Appendix A:
Initial Study/Notice of Preparation

CAL POLY
SAN LUIS OBISPO
Facilities Planning and Capital Projects
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Notice of Preparation of Environmental Impact Report
Master Plan 2035
Cal Poly San Luis Obispo

The California Polytechnic State University San Luis Obispo (Cal Poly) will prepare an Environmental Impact Report for the Master Plan 2035. The Master Plan provides a framework for implementation of the University's goals and programs by identifying needed facilities and improvements to accommodate a gradual growth in student enrollment due to area-wide and regional growth in student population and continuing high demand for Cal Poly education. The student enrollment is projected to reach 22,500 full-time equivalent (FTE) students (25,000 head count) by 2035. The Master Plan main objective is to guide campus development accommodating this gradual student enrollment growth over the next 20 years while preserving and enhancing the quality of campus life.

Cal Poly completed an Initial Study for the Master Plan which indicates that the project may potentially have significant environmental impacts which will be addressed in the EIR being prepared by the University. The 30-day public review period for the Initial Study begins on October 3, 2016 and ends on November 1, 2016.

A public meeting to receive comments on the Initial Study is scheduled as follows:
October 20, 2016 at 6pm at the University Union, Room 220 (Bldg. 65-220)

The Initial Study is available for public review during the public review period at the University's website at http://masterplan.calpoly.edu, at Kennedy Library at the Cal Poly campus, and at the San Luis Obispo County Library

If you wish to comment, please send your written comments so the comments are received no later than 5:00pm, Tuesday, November 1, 2016 to:

Julie Hawkins, Campus Planner
Facilities Planning and Capital Projects
California Polytechnic State University
1 Grand Avenue
San Luis Obispo, California 93407-0690
Phone: (805) 756-6563
Email: jkhawkin@calpoly.edu

Initial Study

Master Plan 2035

California Polytechnic State University,
San Luis Obispo

CAL POLY
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October 2016

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Initial Study

Master Plan 2035

California Polytechnic State University,
San Luis Obispo

October 2016

Lead Agency
The Board of Trustees of the California State University;
California Polytechnic State University, San Luis Obispo

Consultant to Lead Agency
SWCA and WSP | Parsons Brinckerhoff

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Initial Study

1. **Project Title:** California Polytechnic State University San Luis Obispo Master Plan 2035

2. **Lead Agency Name and Address:** The Board of Trustees of the California State University;
California Polytechnic State University, San Luis Obispo
1 Grand Avenue
San Luis Obispo, CA 93407

3. **Contact Person and Phone Number:** Julie Hawkins, Campus Planner
Facilities Planning and Capital Projects
(805) 756-6563

4. **Project Location:** California Polytechnic State University San Luis Obispo campus, San Luis Obispo County

5. **Project Sponsor's Name and Address:** Same as Lead Agency

6. **Campus Master Plan Designation:** Various academic, student housing, sport and recreation, support, administrative, and other designations

7. **Project Description:** California Polytechnic State University San Luis Obispo (Cal Poly), founded in 1901, is a comprehensive polytechnic University with a unique tradition of Learn-by-Doing education. The University's area is comprised of over 6,000 acres in San Luis Obispo county and approximately 3,200 acres in Santa Cruz county. These lands provide hands-on opportunities for students to apply their classroom knowledge to real-life situations. As the future of Cal Poly unfolds, the University must take advantage of opportunities to enhance academic programs and increase student success by creating contemporary learning spaces and inclusive support facilities to accommodate students seeking education at Cal Poly, and creating a more diverse body of students, faculty, and staff. Learn-by-Doing is more than a motto - it is a way of life at Cal Poly - and is integrated into both the academic and support areas of the campus. The Master Plan 2035 is a long-range planning document that addresses these opportunities, as well as the existing constraints, for the next 20 years.

   Fifteen years after the adoption of the 2001 Master Plan, the majority of the planned campus facilities have been developed to accommodate 17,500 full-time equivalent (FTE) students (20,000 head count students) currently enrolled at the University. As Cal Poly education continues to be in great demand, the proposed Master Plan 2035 provides a framework for implementation of the University's goals and programs by identifying needed facilities and improvements to accommodate a gradual growth in student enrollment projected to reach 22,500 FTE students (25,000 head-count students) by 2035.

University Objectives: The principal objective of the Master Plan is to support and advance the University's educational mission by guiding the development of the physical campus and its facilities over the next 20 years to accommodate gradual student enrollment growth while preserving and enhancing the quality of campus life. To do so, the Master Plan strives to create a physical environment that provides opportunities for the achievement of the following goals:

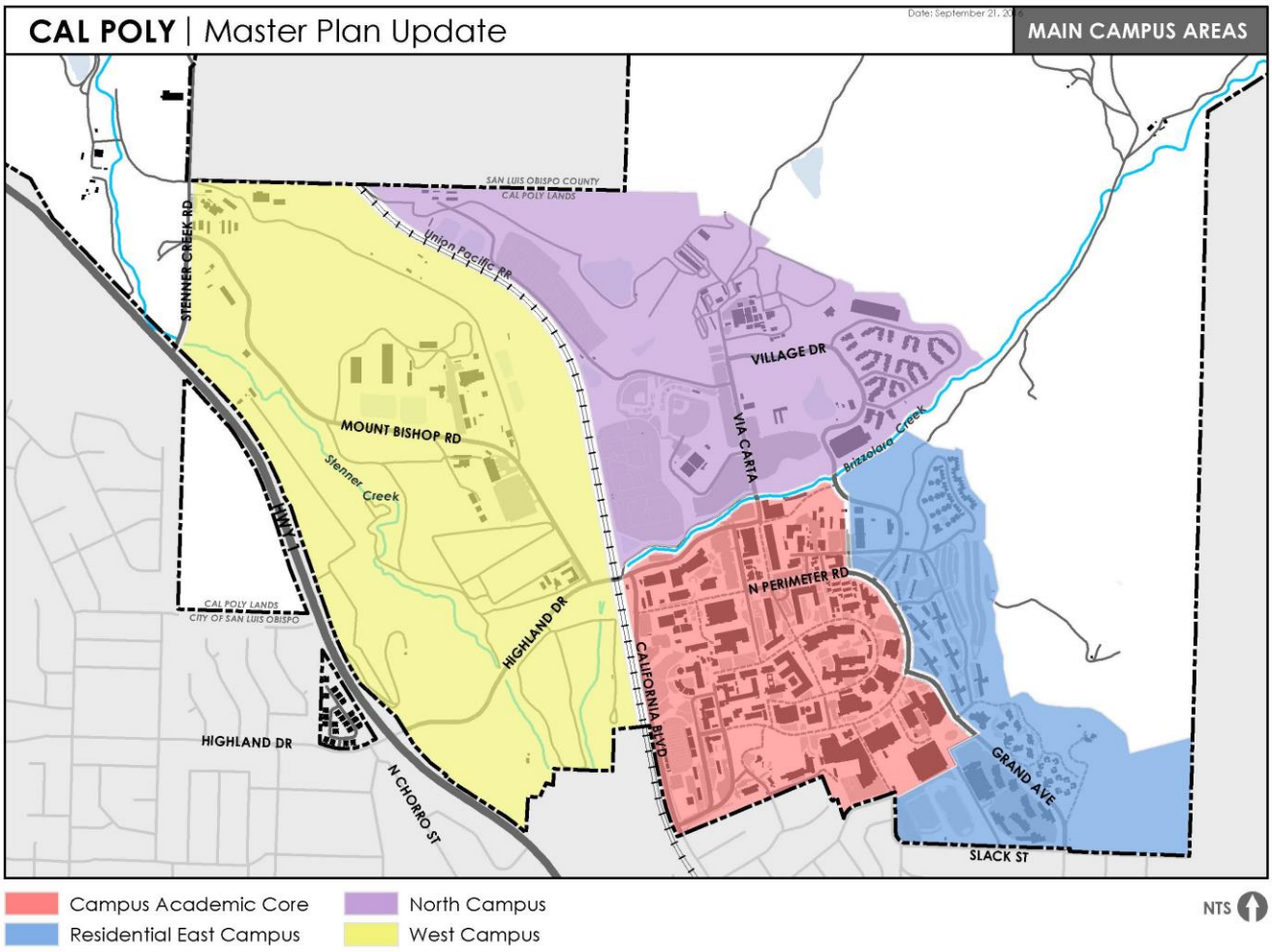
- Enhance academic quality and student success through Learn-by-Doing
- Increase the diversity of students, faculty and staff
- Strengthen the campus' compact, cross-disciplinary Academic Core
- House more students in residential communities on campus
- Offer more vibrant evening and weekend events and activities on campus
- Attain a modal shift from cars to more pedestrian, bicycle, and transit use
- Reinforce campus-wide environmental sustainability

Project Characteristics: The Master Plan 2035 provides guidance for facilities and improvements over the next two decades needed to fulfill academic programs demands, while addressing physical and environmental constraints and opportunities, to support a future enrollment of 22,500 FTE (25,000 head count) students. To do so, the Master Plan provides for consolidation of future facilities development within the main campus' Academic Core and phases new facilities development north of Brizzolara Creek. At the same time, the Master Plan is designed to protect natural environmental features and agricultural lands that form the character of campus.

Master Plan Land Use Map: The Master Plan Land Use Map (Figure 2) shows the planned land uses by category. It indicates both areas where uses will change from current activities and areas where future facilities will be developed. Included in the use categories are academic functions, student housing and residential neighborhoods, outdoor teaching and learning facilities, and student support areas. Recreation and athletics locations and major open spaces are also indicated. The map illustrates location, adjacency, and scale of future facilities and improvements that are planned to be developed over the next 20 years.

Campus Organization: The main campus is organized into the Academic Core, surrounded by the Residential East Campus, North Campus, and West Campus, as illustrated in Figure 1.

Campus Organization
Figure 1



Academic Core: The Academic Core encompasses the majority of academic teaching and learning facilities. It is roughly defined by Brizzolara Creek to the north, the southern edge of campus to the south, Grand Avenue and Perimeter Road to the east, and the Union Pacific Railroad tracks to the west. Support services for students, faculty and staff are also located in the Academic Core. Most buildings where classes and laboratories are held are within a 10-minute walking distance, or approximately one-half mile. Two activity hubs frame the Academic Core – the Julian A. McPhee University Union (UU), and a new Creekside Village area at the northern edge of the core at Villa Carta and Brizzolara Creek. The UU will be improved for an enhanced indoor and outdoor experience supporting the entire campus community, especially the student housing within close proximity. The new Creekside Village will also support the campus community, especially new proposed student housing to the north of Brizzolara Creek, and will house a mix of uses such as teaching and office spaces, retail and food services, recreation, student engagement and study spaces, and more.

Via Carta, which is currently the primary north/south pedestrian and bicycle route for the Academic Core, will become the central spine of campus, providing access to a variety of interactive gathering places, open spaces of numerous types and sizes, and will provide a framework for incorporating new facilities in an integrated, unifying, and welcoming manner. The varied topography of the Academic Core will be capitalized upon to create visually interesting places and to preserve and enhance views of the surrounding hills, campus lands, and buildings. Utilizing the existing topography will allow at-grade access at multiple levels for many of the new facilities.

A major focus of the Academic Core land use plan is to create a true "heart" of campus. This area is anticipated to be a convergence of two spaces, Dexter Lawn and Centennial Meadow. Dexter Lawn, a traditional collegiate landscape, will be extended to the east, terminating at the intersection of Via Carta. Centennial Green will be expanded, resulting in more of a meadow like open space with Central Coast landscaping and numerous seating areas among trees and foliage. There will be a visual and physical connection between Centennial Meadow and Dexter Lawn. This area is anticipated to be a gathering space, a meeting place, and an iconic convergence of campus life.

The Academic Core will be essentially vehicle free. Emergency, service and special vehicle access needs will be accommodated within the pedestrian streets and plazas similar to how they are currently accommodated on Mustang Way and north Via Carta. Well defined pedestrian and bicycle routes will be provided, and wayfinding will be enhanced by better definition of an informal grid across the Academic Core, with secondary walkways integrated with smaller scale open spaces and seating areas.

Figure 3 illustrates planned land uses within the Academic Core.

***Residential East Campus*:** Student housing is concentrated on the east side of campus, primarily along Grand Avenue, at the base of the eastern hills. The newest housing development at the Grand Avenue entrance to campus, slated to open in Fall of 2018, will allow all first-year students to live on campus, in traditional dormitory-style housing. These residential neighborhoods will largely remain the same, with anticipated improvements, such as the replacement of the Vista Grande dining facility, augmentation of the North Mountain residence

halls, and renovations of the other residence halls. An additional student housing development is planned for the existing parking lots behind the North and South Mountain dorms.

***North Campus*:** The North Campus encompasses land uses and facilities across Brizzolara Creek from the Academic Core, and is the focus of the future physical development of the campus. A major goal of the Master Plan is to house all freshman and sophomore students on campus, as well as approximately 30% percent of upper division students. To do so will require the provision of approximately 6,800 new student beds, in both dormitory and apartment styles. Currently, Cal Poly houses approximately 40% of its undergraduate students on campus, and the Master Plan provides for increasing that housing to accommodate 65% of the University's undergraduate students. Most of this new housing will be located in the North Campus.

In addition to student housing, new recreation facilities are proposed for the North Campus with both passive and active programmable spaces. The track and football practice fields will be located near the Union Pacific Railroad tracks, along a proposed extension of California Boulevard. An event arena is also proposed north of Brizzolara Creek. The arena is envisioned to house team sports such as basketball and volleyball, and also provide a venue for concerts, large speaking engagements, and other similar events. Mott Gym, the current home to basketball and volleyball, is likely to remain with major renovations. Two parking structures, one at Highland Drive and Mt. Bishop Road and one at Via Carta, near the baseball stadium will replace existing surface parking lots and provide parking for both sport events and residential uses in the area.

***West Campus*:** The West Campus includes agricultural lands and facilities, which are mostly preserved or enhanced under the Master Plan. Some agricultural facilities or related uses might be located on adjacent agricultural lands, as necessary. A new Farm Shop is proposed near Highway 1, and the Facilities Service Yard and a new Data Center will also be relocated further from the core of campus to free up key space within the Academic Core. New recreation fields will also be provided in this area.

Faculty/Staff Housing and Options Primarily for Non-Students: The Master Plan designates five locations as "Residential Neighborhoods", primarily for non-students. Two of these locations are on the southern boundary of the campus and will provide "buffers" between the campus itself and adjacent off-campus neighborhoods. Another location is in the area near the University House and Spanos Stadium. The other two locations are west of Highway 1 and along the west side of Stenner Creek Road. The development housing at all these locations could provide a total of up to 1,470 units that will be made available to the University and the general public. A priority system will be used to make sure that University-related housing needs are fulfilled first, before making units available to the general market in a community where reasonably priced apartment-style housing is needed. The University's needs include making housing available to faculty and staff, older students - including graduate students, veterans, and students with families, and possibly alumni and retirees.

Roadway Infrastructure Improvements: As the campus continues to develop northward, the uses planned north of Brizzolara Creek will require new roads. The Master Plan includes two new roads: the northernmost road that connects Village Drive to Mount Bishop Road, and utilizing in part Sports Complex Road. This includes grade-separated railroad crossings for vehicles and for pedestrians. The second new road will extend from the California/Highland intersection north of

the creek and east to Via Carta to access new residential uses in this vicinity. These new routes will not only accommodate vehicles, but also pedestrians and bicycles.

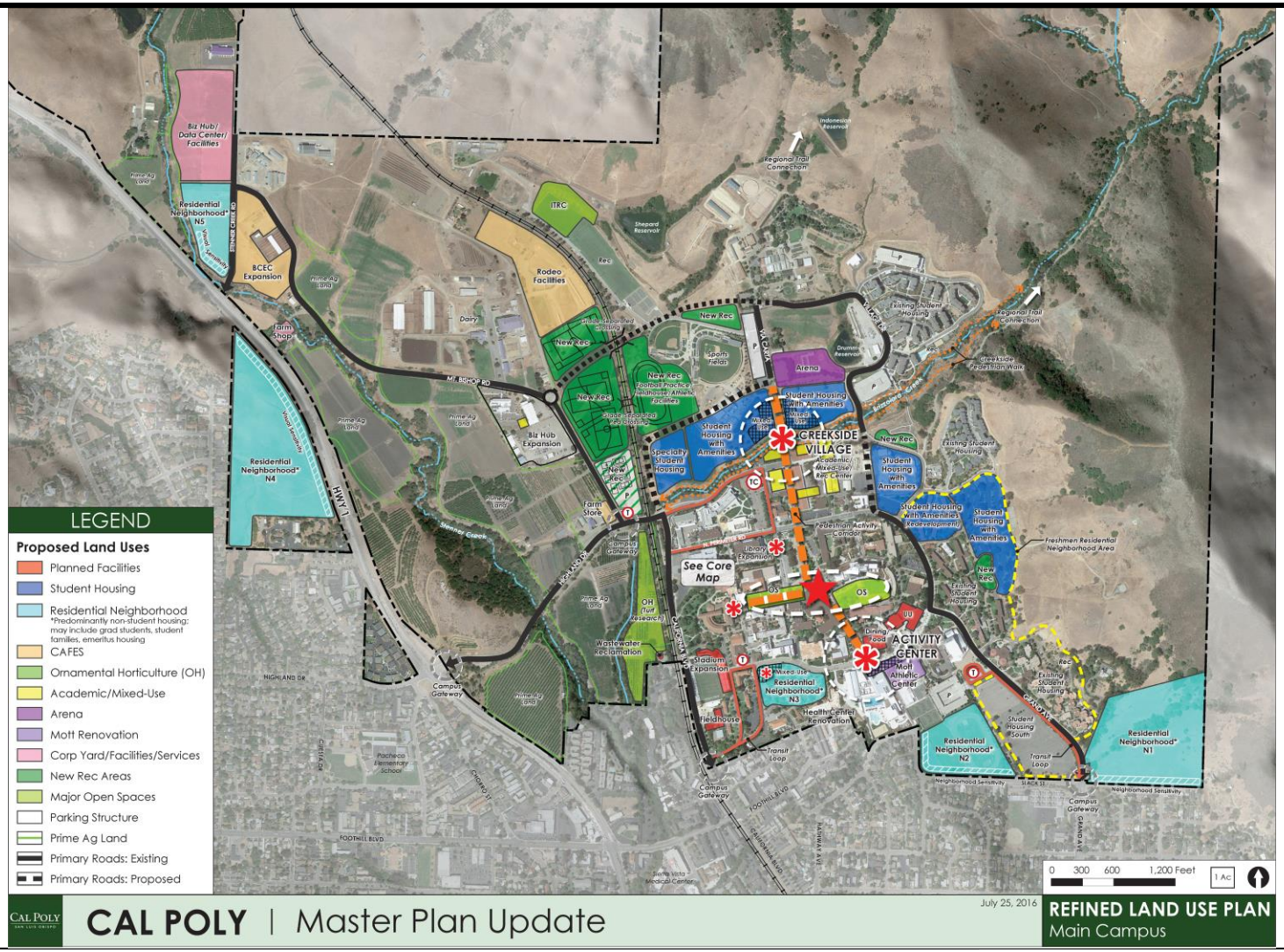
The Master Plan also calls for the redesign of North Perimeter, University, South Perimeter, and the eastern end of Highland Drive to restrict through traffic, to create a stronger and safer pedestrian presence, and to encourage bicycle use. North Perimeter in particular currently divides the Academic Core and creates significant intermodal conflicts.

Utility Infrastructure Improvements: Utility infrastructure improvements will provide modernization and enhancements to the existing campus utility systems to serve new facilities, including drainage, water, sewer, and other utility infrastructure systems, including a new wastewater reclamation facility. While ensuring a quality operational performance of these systems, the improvements will also conserve water, conserve energy, reduce carbon emissions, and reduce utility costs.

"Smart Growth", Sustainability, and Environmental Stewardship: The Master Plan incorporates "smart growth" measures, including the compact development form around the campus core and mixed uses that reduce the reliance on cars and improve the efficiency of infrastructure and energy use. Furthermore, and importantly, the Master Plan calls for increased housing on campus that will reduce commuting and its associated environmental impacts, and also emphasizes a pronounced shift away from cars toward active transportation modes including walking, bikes, and transit. In addition, the Master Plan emphasizes use of renewable energy sources including solar and wind energy, water reclamation, and for waste composting - which is especially important at for the University with hands-on, learn-by-doing agricultural programs.

Cal Poly is committed to being a leader in sustainability in its facilities and operations, and views sustainability as an essential element of its academic mission. Therefore, the Master Plan strives to protect important environmental resources, keeping most prime agricultural land in production, creating protective buffers around creeks, and preserving open space and scenic resources that are so important to Cal Poly's image and character. It also requires that new facilities and campus infrastructure be environmentally responsible, energy efficient, and showcase advancements in sustainable technology. This includes new facilities that are designed to meet LEED (Leadership in Energy and Environmental Design) standards; energy systems that are continually monitored, maintained, and updated to assure that Cal Poly runs in the most efficient manner possible; and that outdated technology and systems are upgraded or replaced as needed.

Master Plan Land Use Map
Figure 2



Academic Core Land Use Map
Figure 3

8. Surrounding Land Uses and Setting: Cal Poly's main campus abuts the City of San Luis Obispo on the south and west, and the County of San Luis Obispo on the north and east (see Figure 2). The Alta Vista and Monterey Heights neighborhoods border the southern edge of campus with single family homes. To the west of campus are the neighborhoods north of Foothill Boulevard, including Foothill, Bella Montaña, and Ferrini Heights. Santa Rosa Street (Highway 1) frames the western side of the campus with commercial development. At the southwest corner, along Foothill Boulevard, several multi-family housing complexes accommodate Cal Poly students – with some specifically designed for that purpose, such as Mustang Village and Stenner Glen.

9. CSU and Other Public Agencies whose approval will be sought:

- CSU Board of Trustees
  Approval and adoption of the Master Plan

- City of San Luis Obispo
  Approval of increase in wastewater treated at the Water Resource Recovery Facility (WRRF) as needed

- Regional Water Quality Control Board
  Issuance of Construction Storm Water General Permit for construction of new facilities and improvements

- San Luis Obispo Regional Transit Authority (RTA)
  Approval of any future bus service improvements

- Public Utilities Commission (PUC) and Union Pacific Railroad (UP)
  Approval of grade-separated vehicular and pedestrian/bicycle railroad crossings for the new roadway connecting Village Drive to Mount Bishop Road

- California Department of Fish and Wildlife
  Issuance of permits or other actions if needed for improvements that may affect sensitive biological resources

- US Army Corp of Engineers (USACE)
  Issuance of permits under Section 10 and under Section 404 if needed for improvements that may affect Brizzolara and/or Stenner Creeks

- Division of State Architect
  Approval of accessibility in future facilities

- State Fire Marshall
  Facility fire safety review and approval

- Others, as may be necessary

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Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒	Aesthetics	☒	Agriculture and Forestry Resources	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☒	Greenhouse Gas Emissions
☒	Geology /Soils	☒	Hazards & Hazardous Materials	☒	Hydrology / Water Quality
☐	Land Use / Planning	☐	Mineral Resources	☒	Noise
☒	Population / Housing	☒	Public Services	☒	Recreation
☒	Transportation/Traffic	☒	Utilities / Service Systems	☒	Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature Julie K. Hall Date 9/23/16

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☒	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☒	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐
a through d. Campus development over the next 20 years pursuant to the Master Plan will result in new facilities and improvements that will change the visual character of some campus areas. Therefore these issues will be evaluated in the EIR. The aesthetics analysis will address the Master Plan's potential effect on the campus' visual resources and its aesthetic/visual character, including potential development on the edges of the campus as this will be the most visible element to residential areas closest to the campus, and including potential residential neighborhood development near the scenic Highway 1. Mitigation measures will be identified to reduce potential impacts.				
II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement technology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☒	☐	☐	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources section 4256) or timberland zoned Timberland Production (as defined by Government Code section 51104(g)?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a through e. The Cal Poly main campus area includes approximately 250 acres of prime agricultural land. The Master Plan minimizes impacts on this land in three ways. The first is to intensify the Academic Core and locate new development in the North and West campuses on less productive soils. The second is to protect agricultural land for educational use, fully consistent with Cal Poly's learn-by-doing approach to education. Thus, during the Master Plan process the University explicitly excluded lands with prime agricultural soils along lower Brizzolara and Stenner creeks from further development consideration. The third aspect is to concentrate new land-intensive development that must be located on prime soils around existing campus development - for example, along Mt. Bishop Road between the railroad tracks, Crops Unit and Technology Park, rather than extending development into new areas. Nonetheless, since some of the new facilities could be located on prime soils around the existing campus development, this issue will be evaluated in the EIR. There is no land classified as forest land within the main campus.

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

a. The implementation of the Master Plan will not conflict with nor obstruct the implementation of the regional air quality plan since the Master Plan is intended to accommodate the projected growth in student enrollment resulting from regional growth in population, housing, and employment over the next 20 years. In addition, the Master Plan includes additional student housing on campus, implements smart growth measures, and environmental stewardship and sustainability measures intended to reduce commute vehicular travel by students and faculty and reduce energy use that will have a beneficial effect of reducing air pollutant emissions.

b through d. While the Master Plan is anticipated to reduce commute vehicular travel by students, faculty and staff that generate air pollutants, the campus development has the potential to generate additional vehicular trips associated with residential neighborhoods, and short-term emissions associated with construction of new facilities and improvements. Therefore, these issues will be evaluated in the EIR.

e. The campus development and operations are not associated with the generation of objectionable odors that could affect a substantial number of people. No adverse impact will result.

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a through f. The Master Plan preserves open space on campus and guides new development to be compact by intensifying the Academic Core and locating new development in the North and West campuses. The Master Plan also creates buffers around the existing creeks to protect these unique natural resources within the campus area. However, since some of the planned campus development may occur nearby these creeks and other potentially sensitive areas, these issues will be evaluated in the EIR, including a preparation of a biological resources assessment.				
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
a through d. The campus development pursuant to the Master Plan involves replacement of some older facilities that have become functionally obsolete. Therefore, while the new development pursuant to the Master Plan is not anticipated to significantly affect any known archaeological or other cultural resources within the campus area, the cultural resources issues will be evaluated further in the EIR.				
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
a. through d. There are no known earthquake faults within the Cal Poly main campus. However, the campus is located in the seismically active central California region, in proximity to known faults, including the West Huasna fault to the northeast. Therefore, all design and construction of new facilities and improvements will be in strict compliance with the California State University seismic safety standards, rules, and regulation. This includes (1) conducting site-specific geotechnical investigations, (2) site-specific seismic design of all new facilities and improvements, (3) using engineering techniques for site-specific soil conditions in construction of all new facilities and improvements developed pursuant to the Master Plan. With mandatory compliance with all applicable requirements and regulations and the use of appropriate engineering and design techniques impact will be less than significant and these issues will not be addressed in the EIR.				
e. The campus is served by sewer systems and no septic tanks or alternative wastewater disposal systems are needed. No impact will result.				
VII. GREENHOUSE GAS EMISSIONS -- Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒
a and b. The Master Plan is intended to accommodate the projected growth in student enrollment resulting from regional growth in population, housing, and employment over the next 20 years. In addition, the Master Plan aims at reducing overall emissions, including greenhouse (GHG) emissions, by housing more students on campus and reducing commute vehicular travel by students, faculty and staff; implementing "smart growth" measures; and implementing environmental stewardship and sustainability measures intended to reduce vehicle and energy use that will have a beneficial effect of reducing GHG. However, since some of the land uses pursuant to the Master Plan have the potential to generate additional vehicular trips, and short-term construction emissions associated with development of new facilities and improvements, which include GHG, these issues will be evaluated in the EIR.				
VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒	☐	☐
a through c. For most of the new facilities on-site use and storage of hazardous materials will be limited to small amounts of everyday household cleaners and common chemicals used for landscaping and maintenance. Materials used for laboratory academic research and instructions will be handled and disposed of in accordance with established University safety procedures. The University's environmental health and safety staff will continue to monitor the use of such materials in research and science instructions to ensure safe and lawful handling, movement, storage, and disposal. Impact will be less than significant and these issues will not be addressed in the EIR.				
d. The campus is not included on the Department of Toxic Substances Control Hazardous Waste and Substance List (Cortese List) or any other list of hazardous materials sites. No impact will result.				
e and f. The campus is not located within two miles of a public use airport or private airport. No adverse impact will result.				
g. All new facilities developed pursuant to the Master Plan will include the provision of all necessary emergency access in compliance with existing regulations. Therefore, the project will not impair implementation nor physically interfere with any adopted emergency response or evacuation plans. No adverse impact will result.				
h. The Cal Poly campus includes areas located adjacent to hillsides which pose a potential for wildfire, particularly under extreme weather and drought conditions. While all new facilities developed pursuant to the Master Plan will include all required fire safety features, including emergency access, this issue will be evaluated further in the EIR.				
IX. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☒	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☒	☐	☐	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☐
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
j) Inundation by seiche, tsunami, or mudflow?	☐	☒	☐	☐

a, c through f. While the Master Plan concentrates development of new facilities and improvements within the developed core of the campus, it provides for new facilities within the nearby areas that are not fully developed. With new impervious surfaces, changes to the existing drainage patterns within those areas are therefore anticipated. While all new development will include all necessary drainage improvements, including stormwater retention, these issues will be evaluated in the EIR.

b. The implementation of the Master Plan is not expected to result in substantially increased groundwater pumping since the primary source of water for the campus are the area's reservoirs. The Master Plan also provides for wastewater reclamation in addition to comprehensive water use reductions measures implemented in all campus facilities and operations. Nonetheless, this issue will be addressed in the EIR.

g and h. The National Flood Insurance Rate Maps identify 100-year flood hazard areas along Brizzolara and Stenner Creeks. The Master Plan creates buffers along these creeks so that the new facilities will be located outside the delineated flood hazard area. No significant impact will result.

j. The campus is located inland and is not subject to tsunamis. The new facilities pursuant to the Master Plan will be located at a sufficient distance from existing reservoirs and not be subject to a seiche. However, since some campus areas are located adjacent to hillsides, there is a potential for mudflows under extreme weather or fire conditions, and this issue will be evaluated in the EIR.

X. LAND USE AND PLANNING -- Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a through c. The Master Plan provides for improvements within the Cal Poly's campus and will not physically divide an established community. No other land use plans apply to the campus and no adverse impact will result.

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
a and b. No mineral resources are known to exist on the Cal Poly campus. No adverse impact will result.				
XII. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a through d. Implementation of the Master Plan will result in noise associated with **c**onstruction of new facilities and improvements, with day-today campus activities, and residential neighborhood uses. These issues will be evaluated in the EIR and as needed, mitigation measures will be identified to reduce potential impacts.				
b. The long-term facilities and improvements provided pursuant to the Master Plan will continue the University uses and functions that do not involve generating excessive vibration or groundborne noise. No adverse impact will result and this issue will not be addressed in the EIR.				
e and f. The campus is not located within an airport land use plan, within two miles of an airport or public use airport, or within the vicinity of a private airstrip. No impact will result.				
XIII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☒	☐	☐	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
a. The Master Plan provides for additional student and faculty and staff housing on campus, as well the opportunity for community housing within the identified "residential neighborhoods". While the provision of additional housing opportunities within these neighborhoods has no potential to significantly affect long-term population, housing, and employment growth within the San Luis Obispo county region, it could affect such growth within the nearby area, including the City of San Luis Obispo. Therefore these issues will be evaluated in the EIR.				
b and c. The project does not involve the removal of housing or displacement of people. No impact will result.				

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☒	☐	☐	☐
Police protection?	☒	☐	☐	☐
Schools?	☐	☒	☐	☐
Parks?	☐	☒	☐	☐
Other public facilities?	☐	☒	☐	☐
a. The Master Plan provides for needed facilities and improvements to accommodate the projected student enrollment over the next 20 years, which will generate additional demand for fire and police protection services. Potential impact on these services, as well as a potential impact on other public services, will be evaluated in the EIR.				
XV. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☒	☐	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a and b. Implementation of the Master Plan is not anticipated to result in the construction of new parks or recreational facilities that might have an adverse physical effect on the environment. The Master Plan provides for new and improved recreation facilities and open space within the campus for the University students, faculty, and staff. However, as the Master Plans provides for residential neighborhoods at the edges of the campus that may result in an increased use of existing recreation facilities by their future residents, these issues will be evaluated further in the EIR.				
XVI. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☐	☐	☐
b) Conflict with applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location which results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the safety of such facilities?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a and b. The Master Plan provides for additional student housing on campus and housing for faculty and staff, which will reduce commuter vehicular trips to campus. However, since the gradual increase in student enrollment accommodated by the Master Plan and provision of opportunities for community housing on the edges of the campus will result in vehicular trips in vicinity of the campus, a traffic study will be prepared as part of the EIR to address these issues.				
c through f. The provision of University facilities and improvements pursuant to the Master Plan will not affect air traffic patterns. The new facilities and improvements pursuant to the Master Plan will include the provision of all required emergency access in compliance with existing regulations. No design features or uses that could result in increased hazards are part of the Master Plan. The Master Plan provides for enhanced use of public transit and bicycles, and enhanced pedestrian circulation supporting the University's alternative transportation programs and policies. No adverse impact will result and these issues will not be addressed further in the EIR.				
XVII. UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☒	☐	☐	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Comply with federal, State, and local statutes and regulations related to solid waste?	☐	☐	☐	☒
a. The new facilities and uses developed pursuant to the Master Plan will generate wastewater similar to existing flows. The quality of the wastewater flows associated with these typical educational uses meet all applicable requirements. No adverse impact will result and this issue will not be addressed in the EIR.				
b through e. The new facilities and improvements developed pursuant to the Master Plan will use water and generate wastewater, and the new facilities on sites that were not previously developed will generate additional stormwater flows. Therefore, these issues will be evaluated in the EIR.				
f and g. The University implements a comprehensive recycling program to minimize the amount of solid waste disposed at landfills. The recycling program and other waste-reduction measures will continue to be implemented in additional uses and facilities developed pursuant to the Master Plan. Nonetheless, since the development pursuant to the Master Plan will generate solid waste, these issues will be further addressed in the EIR.				
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Implementation of the Master Plan will result in additional facilities and improvements within the campus. While the Master Plan preserves open space resources, some of the new facilities will be developed in currently undeveloped areas and may affect biological or cultural resources. Therefore, these issues will be evaluated in the EIR.				
b. The future area-wide growth and development over the next 20 years, including the campus development pursuant to the Master Plan, may result in significant cumulative air quality, traffic, noise, and other impacts. Therefore, these issues will be evaluated in the EIR.				
c. The Master Plan will result in the provision of needed facilities and improvements at the Cal Poly campus. These facilities and improvements are necessary to continue the University functions and the provision of higher education opportunities to the residents of the surrounding area, the region, and the state as reflected by the projected student enrollment, with no potential to result in substantial adverse effects on people.				

Preparers of the Initial Study

Lead Agency

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Long Beach, CA 90802

California Polytechnic State University, San Luis Obispo
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San Luis Obispo, CA 93407

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Appendix B: Slack and Grand Residential Neighborhood Draft Plans

UNIT DISTRIBUTION SUMMARY: **420 Units**

Neighborhood 1
Parking: 155 ps + 9 hc = 164 total 164 / 108 = 1.51 Ratio
Total Units: 3x36-Plex (4 Level / Flats) 108 Units

Neighborhood 2
Parking: 74 ps + 4 hc = 78 total 78 / 42 = 1.86 Ratio
Total Units: 3x14-Plex (3 Level / TH, Flats) 42 Units

Neighborhood 3
Parking: 146 ps + 9 hc = 155 total 155 / 87 = 1.78 Ratio
3x18-Plex (3 Level / Flats) 54 Units
3x11-Plex (2 Level / Flats) 33 Units
Total Apartment Units: 87 Units

Neighborhood 4
Apartment Parking: 261 ps + 14 hc = 275 total
275 / 183 = 1.50 Ratio
Podium Building (3 LVL, over 2 LVL, Garage): 183 Units

(Podium) Neighborhood 4 Summary:

Total Units: 183
Building Height: 3&3-Story Type V Construction over Type I

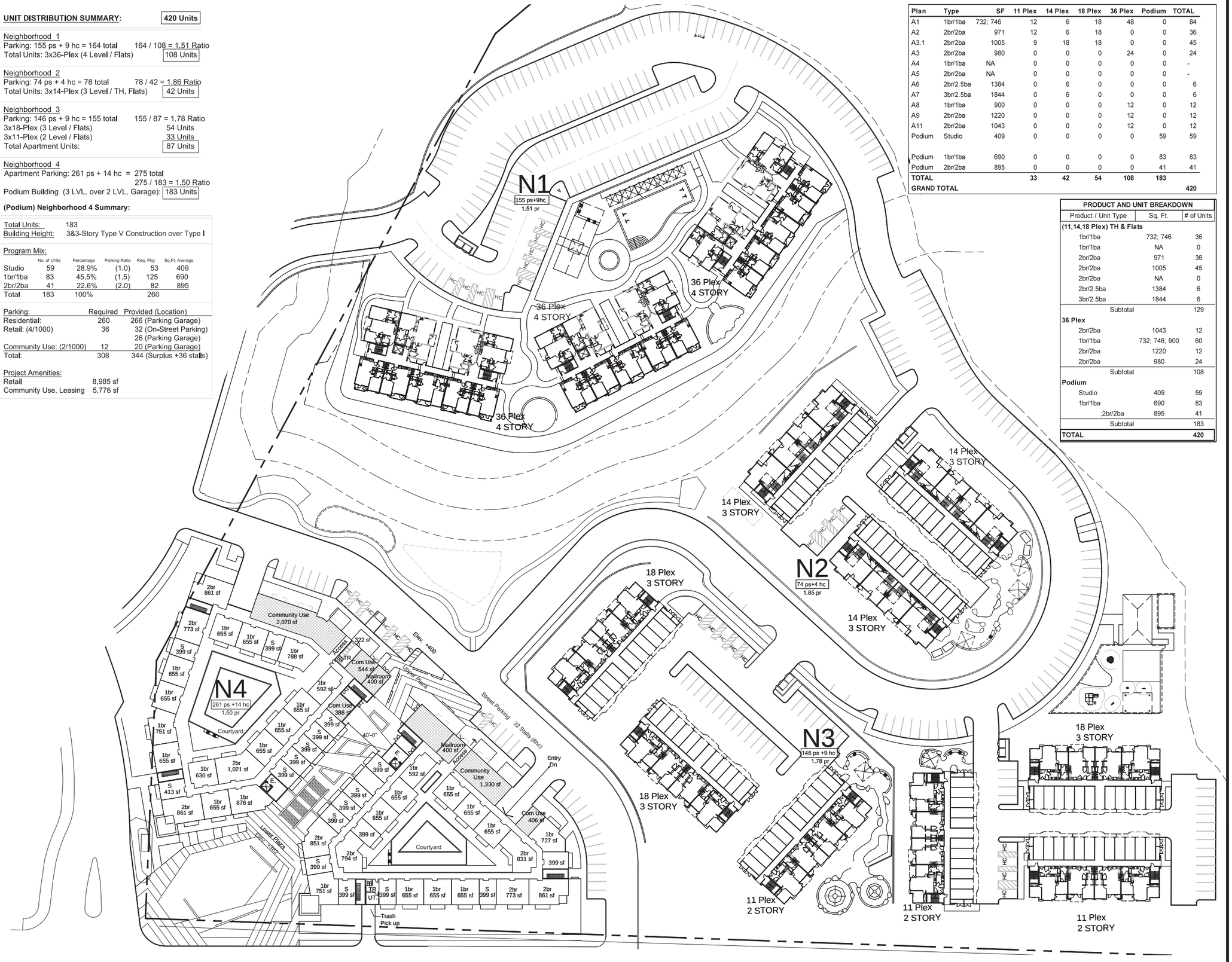
Program Mix:

	No. of Units	Percentage	Parking Ratio	Req. Pkg	Sq.Ft. Average
Studio	59	28.9%	(1.0)	53	409
1br/1ba	83	45.5%	(1.5)	125	690
2br/2ba	41	22.6%	(2.0)	82	895
Total	183	100%		260	

Parking:	Required	Provided (Location)
Residential:	260	266 (Parking Garage)
Retail: (4/1000)	36	32 (On-Street Parking)
		26 (Parking Garage)
Community Use: (2/1000)	12	20 (Parking Garage)
Total:	308	344 (Surplus +36 stalls)

Project Amenities:

Retail	8,985 sf
Community Use, Leasing	5,776 sf



Plan	Type	SF	11 Plex	14 Plex	18 Plex	36 Plex	Podium	TOTAL
A1	1br/1ba	732; 746	12	6	18	48	0	84
A2	2br/2ba	971	12	6	18	0	0	36
A3.1	2br/2ba	1005	9	18	18	0	0	45
A3	2br/2ba	980	0	0	0	24	0	24
A4	1br/1ba	NA	0	0	0	0	0	-
A5	2br/2ba	NA	0	0	0	0	0	-
A6	2br/2.5ba	1384	0	6	0	0	0	6
A7	3br/2.5ba	1844	0	6	0	0	0	6
A8	1br/1ba	900	0	0	0	12	0	12
A9	2br/2ba	1220	0	0	0	12	0	12
A11	2br/2ba	1043	0	0	0	12	0	12
Podium	Studio	409	0	0	0	0	59	59
Podium	1br/1ba	690	0	0	0	0	83	83
Podium	2br/2ba	895	0	0	0	0	41	41
TOTAL			**33**	**42**	**54**	**108**	**183**	
GRAND TOTAL								**420**

PRODUCT AND UNIT BREAKDOWN		
Product / Unit Type	Sq. Ft.	# of Units
(11,14,18 Plex) TH & Flats		
1br/1ba	732; 746	36
1br/1ba	NA	0
2br/2ba	971	36
2br/2ba	1005	45
2br/2ba	NA	0
2br/2.5ba	1384	6
3br/2.5ba	1844	6
Subtotal		129
36 Plex		
2br/2ba	1043	12
1br/1ba	732; 746; 900	60
2br/2ba	1220	12
2br/2ba	980	24
Subtotal		108
Podium		
Studio	409	59
1br/1ba	690	83
;2br/2ba	895	41
Subtotal		183
TOTAL		**420**

AMCAL EQUITIES, LLC
GRAND AVENUE FACULTY AND STAFF HOUSING
30141 Agoura Rd, Agoura Hills, CA 91301

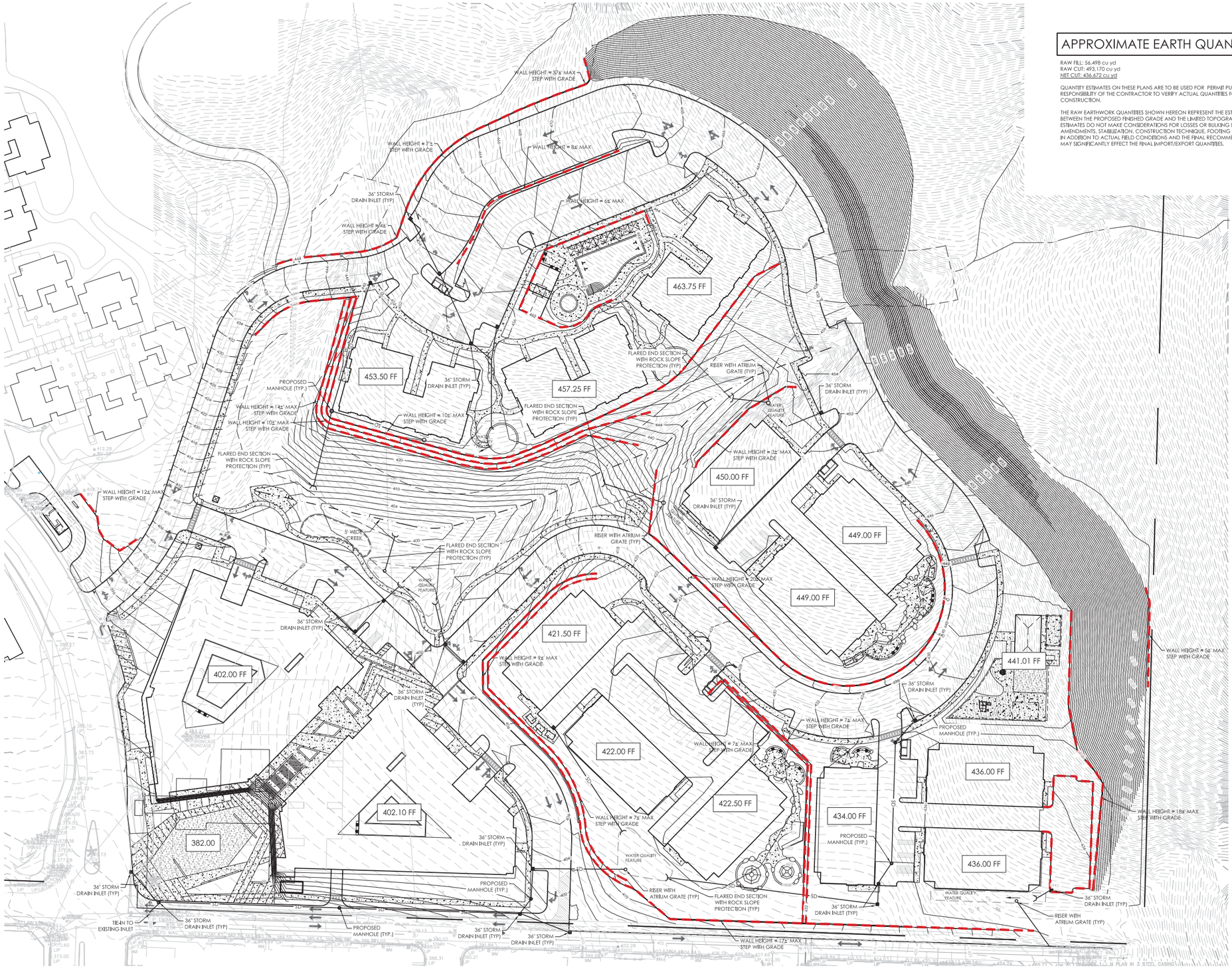
DEVELOPER:
PROJECT NAME:
CLIENT ADDRESS:

DATE ISSUED: 08/21/2017
PROJECT NO: 2017-40111
SCALE: AS NOTED 1" = 40'-0"

SHEET NUMBER: A101
SHEET TITLE:

SITE PLAN

SVA ARCHITECTS
3 MACARTHUR PLACE, SUITE 850 SANTA ANA, CA 92707
T 949.809.3380 WWW.SVA-ARCHITECTS.COM



APPROXIMATE EARTH QUANTITIES

RAW FILL: 56,498 cu yd
RAW CUT: 493,170 cu yd
NET CUT: 436,672 cu yd

QUANTITY ESTIMATES ON THESE PLANS ARE TO BE USED FOR PERMIT PURPOSES ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL QUANTITIES FOR THE PURPOSE OF CONSTRUCTION.

THE RAW EARTHWORK QUANTITIES SHOWN HEREON REPRESENT THE ESTIMATED VOLUMETRIC DIFFERENCE BETWEEN THE PROPOSED FINISHED GRADE AND THE LIMITED TOPOGRAPHIC EXISTING GRADES. THESE ESTIMATES DO NOT MAKE CONSIDERATIONS FOR LOSSES OR BULKING DUE TO: SHRINKAGE, SOIL AMENDMENTS, STABILIZATION, CONSTRUCTION TECHNIQUE, FOOTING & TRENCHING SPOILS, ETC. THESE, IN ADDITION TO ACTUAL FIELD CONDITIONS AND THE FINAL RECOMMENDATIONS OF THE SOILS ENGINEER MAY SIGNIFICANTLY EFFECT THE FINAL IMPORT/EXPORT QUANTITIES.

DEVELOPER: AMCAL EQUITIES, LLC

PROJECT NAME: GRAND AVENUE FACULTY AND STAFF HOUSING

CLIENT ADDRESS: 30141 Agoura Rd, Agoura Hills, CA 91301

DATE ISSUED:

PROJECT NO:

SCALE:

SHEET NUMBER: C2

SHEET TITLE: GRADING & DRAINAGE

3 MACARTHUR PLACE, SUITE 850 SANTA ANA, CA 92707
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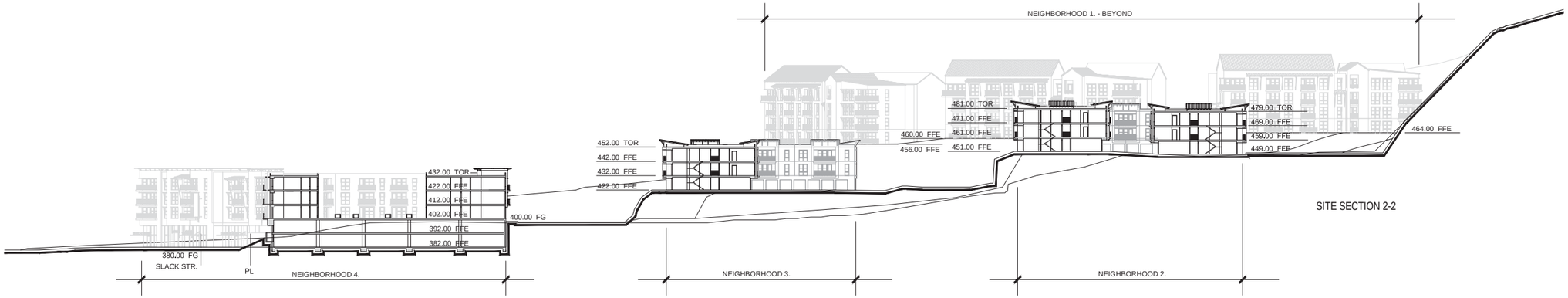
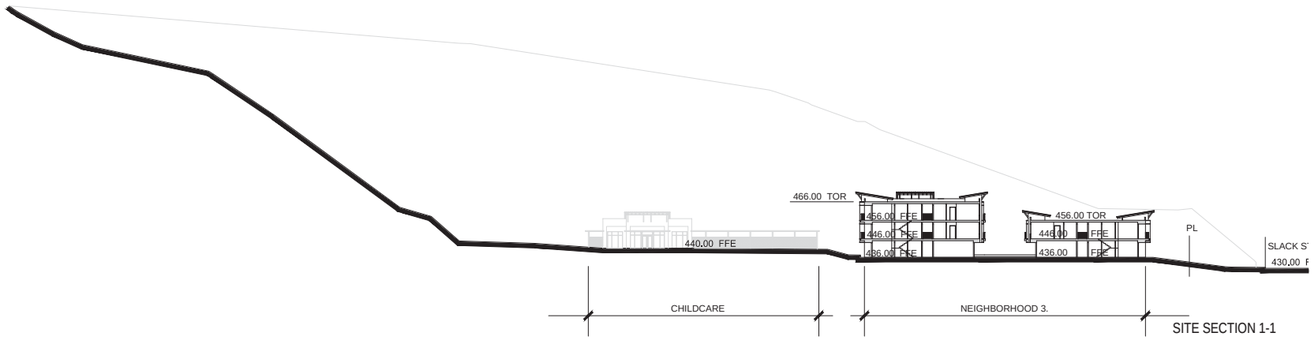
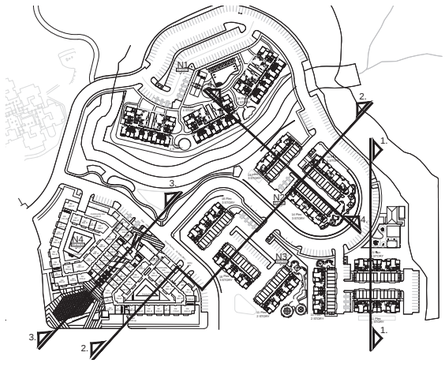


SITE SECTION 2-2



SITE SECTION 1-1



KEY PLAN N.T.S

NORTH

0' 30' 60' 90'

DEVELOPER: AMCAL EQUITIES, LLC

PROJECT NAME: GRAND AVENUE FACULTY AND STAFF HOUSING

CLIENT ADDRESS: 30141 Agoura Rd, Agoura Hills, CA 91301

DATE ISSUED: 08/21/2017

PROJECT NO: 2017-40111

SCALE: 1" = 30'-0"

SHEET NUMBER: A 410

SHEET TITLE:

SITE SECTIONS
1-1 AND 2-2

SVA ARCHITECTS
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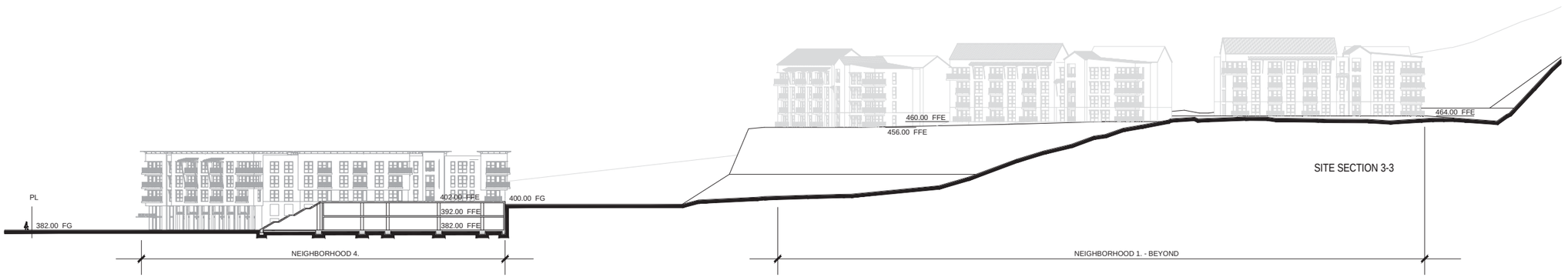
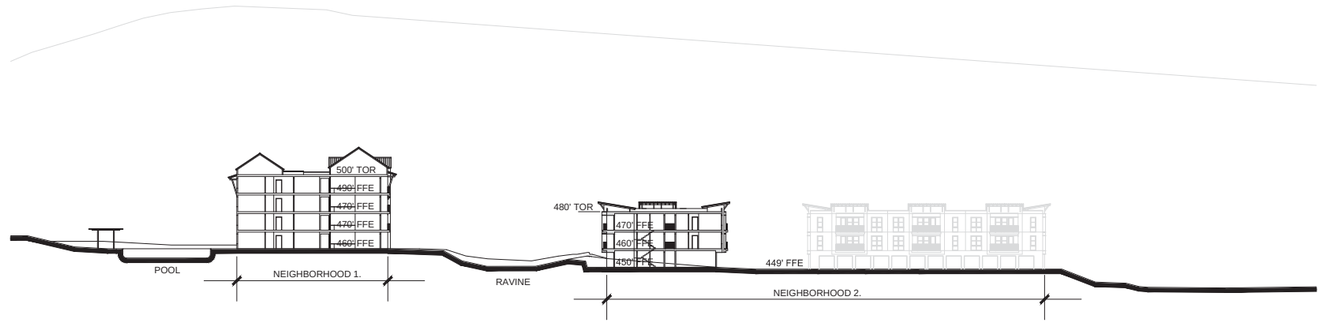
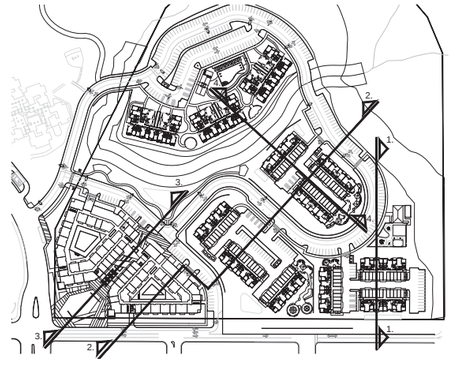


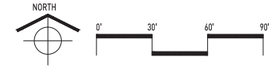
SITE SECTION 3-3



SITE SECTION 4-4



KEY PLAN N.T.S



DEVELOPER: AMCAL EQUITIES, LLC

PROJECT NAME: GRAND AVENUE FACULTY AND STAFF HOUSING

CLIENT ADDRESS: 30141 Agoura Rd, Agoura Hills, CA 91301

DATE ISSUED: 08/21/2017

PROJECT NO: 2017-40111

SCALE: 1" = 30'-0"

SHEET NUMBER: A 411

SHEET TITLE:

SITE SECTIONS
3-3 AND 4-4

SVA ARCHITECTS
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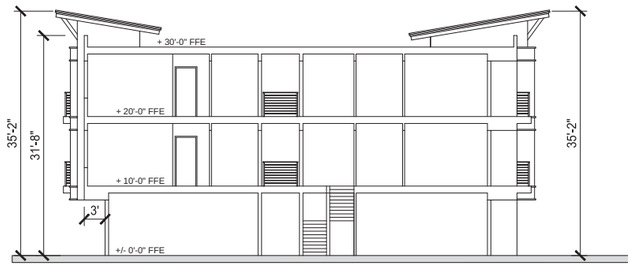
SECTION

36 Plex-4L - Neighborhood1

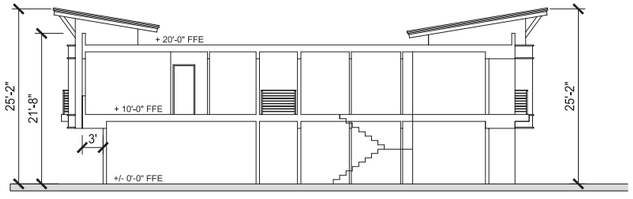
CROSS SECTION

36 Plex-4L - Neighborhood1



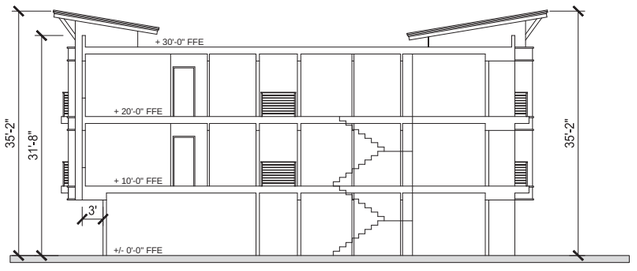
CROSS SECTION

14 Plex(TH) -3L - Neighborhood 2



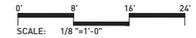
CROSS SECTION

11 PleX-2L - Neighborhood 3



CROSS SECTION

18 Plex-3L - Neighborhood 3



DEVELOPER: AMCAL EQUITIES, LLC

PROJECT NAME: GRAND AVENUE FACULTY AND STAFF HOUSING

CLIENT ADDRESS: 30141 Agoura Rd, Agoura Hills, CA 91301

DATE ISSUED: 08/21/2017

PROJECT NO: 2017-40111

SCALE: 1/8" = 1'-0"

SHEET NUMBER: A 401

SHEET TITLE:

NEIGHBORHOOD 1,2
AND 3
BUILDING SECTIONS

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FRONT ELEVATION

36 Plex-4L - Neighborhood1

RIGHT ELEVATION

36 Plex-4L - Neighborhood1

REAR ELEVATION

36 Plex-4L - Neighborhood1

LEFT ELEVATION

36 Plex-4L - Neighborhood1

MATERIAL LIST:

1 PLASTER FINISH
2 COMPOSITE SIDING
3 PREFINISHED METAL PANEL, or SIMILAR
4 VINYL WINDOW AND DOOR SYSTEM
5 PREFINISHED METAL GUARDRAIL SYSTEM
6 PREFINISHED METAL FRAME
7 PREFINISHED METAL ROOF, or SIMILAR
8 PREFINISHED METAL CLADDING, or SIMILAR
9 PAINTED METAL DOOR
10 PREFINISHED SECTIONAL GARAGE DOOR

SCALE: 1/8"=1'-0"

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GRAND AVENUE FACULTY AND STAFF HOUSING

30141 Agoura Rd, Agoura Hills, CA 91301

DEVELOPER:

PROJECT NAME:

CLIENT ADDRESS:

DATE ISSUED: 08/21/2017
PROJECT NO: 2017-40111
SCALE: 1/8" = 1'-0"

SHEET NUMBER: **A1-201**

SHEET TITLE:

NEIGHBORHOOD 1
BUILDING
ELEVATIONS

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FRONT ELEVATION

14 Plex(TH) -3L - Neighborhood 2

RIGHT ELEVATION

14 Plex(TH) -3L - Neighborhood 2

REAR ELEVATION

14 Plex(TH) -3L - Neighborhood 2

LEFT ELEVATION

14 Plex(TH) -3L - Neighborhood 2

MATERIAL LIST:

1 PLASTER FINISH
2 COMPOSITE SIDING
3 PREFINISHED METAL PANEL, or SIMILAR
4 VINYL WINDOW AND DOOR SYSTEM
5 PREFINISHED METAL GUARDRAIL SYSTEM
6 PREFINISHED METAL FRAME
7 PREFINISHED METAL ROOF, or SIMILAR
8 PREFINISHED METAL CLADDING, or SIMILAR
9 PAINTED METAL DOOR
10 PREFINISHED SECTIONAL GARAGE DOOR

0' 8' 16' 24'
SCALE: 1/8"=1'-0"

DEVELOPER: AMCAL EQUITIES, LLC

PROJECT NAME: GRAND AVENUE FACULTY AND STAFF HOUSING

CLIENT ADDRESS: 30141 Agoura Rd, Agoura Hills, CA 91301

DATE ISSUED: 08/21/2017
PROJECT NO: 2017-40111
SCALE: 1/8" = 1'-0"

SHEET NUMBER: A2-201
SHEET TITLE:

NEIGHBORHOOD 2
BUILDING
ELEVATIONS

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FRONT ELEVATION

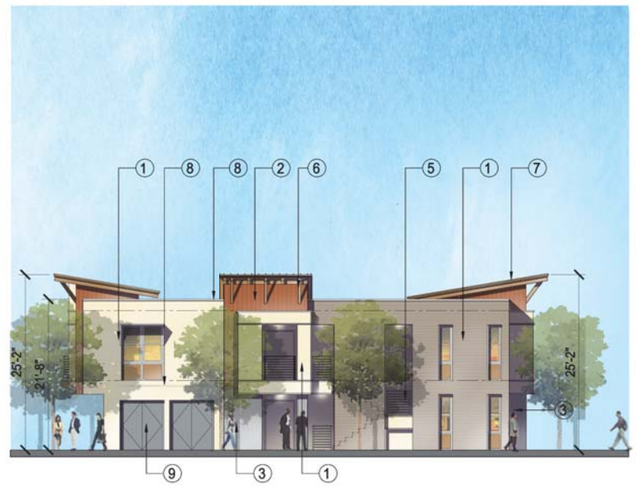
11 Plex -2L - Neighborhood 3

RIGHT ELEVATION

11 Plex -2L - Neighborhood 3

REAR ELEVATION

11 Plex -2L - Neighborhood 3



LEFT ELEVATION

11 Plex -2L - Neighborhood 3

MATERIAL LIST:

1 PLASTER FINISH
2 COMPOSITE SIDING
3 PREFINISHED METAL PANEL, or SIMILAR
4 VINYL WINDOW AND DOOR SYSTEM
5 PREFINISHED METAL GUARDRAIL SYSTEM
6 PREFINISHED METAL FRAME
7 PREFINISHED METAL ROOF, or SIMILAR
8 PREFINISHED METAL CLADDING, or SIMILAR
9 PAINTED METAL DOOR
10 PREFINISHED SECTIONAL GARAGE DOOR

0' 8' 16' 24'
SCALE: 1/8"=1'-0"

DEVELOPER: AMCAL EQUITIES, LLC

PROJECT NAME: GRAND AVENUE FACULTY AND STAFF HOUSING

CLIENT ADDRESS: 30141 Agoura Rd, Agoura Hills, CA 91301

DATE ISSUED: 08/21/2017
PROJECT NO: 2017-40111
SCALE: 1/8" = 1'-0"

SHEET NUMBER: A3-201

SHEET TITLE:

NEIGHBORHOOD 3
BUILDING
ELEVATIONS

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FRONT ELEVATION

18 Plex-3L - Neighborhood 3

RIGHT ELEVATION

18 Plex-3L - Neighborhood 3

REAR ELEVATION

18 Plex-3L - Neighborhood 3

LEFT ELEVATION

18 Plex-3L - Neighborhood 3

MATERIAL LIST:

1 PLASTER FINISH
2 COMPOSITE SIDING
3 PREFINISHED METAL PANEL, or SIMILAR
4 VINYL WINDOW AND DOOR SYSTEM
5 PREFINISHED METAL GUARDRAIL SYSTEM
6 PREFINISHED METAL FRAME
7 PREFINISHED METAL ROOF, or SIMILAR
8 PREFINISHED METAL CLADDING, or SIMILAR
9 PAINTED METAL DOOR
10 PREFINISHED SECTIONAL GARAGE DOOR

0' 8' 16' 24'
SCALE: 1/8 "=1'-0"

DEVELOPER: AMCAL EQUITIES, LLC

PROJECT NAME: GRAND AVENUE FACULTY AND STAFF HOUSING

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DATE ISSUED: 08/21/2017
PROJECT NO: 2017-40111
SCALE: 1/8" = 1'-0"

SHEET NUMBER: **A3-202**

SHEET TITLE:

NEIGHBORHOOD 3
BUILDING
ELEVATIONS

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WEST (GRAND AVE.) ELEVATION

SOUTH (SLACK STR.) ELEVATION

MATERIAL LIST:

1 PLASTER FINISH
2 COMPOSITE SIDING
3 PREFINISHED METAL PANEL, or SIMILAR
4 VINYL WINDOW AND DOOR SYSTEM
5 PREFINISHED METAL GUARDRAIL SYSTEM
6 PREFINISHED METAL FRAME
7 PREFINISHED METAL ROOF, or SIMILAR
8 PREFINISHED METAL CLADDING, or SIMILAR
9 PAINTED METAL DOOR
10 PREFINISHED SECTIONAL GARAGE DOOR
11 PREFINISHED ALUMINUM STOREFRONT
12 TEXTURED CONCRETE WALL
13 PREFINISHED METAL SCREEN

0' 8' 16' 24'
SCALE: 1/8"=1'-0"

DEVELOPER: AMCAL EQUITIES, LLC

PROJECT NAME: GRAND AVENUE FACULTY AND STAFF HOUSING

CLIENT ADDRESS: 30141 Agoura Rd, Agoura Hills, CA 91301

DATE ISSUED: 08/21/2017
PROJECT NO: 2017-40111
SCALE: 1/8" = 1'-0"

SHEET NUMBER: A4-301

SHEET TITLE:

NEIGHBORHOOD 4
BUILDING
ELEVATIONS

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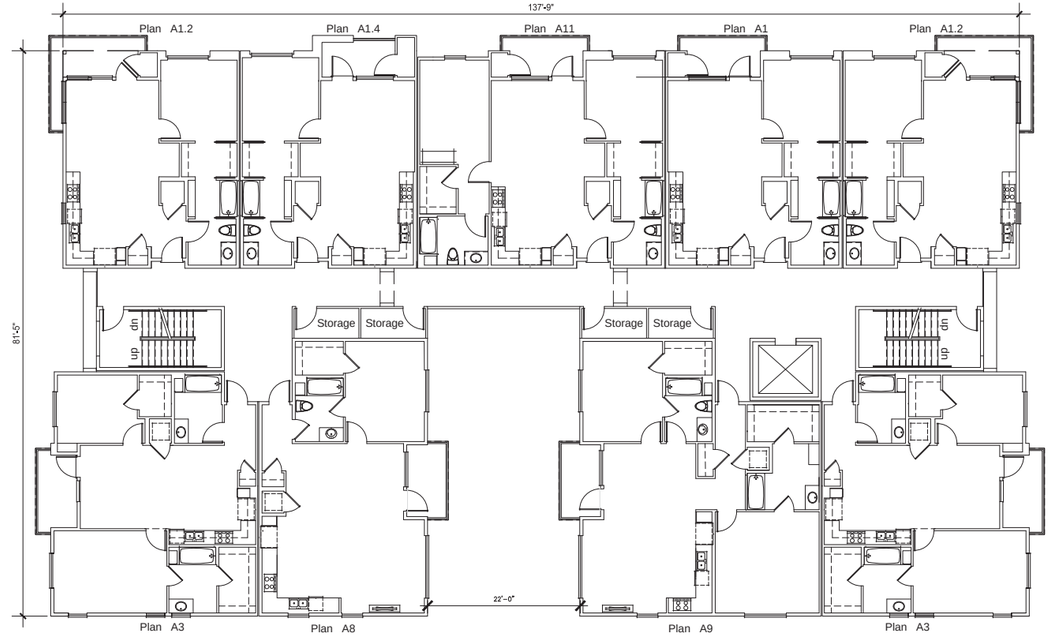
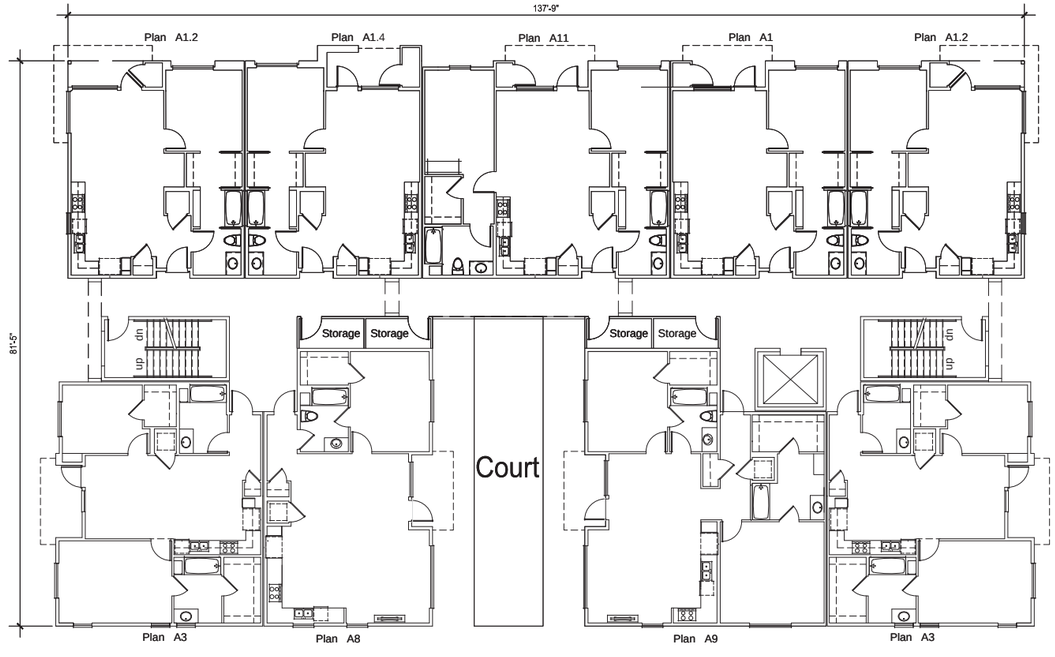


2nd, 3rd & 4th level



1st level

36 Plex: 4-Stories

Plan Tabulations: (Gross)				(Qty)
Plan A1	s.f.	732 +/-	1br/1ba	16
Plan A8	s.f.	900 +/-	1br/1ba	4
Plan A9	s.f.	1,220 +/-	2br/2ba	4
Plan A3	s.f.	984 +/-	2br/2ba	8
Plan A11	s.f.	1,043 +/-	2br/2ba	4
Total:				36

Neighborhood 1

0' 8' 16' 24'
SCALE: 1/8 "=1'-0"

DEVELOPER: AMCAL EQUITIES, LLC

PROJECT NAME: GRAND AVENUE FACULTY AND STAFF HOUSING

CLIENT ADDRESS: 30141 Agoura Rd, Agoura Hills, CA 91301

DATE ISSUED: 08/09/2017
PROJECT NO: 2017-40111
SCALE: 1/8" = 1'-0"

SHEET NUMBER: A1-101
SHEET TITLE:

NEIGHBORHOOD 1
BUILDING PLANS

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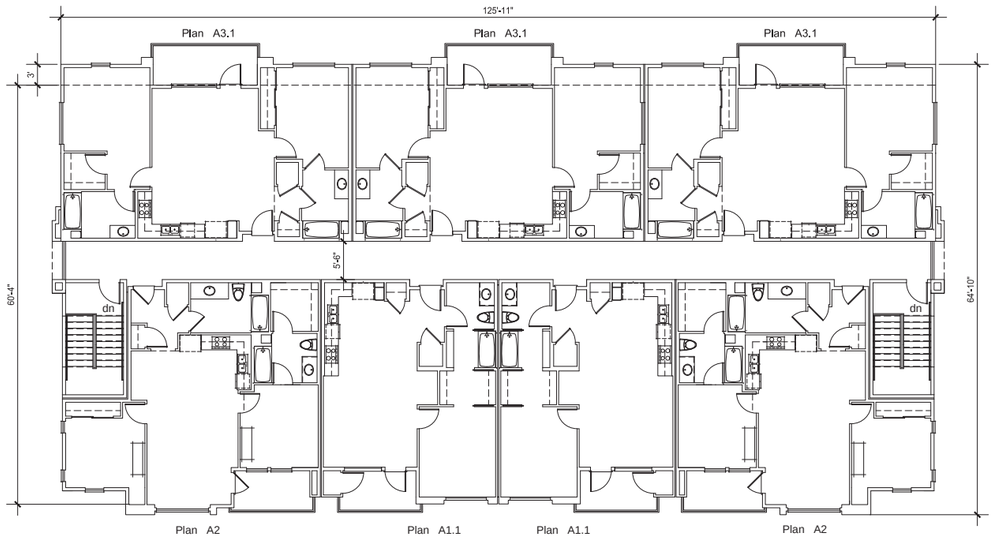
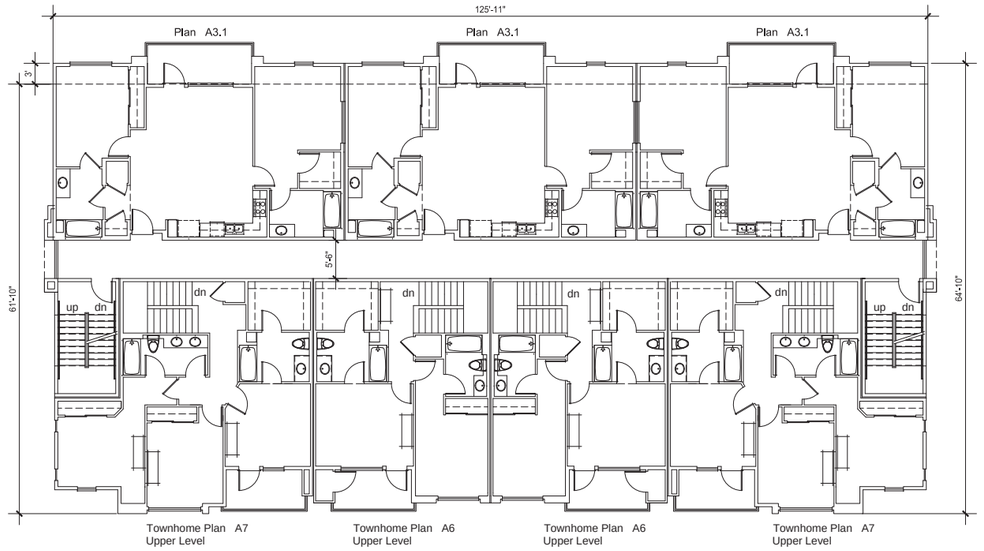


3rd level



2nd level

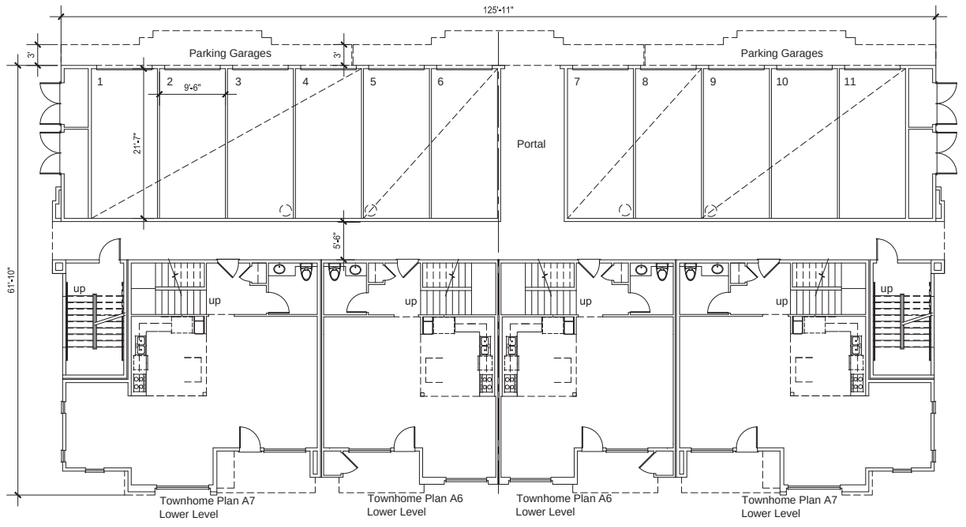
14 Plex (A): 3-Stories

Plan Tabulations: (Gross)				(Qty)
Plan A1.1	s.f.	746 +/-	1br/1ba	2
Plan A2	s.f.	971 +/-	2br/2ba	2
Plan A3.1	s.f.	1,005 +/-	2br/2ba	6
Townhome Plan A6	s.f.	1,384 +/-	2br/2.5ba	2
Townhome Plan A7	s.f.	1,844 +/-	3br/2.5ba	2
Total:				14

Neighborhood 2

0' 8' 16' 24'

SCALE: 1/8 "=1'-0"



1st level

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DEVELOPER:

PROJECT NAME:

CLIENT ADDRESS:

DATE ISSUED: 08/09/2017

PROJECT NO: 2017-40111

SCALE: 1/8" = 1'-0"

SHEET NUMBER: A2-101

SHEET TITLE:

NEIGHBORHOOD 2
BUILDING PLANS

SVA ARCHITECTS
3 MACARTHUR PLACE, SUITE 850 SANTA ANA, CA 92707
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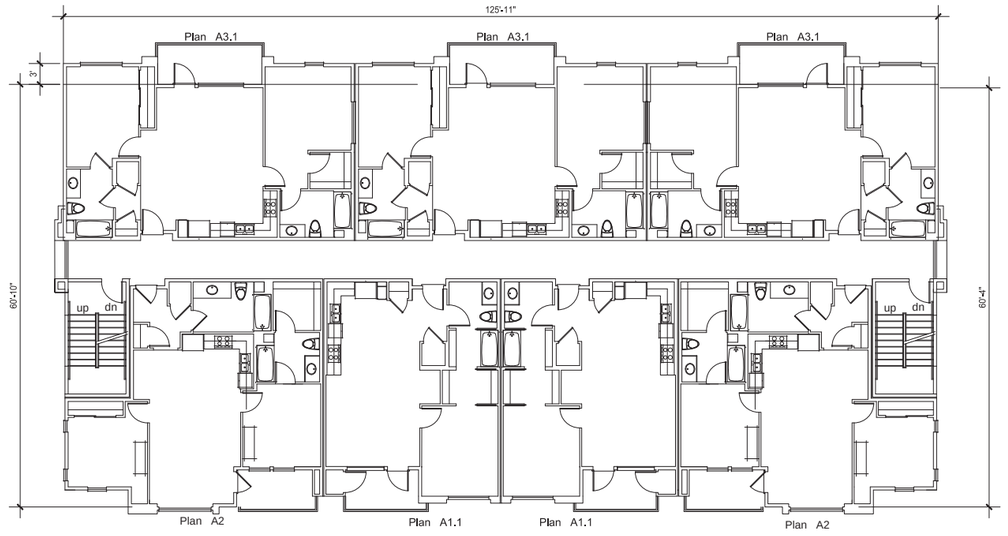
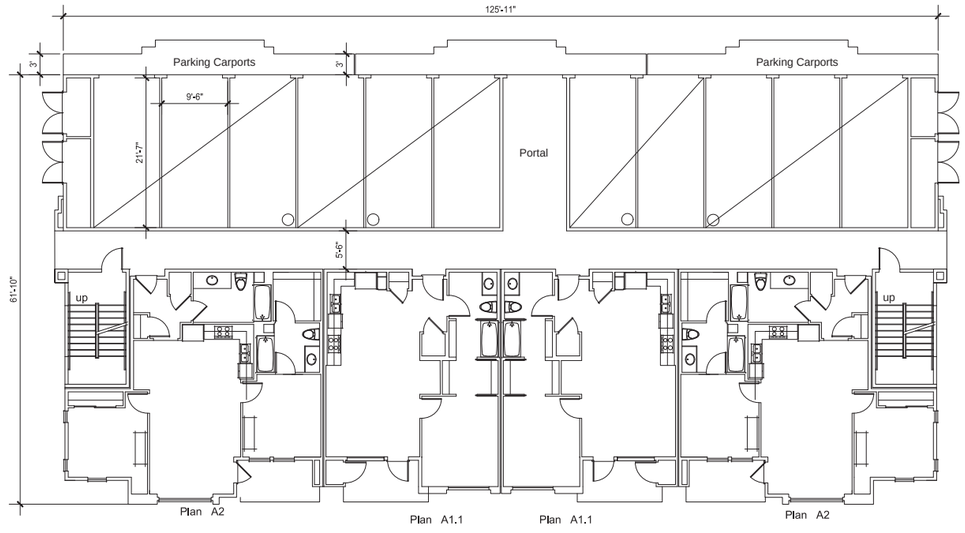


2nd level



1st level

11 Plex: 2-Stories

Plan Tabulations: (Gross)			(Qty)
Plan A1.1	s.f.	746 +/- 1br/1ba	4
Plan A2	s.f.	971 +/- 2br/2ba	4
Plan A3.1	s.f.	1,005 +/- 2br/2ba	3
Total:			11

Neighborhood 3

0' 8' 16' 24'
SCALE: 1/8"=1'-0"

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30141 Agoura Rd, Agoura Hills, CA 91301

DEVELOPER:
PROJECT NAME:
CLIENT ADDRESS:

DATE ISSUED: 08/21/2017
PROJECT NO: 2017-40111
SCALE: 1/8" = 1'-0"

SHEET NUMBER: A3-101
SHEET TITLE:

NEIGHBORHOOD 3
11 PLEX
BUILDING PLANS

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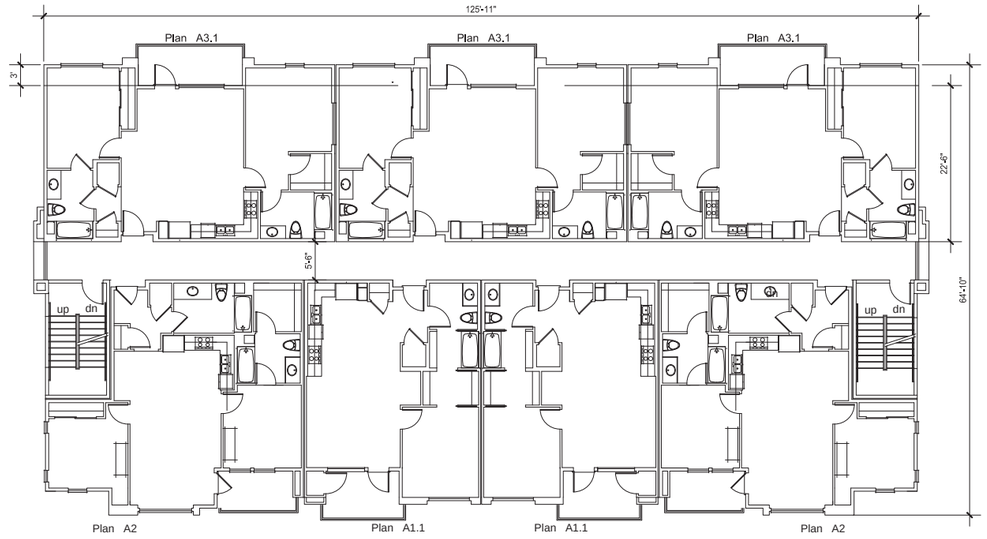
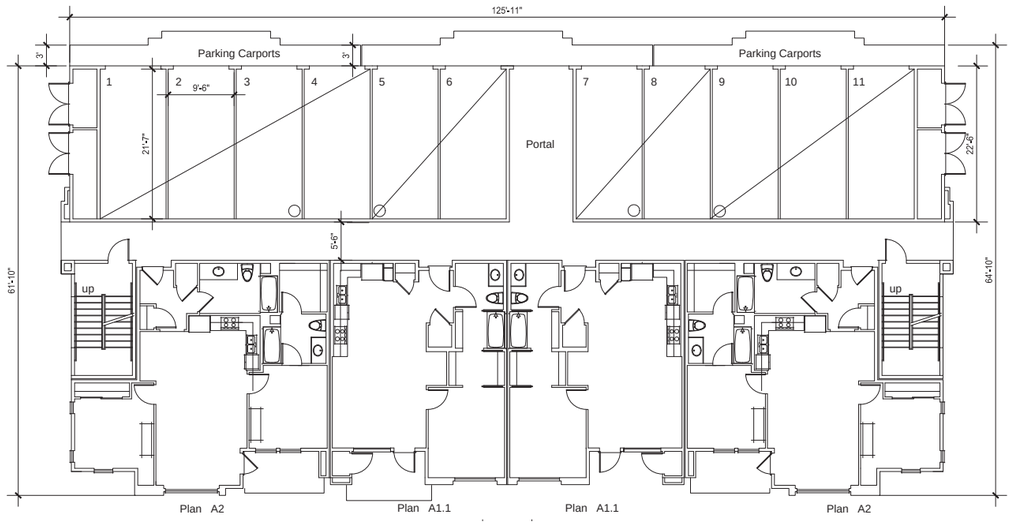


2nd & 3rd level



1st level

18 Plex: 3-Stories

Plan Tabulations: (Gross)			(Qty)
Plan A1.1	s.f. 746 +/-	1br/1ba	6
Plan A2	s.f. 971 +/-	2br/2ba	6
Plan A3.1	s.f. 1,005 +/-	2br/2ba	6
Total:			18

Neighborhood 3

0' 8' 16' 24'

SCALE: 1/8 "=1'-0"

AMCAL EQUITIES, LLC
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DEVELOPER:
PROJECT NAME:
CLIENT ADDRESS:

DATE ISSUED: 08/21/2017
PROJECT NO: 2017-40111
SCALE: 1/8" = 1'-0"

SHEET NUMBER: A3-102
SHEET TITLE:

NEIGHBORHOOD 3
18 PLEX
BUILDING PLANS

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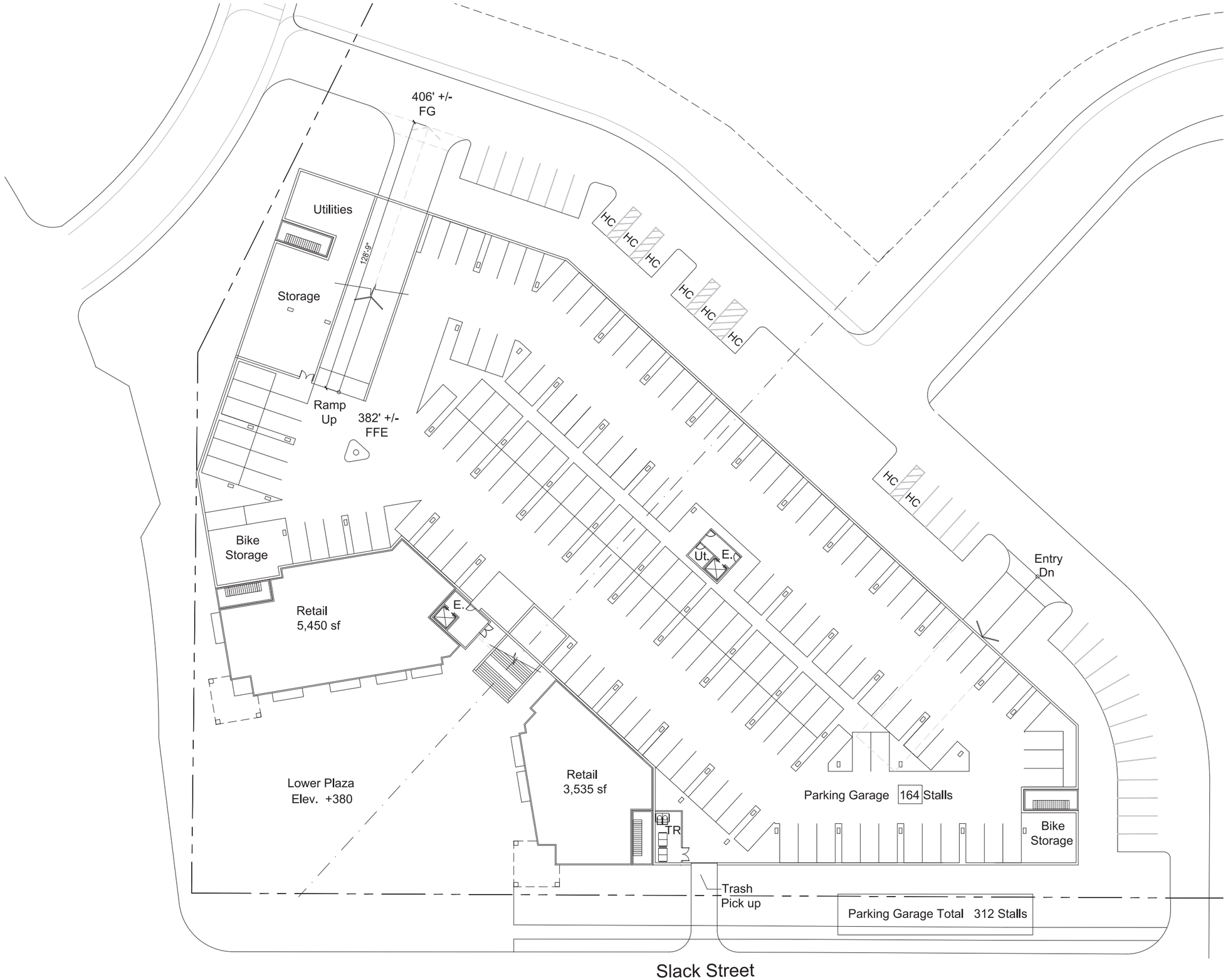

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DEVELOPER:

PROJECT NAME:

CLIENT ADDRESS:

DATE ISSUED: 08/21/2017

PROJECT NO: 2017-40111

SCALE: **AS NOTED** 1/16" = 1'-0"

SHEET NUMBER: A4-201

SHEET TITLE:

NEIGHBORHOOD 4
LEVEL B2

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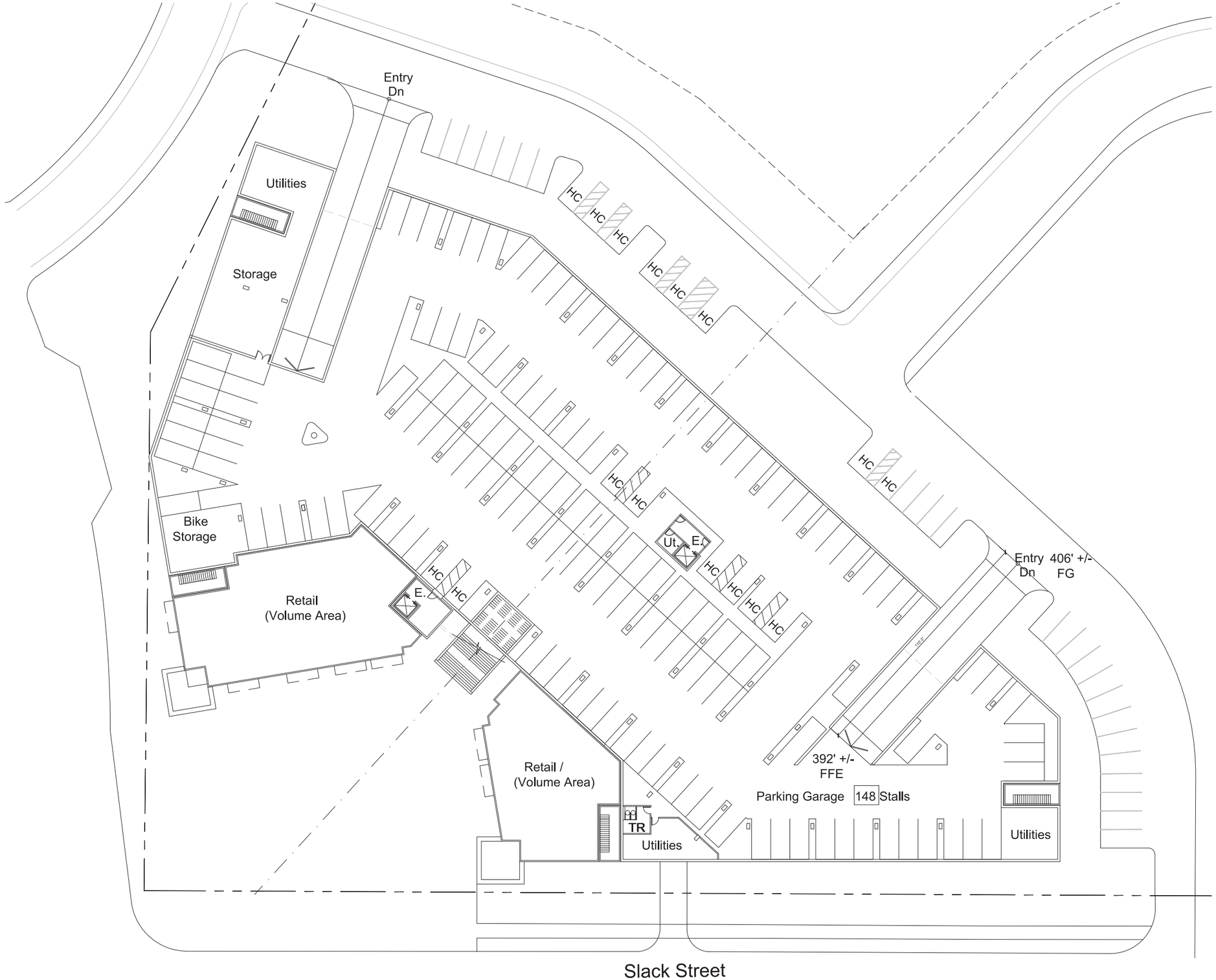

DEVELOPER: AMCAL EQUITIES, LLC

PROJECT NAME: GRAND AVENUE FACULTY AND STAFF HOUSING

CLIENT ADDRESS: 30141 Agoura Rd, Agoura Hills, CA 91301

DATE ISSUED: 08/21/2017

PROJECT NO: 2017-40111

SCALE: AS NOTED 1/16" = 1'-0"

SHEET NUMBER: A4-202

SHEET TITLE:

NEIGHBORHOOD 4
LEVEL B1

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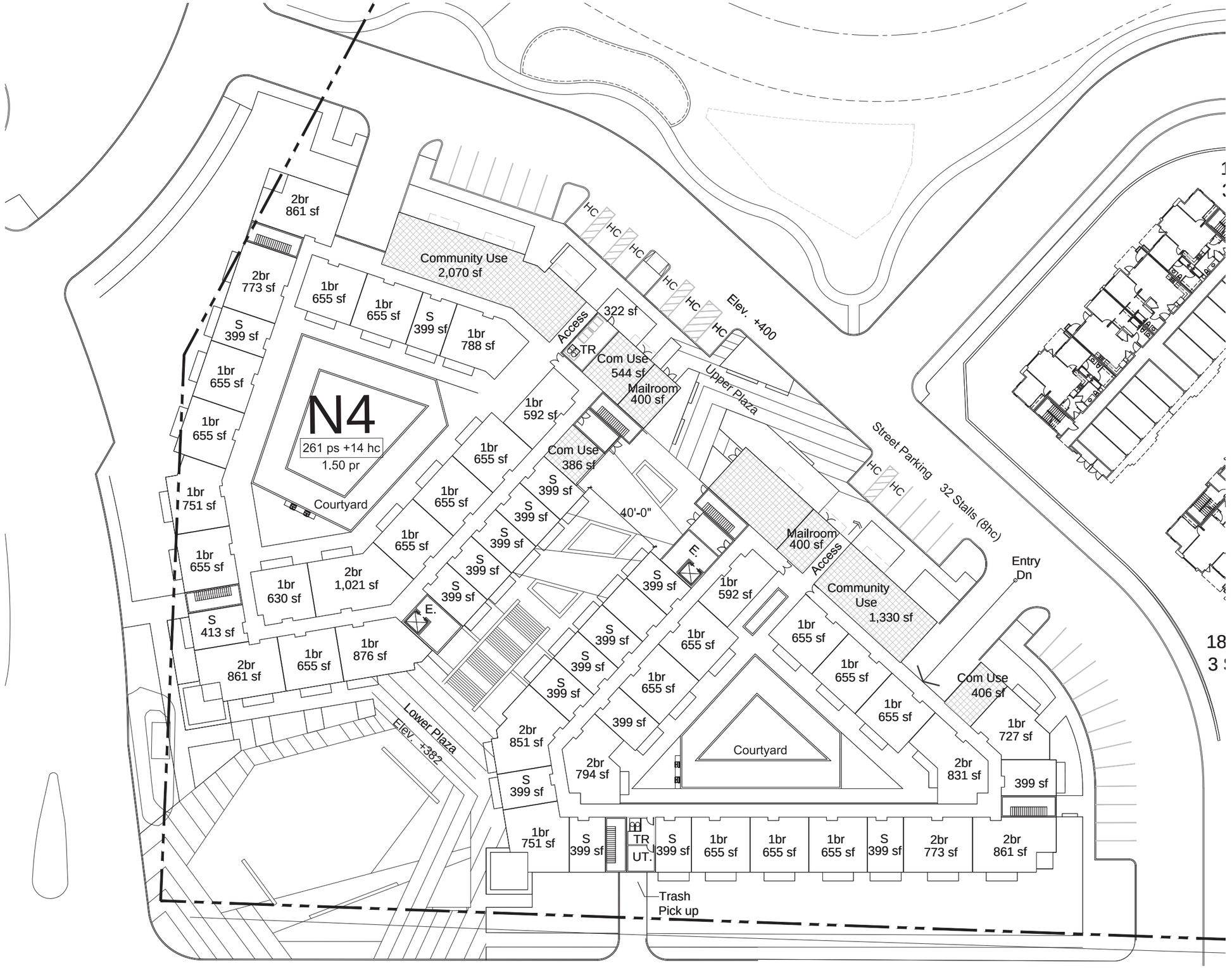

DEVELOPER: AMCAL EQUITIES, LLC

PROJECT NAME: GRAND AVENUE FACULTY AND STAFF HOUSING

CLIENT ADDRESS: 30141 Agoura Rd, Agoura Hills, CA 91301

DATE ISSUED: 08/21/2017

PROJECT NO: 2017-40111

SCALE: AS NOTED 1/16" = 1'-0"

SHEET NUMBER: A4-203

SHEET TITLE:

NEIGHBORHOOD 4
LEVEL 1-PODIUM

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DEVELOPER:

PROJECT NAME:

CLIENT ADDRESS:

DATE ISSUED: 08/21/2017

PROJECT NO: 2017-40111

SCALE: AS NOTED 1/16" = 1'-0"

SHEET NUMBER: A4-204

SHEET TITLE:

NEIGHBORHOOD 4
LEVEL 2

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GRAND AVENUE FACULTY AND STAFF HOUSING

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DEVELOPER:
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DATE ISSUED: 08/21/2017
PROJECT NO: 2017-40111
SCALE: AS NOTED 1/16" = 1'-0"

SHEET NUMBER: A4-205
SHEET TITLE:

NEIGHBORHOOD 4
LEVEL 3

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Appendix C: Biological Resources Species Information and Photo Documentation

Table 1. Special-Status Plant Species and Communities Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Hoover's bent grass *Agrostis hooveri*	Sandy sites in chaparral, cismontane woodland, valley and foothill grassland. 60–600 meters	April–July	--/--/1B.2	**Unlikely**. The planning areas do not support sandy soils.
Arroyo de la cruz manzanita *Arctostaphylos cruzensis*	Broadleaf upland forest, coastal scrub, closed cone coniferous forest, chaparral and grassland. On sandy soils. 60–310 meters	December–March	--/--/1B.2	**Unlikely**. The planning areas do not support sandy soils.
Santa Lucia manzanita *Arctostaphylos luciana*	Evergreen shrub; occurs on Chaparral with shale outcrops. 350–850 meters	February–March	--/--/1B.2	**Unlikely**. Elevation of the planning areas is lower than this species range.
Morro manzanita *Arctostaphylos morroensis*	Chaparral, cismontane woodland, coastal scrub, on stabilized coastal dunes. 5–205 meters	December–March	FT/--/1B.1	**Unlikely**. The planning areas do not support sandy soils and is located east of this species range.
Oso Manzanita *Arctostaphylos osoensis*	Evergreen shrub; occurs in chaparral and cismontane woodland associated with dacite porphyry (purple/red igneous volcanic rock) on buttes. 300–500 meters	February–March	--/--/1B.2	**Unlikely**. The planning areas do not support appropriate soils and are located at lower elevation than this species range.
Pecho manzanita *Arctostaphylos pechoensis*	Closed coniferous forest, chaparral, and coastal scrub on siliceous shale. 125–850 meters	November to March	--/--/1B.2	**Unlikely**. The planning areas do not support suitable soils.
Santa Margarita manzanita *Arctostaphylos pilosula*	Evergreen shrub; occurs in closed coniferous forest, chaparral, and cismontane woodland on shale soils. 170–1100 meters	December–March	--/--/1B.2	**Unlikely**. The planning areas do not support suitable soils and are at the lowest extent of this species elevation range.
sand mesa manzanita *Arctostaphylos rudis*	Evergreen shrub; occurs in maritime chaparral and coastal scrub with sandy soils. 25–322 meters	November–February	--/--/1B.2	**Unlikely**. The planning areas do not support sandy soils.
dacite manzanita *Arctostaphylos tomentosa* ssp. *daciticola*	Evergreen shrub occurs in chaparral and cismontane woodland associated with dacite porphyry (purple/red igneous volcanic rock) on buttes. 100–300 meters	March	--/--/1B.1	**Unlikely**. The planning areas do not support appropriate soils.

Table 1. Special-Status Plant Species and Communities Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
marsh sandwort *Arenaria paludicola*	Marshes and swamps. Grows through dense mats of *Typha*, *Juncus*, *Scirpus*, etc. in freshwater marsh. 10–170 meters	May–August	FE/SE/1B.1	**Unlikely:** The various reservoirs in the planning areas may support marginal wetland conditions.
Mile's milk vetch *Astragalus didymocarpus* var. *milesianus*	Annual herb; Occurs in coastal scrub on clay soils. 20–90 meters	March–June	--/--/1B.2	**Low Potential:** Species not expected to occur in the agricultural and developed areas. N4 Residential Neighborhood supports suitable habitat.
Coulter's saltbush *Atriplex coulteri*	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland/alkaline or clay; elev. 3–460 meters.	March–October	--/--/1B.2	**Low Potential:** Species not expected to occur in the agricultural and developed areas. N4 Residential Neighborhood supports suitable habitat.
twisted horsehair lichen *Bryoria spiralifera*	An epiphytic lichen that is typically associated with conifers. Largest known population is on Samoa Peninsula in Humboldt County. 0–30 meters.	NA	--/--/1B.2	**Unlikely**. The planning areas do not support appropriate habitat.
round-leaved filaree *California macrophylla*	Annual herb occurs in cismontane woodland and valley and foothill grassland with clay soils. 15–1200 meters	March–May	--/--/1B.1	**Low Potential:** Species not expected to occur in the agricultural and developed areas. N4 Residential Neighborhood supports suitable habitat.
San Luis mariposa-lily *Calochortus obispoensis*	Chaparral, coastal scrub, valley and foothill grassland. Often in serpentine grassland. 75–665 meters	May–July	--/--/1B.2	**Low Potential:** Species not expected to occur in the agricultural and developed areas. The species could occur in the vicinity of the Creekside Pedestrian Walk. CNDDB documents occurrences in Poly Canyon, near the Poly "P," and Pennington Creek preserve.
La Panza mariposa lily *Calochortus simulans*	Chaparral, cismontane woodlands, lower montane coniferous forest, valley and foothill grassland; often in sandy, granitic, or serpentine soils. 395–1100 Meters	April–May	--/--/1B.3	**Unlikely:** The planning areas do not support suitable soils and are located at a lower elevation than this species range.

Table 1. Special-Status Plant Species and Communities Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Cambria morning-glory *Calystegia subacaulis* ssp. *episcopalis*	Grassland and rocky areas associated with chaparral and cismontane woodland. 60–500 meters	April–May	--/--/4.2	**Low Potential:** Species not expected to occur in the development areas. N4 Residential Neighborhood supports suitable habitat.
Hardham's evening-primrose *Camissoniopsis hardhamiae*	An annual herb that is typically found in sandy, decomposed carbonate soils. Especially in disturbed or burned areas among chaparral and cismontane woodland. 140–945 meters	March–May	-- / -- / 1B.2	**Unlikely:** The planning areas do not support suitable soils or habitats.
San Luis Obispo sedge *Carex obispoensis*	Closed cone coniferous forests, chaparral, coastal prairie, coastal scrub, and valley and foothill grassland. Usually adjacent to seeps, springs, stream sides or other water source with sand, clay or serpentine. 5–790 meters	April–June	--/--/1B.2	**Low Potential:** Species not expected to occur in the development areas. The species could occur in the vicinity of the Creekside Pedestrian Walk. CNDDB documents occurrences in upper reaches of Stenner Creek.
San Luis Obispo owls clover *Castilleja densiflora* ssp. *obispoensis*	Valley and foothill grassland. 10–215 meters	April	--/--/1B.2	**Low Potential:** Species not expected to occur in the agricultural and developed areas. N4 Residential Neighborhood and Creekside Pedestrian Walk areas support suitable conditions. CNDDB documents occurrences in Poly Canyon and Chorro Creek Ranch.
Congdon's tarplant *Centromadia parryi* ssp. *congdonii*	Depressional areas within valley and foothill grassland. 1–230 meters	June–November	--/--/1B.1	**Low Potential:** Species not expected to occur in the development areas. N4 Residential Neighborhood supports suitable habitat.
Coastal goosefoot *Chenopodium littoreum*	annual herb that occurs on coastal dunes.10–30 meters	April–August	--/--/1B.2	**Unlikely:** The planning areas do not support coastal dunes**.**
dwarf soaproot *Chlorogalum pomeridianum* var. *minus*	Chaparral habitats with serpentine soils. 305–1000 meters	May–August	--/--/1B.2	**Unlikely:** Most of the planning areas do not support suitable soils. All of the planning areas are located at a lower elevation than this species range.

Table 1. Special-Status Plant Species and Communities Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Point Reyes birds-beak *Chloropyron maritimum* ssp. *palustre*	Annual herb (hemiparisitic) that occurs in marshes and swamps (coastal salt). Elevation 0–10 meters.	June–October	--/--/1B.2	**Unlikely:** The planning areas do not support coastal swamps or marshes**.**
Brewer's spineflower *Chorizanthe breweri*	Chaparral, cismontane woodland, coastal scrub, closed–cone coniferous forest; rocky or gravelly serpentine sites; usually in barren areas. 45–800 meters	May–August	--/--/1B.3	**Low Potential:** Species not expected to occur in most development areas. N4 Residential Neighborhood supports suitable habitat. CNDDB documents occurrences in Poly Canyon, Chorro Creek Ranch, and Pennington Creek Biological Preserve.
straight-awned spineflower *Chorizanthe rectispina*	Chaparral, cismontane woodland, coastal scrub. Often on granite in chaparral. 355–1035 meters	April–July	--/--/1B.3	**Unlikely:** The planning areas do not support suitable soils and are located at a lower elevation than this species range.
San Luis Obispo fountain thistle *Cirsium fontinale* var. *obispoense*	Chaparral, cismontane woodlands; serpentine seeps or bogs. 35–380 meters	February–July	FE/SE/1B.2	**Low Potential:** Species may occur in serpentine seeps along Poly Canyon and Stenner Creek. CNDDB documents occurrences in a University bioreserve areas. Species is not expected to occur in the proposed development areas.
Cuesta Ridge thistle *Cirsium occidentale* var. *lucianum*	A perennial herb that occurs in openings among chaparral with rocky substrates and serpentinite. Often found on steep rocky slopes and road cuts. 500–750 meters	April–June	-- / -- /1B.2	**Unlikely:** The planning areas do not support suitable soils and are located at a lower elevation than this species range.
surf thistle *Cirsium rhothophilum*	Coastal dunes, coastal bluff scrub. Open areas in central dune scrub; usually in coastal dunes. 3–60 meters	April–June	--/ST/1B.2	**Unlikely:** The planning areas do not support coastal dunes and are located at a higher elevation than this species range.
popcorn lichen *Cladonia firma*	A squamulose lichen that occurs on soil, detritus, or moss on stabilized coastal dunes among coastal scrub. Known in CA only from Morro Bay and Baywood-Los Osos areas. 30–75 meters	NA	--/--/2B.2	**Unlikely:** The planning areas do not support coastal dunes and are located at a higher elevation than this species range.

Table 1. Special-Status Plant Species and Communities Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Pismo clarkia *Clarkia speciosa* ssp. *immaculata*	Sandy soils, openings in chaparral, cismontane woodland, valley and foothill grassland. On ancient sand dunes not far from the coast. 25–185 meters.	May–July	FE/SR/1B.1	**Unlikely:** The planning areas do not support suitable soils and are located north of this species range.
dune larkspur *Delphinium parryi* ssp. *blochmaniae*	Perennial herb. Occurs in maritime chaparral and coastal dunes with sandy or rocky soils. 0–200 meters	April–May	--/--/1B.2	**Unlikely:** The planning areas do not support coastal dunes or maritime chaparral.
Eastwood's larkspur *Delphinium parryi* ssp. *eastwoodiae*	Perennial herb. Occurs in chaparral and valley and foothill grassland among serpentine soils. 60–640 meters	April–May	--/--/1B.2	**Low Potential:** Species not expected to occur in most development areas. N4 Residential Neighborhood supports suitable habitat. CNDDB documents occurrences in Poly Canyon.
umbrella larkspur *Delphinium umbraculorum*	Perennial herb. Occurs in cismontane woodland. 400–1600 meters.	April–June	--/--/1B.3	**Unlikely:** The planning areas are located at a lower elevation than this species range.
beach spectaclepod *Dithyrea maritima*	Coastal dunes, coastal scrub. Sea shores, on sand dunes, and sandy places near the shore. 3–50 meters	March–May	--/ST/1B.1	**Unlikely:** The planning areas do not support coastal dunes or sandy soils and are located at a higher elevation than this species range.
Betty's dudleya *Dudleya abramsii* ssp. *bettinae*	Coastal scrub, valley and foothill grassland, chaparral; rocky barren serpentine exposures. 20–180 meters	May–July	--/--/1B.2	**Low Potential:** Species not expected to occur in the development areas. The species could occur in the vicinity of the Creekside Pedestrian Walk.
mouse-gray dudleya *Dudleya abramsii* ssp. *murina*	Serpentine outcrops in chaparral, cismontane woodland. 90–300 meters.	May–June	--/--/1B.3	**Low Potential:** Species not expected to occur in the development areas. The species could occur in the vicinity of the Creekside Pedestrian Walk. CNDDB documents occurrences in the Chorro Creek Ranch.

Table 1. Special-Status Plant Species and Communities Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Blochman's dudleya *Dudleya blochmaniae* ssp. *blochmaniae*	Coastal scrub, chaparral, and valley and foothill grassland habitats on rocky outcrops in clay or serpentine soils. 5–450 meters.	April–June	--/--/1B.1	**Low Potential:** Species not expected to occur in the developed and agricultural portions of the development areas. N4 Residential Neighborhood and the Creekside Pedestrian Walk sites support suitable habitat. CNDDB documents occurrences in Poly Canyon and Pennington Creek vicinity.
Yellow-flowered eriastrum *Eriastrum luteum*	Annual herb occurs in broadleafed upland forest, chaparral, and cismontane woodland on sandy or gravelly soils. 290–1000 meters	May–June	--/--/1B.2	**Unlikely:** The planning areas do not support suitable habitat and are located at a lower elevation than this species range.
Blochman's leafy daisy *Erigeron blochmaniae*	Perennial rhizomatous herb. Occurs in coastal dunes and coastal scrub on sandy soils. 3–45 meters.	July–August	--/--/1B.2	**Unlikely:** The planning areas do not support coastal dunes or sandy soils and are located at a higher elevation than this species range.
Indian knob mountainbalm *Eriodictyon altissimum*	Evergreen shrub. Occurs in maritime chaparral, cismontane woodland, and coastal scrub with sandstone substrates. 80–270 meters	March–June	FE/SE/1B.1	**Unlikely:** The planning areas do not support sandstone soils.
Hoover's button-celery *Eryngium aristulatum* var. *hooveri*	Vernal pools in alkaline depressions near the coast. 5–45 meters.	July	--/--/1B.1	**Unlikely:** The planning areas are not coastal and are located at a higher elevation than this species range.
San Joaquin spearscale *Extriplex joaquiniana*	Shrub occurs in chenopod scrub, meadows, seeps, playas, and valley and foothill grassland. Often in alkaline soils. 1–835 meters	April–October	--/--/1B.2	**Low Potential:** Species not expected to occur in the developed and agricultural portions of the development areas. N4 Residential Neighborhood site support marginal habitat.
Ojai fritillary *Fritillaria ojaiensis*	Bulbiferous herb occurs in broadleaf upland forest, chaparral and lower montane coniferous forest on rocky soils. 300–998 meters	March–May	--/--/1B.2	**Unlikely:** The planning areas do not support suitable habitat and are located at a lower elevation than this species range.

Table 1. Special-Status Plant Species and Communities Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
mesa horkelia *Horkelia cuneata* ssp. *puberula*	Perennial herb that occurs in chaparral, cismontane woodlands, coastal scrub; in sandy or gravelly sites. 70–810 meters	February–September	--/--/1B.1	**Unlikely:** The planning areas do not support suitable soils.
Perennial goldfields *Lasthenia californica* ssp. *macrantha*	A perennial herb from the Asteraceae family. Occurs in coastal bluff scrub, coastal dunes, and coastal scrub. 5–520 meters	January–November	--/--/1B.2	**Unlikely:** The planning areas do not support suitable soils or habitats..
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Annual herb occurs in freshwater wetlands coastal salt marshes, wetland-riparian habitat, alkali sink, playas, vernal-pools, and swamps. 1–1220 meters	February–June	--/--/1B.1	**Low Potential:** The Stenner Creek and Brizzolara Creek riparian areas support suitable conditions.
Jones's layia *Layia jonesii*	Chaparral and valley and foothill grassland on clay or serpentine outcrops. 5–400 meters.	March–May	--/--/1B.2	**Low Potential:** Species not expected to occur in most development areas. N4 Residential Neighborhood supports suitable habitat. CNDDB documents occurrences of Jones's layia near the summit of Poly Canyon and on Chorro Creek Ranch property.
San Luis Obispo County lupine *Lupinus ludovicianus*	Chaparral, cismontane woodland. Open areas in sandy soils of the Santa Margarita formation. 50–525 meters	April–July	--/--/1B.2	**Unlikely:** The planning areas do not support suitable soils
Santa Lucia bush-mallow *Malacothamnus palmeri* var. *palmeri*	Deciduous shrub occurs in chaparral with rocky substrates. 60–360 meters	May–July	--/--/1B.2	**Unlikely:** The planning areas do not support suitable soils or habitat.
Slender bush-mallow *Malacothamnus gracilis*	Perennial deciduous shrub that occurs in chaparral on rocky soil. 190–575 meters	May–October	--/--/1B.1	**Unlikely:** The planning areas do not support suitable soils or habitat and are located at a lower elevation than this species range.

Table 1. Special-Status Plant Species and Communities Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Palmer's monardella *Monardella palmeri*	Chaparral and cismontane woodland on serpentine slopes. 200–800 meters.	June–August	--/--/1B.2	**Low Potential:** Species not expected to occur in the developed and agricultural portions of the development areas. The upper reaches of the Poly Canyon area supports suitable habitat.
southern curly-leaved monardella *Monardella sinuata* ssp. *sinuata*	Annual herb that occurs in sandy soil among chaparral, cismontane woodland, coastal dunes, and coastal scrub with openings. 0–300 meters	April–September	--/--/1B.2	**Unlikely:** The planning areas do not support suitable soils or habitat.
shinning navarretia *Navarretia nigelliformis* ssp. *radians*	Annual herb that occurs in vernal pools within cismontane woodland and valley and foothill grassland. 76–1000 meters	April–July	--/--/1B.2	**Low Potential:** Species not expected to occur in the agricultural or developed areas. N4 Residential Neighborhood supports suitable habitat.
coast woolly-heads *Nemacaulis denudate* var. *denudata*	Annual herb that occurs on coastal dunes. 0–100 meters	April–September	--/--/1B.2	**Unlikely:** The planning areas do not support suitable soils or habitat.
hooked popcorn-flower *Plagiobothrys uncinatus*	Annual herb occurs in chaparral, cismontane woodland, and valley and foothill grassland with sandy soils. 300–760 meters	April–May	--/--/1B.2	**Unlikely:** The planning areas do not support suitable soils and are located at a lower elevation than this species range.
Diablo Canyon blue grass *Poa diaboli*	Rhizomatous herb occurs in closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub with shale substrates. 120–400 meters	March–April	--/--/1B.2	**Unlikely:** The planning areas do not support suitable soils.
adobe sanicle *Sanicula maritima*	Moist seeps within coastal prairie, chaparral, meadows, and valley and foothill grassland habitats in clay or serpentine soils. 30–240 meters	February–May	--/SR/1B.1	**Low Potential:** Species not expected to occur in the agricultural or developed areas. N4 Residential Neighborhood supports suitable habitat.

Table 1. Special-Status Plant Species and Communities Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
black-flowered figwort *Scrophularia atrata*	Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, riparian scrub. Around swales and in sand dunes. Sand, diatomaceous shale and soils derived from other parent material. 10–250 meters	March–April	--/--/1B.2	**Unlikely:** The planning areas do not support suitable soils.
Blochman's ragwort *Senecio blochmaniae*	A perennial herb that occurs in coastal dunes. 0–100 meters	May–October	--/--/4.2	Unlikely: The planning areas do not support coastal dune habitat.
Cuesta pass checkerbloom *Sidalcea hickmanii* ssp. *anomala*	Closed-cone coniferous forest with rocky serpentine slopes. 600–800 meters.	May–June	--/SR/1B.2	Unlikely: The planning areas do not contain closed-cone coniferous forest or serpentine slopes. The planning areas elevation is lower than this species range.
most beautiful jewel-flower *Streptanthus albidus* ssp. *peramoenus*	Chaparral, cismontane woodlands, valley and foothill grasslands on serpentine soil. 110–1000 meters	April–June	--/--/1B.2	**Low Potential:** Species not expected to occur in the agricultural and developed areas. The Creekside Pedestrian Walk area supports pockets of suitable habitat. CNDDB documents occurrences in the Poly Canyon area.
California seablite *Suaeda californica*	Low growing evergreen shrub occurs in coastal salt marshes and swamps. 0–15 meters	July–October	FE/--/1B.1	**Unlikely:** The planning areas do not support coastal wetland soils or habitats.
Splitting yarn lichen *Sulcaria isidiifera*	An epiphytic lichen that occurs on branches of old growth oaks and shrubs in coastal scrub and woodland habitats.	NA	--/--/1B.1	**Low Potential:** Species not expected to occur in the agricultural and developed areas. The Creekside Pedestrian Walk area supports pockets of suitable habitat.
saline clover *Trifolium hydrophilum*	Annual herb that occurs in marshes and swamps, valley and foothill grassland (mesic, alkaline), and vernal pools. 0–300 meters.	April–June	--/--/1B.2	**Low Potential:** Species not expected to occur in the agricultural or developed areas. N4 Residential Neighborhood supports suitable habitat.

Table 1. Special-Status Plant Species and Communities Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
caper fruited tropidocarpum *Tropidocarpum capparideum*	Valley and foothill grassland habitats on alkaline hills 1–455 meters	March–April	--/--/1B.1	**Low Potential:** Species not expected to occur in the agricultural or developed areas. N4 Residential Neighborhood supports suitable habitat.
Natural Communities of Concern				
central dune scrub	A back dune plant community characterized by low growing, drought tolerant shrubs that develop considerable cover. Diagnostic species include *Ericameria ericoides* and *Lupinus chamissonis*.			The planning areas are not located on the coast and do not support any dune habitats.
central foredunes	A foredune plant community characterized by scattered low growing perennial plants including *Abronia* sp. *Ambrosia* sp. and *Cackile* sp. Usually occurring in areas exposed to tidal action.			The planning areas are not located on the coast and do not support any dune habitats.
central maritime chaparral	A variable scrub community of moderate to high cover dominated by various *Arctostaphylos* sp. Found on well drained sandy soils in areas subject to summer fog.			The planning areas do not support central maritime chaparral.
coastal brackish marsh	Marsh habitat dominated by perennial, emergent, herbaceous monocots such a Scirpus sp. Salinity varies but is brackish from freshwater input. Usually located at interior edges of coastal bays and estuaries or in coastal lagoons.			The planning areas do not contain any brackish wetlands.
coastal and valley freshwater marsh	A wetland community that is found in areas of permanently or prolonged freshwater saturation without significant current or flow. Vegetation is dominated by perennial emergent monocots including cattails and rushes.			Some of the reservoirs and select portions of Brizzolara and Stenner creeks support coastal and valley freshwater marsh
northern coastal salt marsh	Marsh habitat supporting herbaceous, suffrutescent, salt tolerant hydrophytes often active in summer and dormant in winter. Characteristic species include Jaumea carnosa, Limonium californicum, and Frankenia salina. Developed around Humboldt Bay, Tomales Bay, San Francisco Bay, Elkhorn Slough, and Morro Bay.			The planning areas do not contain any salt marsh wetlands.
northern interior cypress forest	An open serotinous forest that is often found on dry, rocky soils. Often associated with serpentine soils. Vegetation consists of dense to sparse stands of *Cupressus* species.			The planning areas do not support northern interior cypress forest.

Table 1. Special-Status Plant Species and Communities Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
serpentine bunchgrass	An open grassland community that is dominated by perennial bunch grasses. Typically, total cover is low but native species' dominate the composition. Associated species include *Nassela cernua*, *N. lepida*, *N. pulchra*, and *Melica californica*. Always occurring on serpentine substrates.			Known to occur on University lands; may occur in the general vicinity of the Creekside Pedestrian Walkway. Does not occur in other planning areas.
valley needlegrass grassland	Grassland reaching up to 2 feet tall and dominated by *Nassella* sp, which is a native tussock forming grass. Annual grasses occur between the perennials, often exceeding the bunch grasses in cover. Usually occurs on fine-textured soils that are wet in the winter and very dry in the summer.			Known to occur on University lands; may occur on N4 Residential Neighborhood parcel. Does not occur in other planning areas.

General references: CNDDB 2016, Baldwin 2012, All plant descriptions paraphrased from CNPS 2016.

Status Codes
--= No status

Federal:
FE = Federal Endangered
FT=Federal Threatened

State:
SE=State Endangered
ST= State Threatened
SR= State Rare

Rationale Terms:
Species Present: Species was or has been observed in the survey area.
Potential: The appropriate habitat, soils, and elevation are present in the survey area.
Low Potential: The appropriate habitat and/or soils are present but other factors (past disturbances, elevation range) may preclude species occurrence.
Suitable Conditions Absent: The survey area did not support the appropriate habitat, soils, and/or elevation for the species.

California Native Plant Society (CNPS):
Rank 1A = plants assumed to be extirpated in California and rare or extinct elsewhere
Rank 1B = rare, threatened, or endangered in California and elsewhere.
Rank 2A = plants assumed to be extirpated in California, but common elsewhere.
Rank 2B = rare, threatened, or endangered in California, but more common elsewhere
Rank 3 = plants that about which more information is needed.
Rank 4 = a watch list plants of limited distribution.

Threat Code:
.1 = Seriously endangered I California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 = Fairly endangered in California (20-80% occurrences threatened)
.3 = Not very endangered I California (<20% of occurrences threatened or no current threats known)

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/CDFW	Rationale for Expecting Presence or Absence
Gastropods			
Morro shoulderband snail *Helminthoglypta walkeriana*	The Morro shoulderband snail (MSS) is restricted to Baywood fine sand in coastal dune and coastal sage scrub communities near Morro Bay. MSS often occurs under shrubs that exhibit dense, low growth and have ample contact with the ground. Mock heather, seaside golden yarrow, deerweed, sand almond, and ice plant include some species the MSS utilize.	FE/--/--	**Suitable Conditions Absent:** The planning areas are located south and east of this species range.
Insects			
Monarch butterfly *Danaus plexippus*	Occurs along the coast from northern Mendocino to Baja California, Mexico. Winter roosts in wind protected tree groves (eucalyptus, Monterey pine and cypress), with nectar and water sources nearby.	--/SA/--	**Low Potential:** The riparian corridors of Smith Reservoir and Stenner Creek support marginal conditions for this species. Neither of these area support known winter roosts. Species was not observed during survey.
Morro Bay blue butterfly *Plebejus icarioides moroensis*	Locally common from March to July, this species flies only along the immediate coast of San Luis Obispo and western Santa Barbara counties. Feeds on Lupinus chamissonis. This variety is restricted to the dunes at Vandenberg Air Force Base, Pismo/Guadalupe dune system and the dunes of Morro Bay.	--/SA/--	**Suitable Conditions Absent:** The planning areas are located east of this species range and do not support the necessary host plant.
Branchiopods			
Vernal pool fairy shrimp *Branchinecta lynchi*	Occur in vernal pool habitats including depressions in sandstone, to small swale, earth slump, or basalt-flow depressions with a grassy or, occasionally, muddy bottom in grassland (Eriksen and Belk, 1999).	FT/-- /--	**Suitable Conditions Absent:** The planning areas do not support suitable soils.
California linderiella *Linderiella occidentalis*	*Seasonal ponds in grasslands, sandstone depressions, and alluvial flats with hardpan beneath.*	--/--/--	**Suitable Conditions Absent:** The planning areas do not support suitable soils.

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/CDFW	Rationale for Expecting Presence or Absence
Fish			
Tidewater goby *Eucyclogobius newberryi*	Occurs in brackish shallow lagoons and lower stream reaches where water is fairly still, but not stagnant.	FE/--/CSC	**Suitable Habitat Absent:** The planning areas do not support brackish water aquatic sites.
South-central California coast steelhead DPS *Oncorhynchus mykiss irideus*	Clear, cool water with abundant in-stream cover, well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio.	FT, PCH /-- /CSC	**Species Present**: Known to occur in Stenner Creek and Brizzolara Creek.
Amphibians			
foothill yellow-legged frog *Rana boylii*	Frequents rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Range in California includes the north and central coasts and the western Sierras.	--/--/CSC	**Suitable Conditions Absent:** The site lacks shoreline with sandy substrate.
California red-legged frog *Rana draytonii*	Aquatic habitats with little or no flow and surface water depths to at least 2.3 feet. Presence of fairly sturdy underwater supports such as cattails.	FT /-- /CSC	**Low Potential:** Some ponds and reservoirs in the planning areas support suitable aquatic habitat. CNDDB documents an occurrence in Brizzolara Creek at Poly Canyon.
western spadefoot *Spea hammondii*	Inhabits vernal pools in primarily grassland, but also in valley and foothill hardwood woodlands.	--/--/CSC	**Low Potential:** Species not expected to occur in the developed areas. N4 Residential Neighborhood supports suitable habitat.
Coast range newt *Taricha torosa torosa*	Breed in ponds, reservoirs, and slow-moving streams. Frequents terrestrial habitats such as oak woodlands.	--/--/CSC	**Low Potential**: The Stenner Creek and Brizzolara Creek riparian areas may support this species. CNDDB documents an occurrence in Poly Canyon at Brizollara Creek. Species is not expected to occur in the currently developed areas but could be found in the Creekside Pedestrian Walk area.

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/CDFW	Rationale for Expecting Presence or Absence
Reptiles			
silvery legless lizard *Anniella pulchra pulchra*	Sandy or loose loamy soils with high moisture content under sparse vegetation.	--/--/CSC	**Low Potential:** Smith Reservoir riparian corridor and the Stenner Creek riparian area support marginal conditions for this species.
black legless lizard *Anniella pulchra nigra*	Sandy or loose loamy soils with high moisture content under sparse vegetation.	--/--/CSC	**Low Potential:** Smith Reservoir riparian corridor and the Stenner Creek riparian area support marginal conditions for this species.
western pond turtle *Emys marmorata*	Quiet waters of ponds, lakes, streams, and marshes. Typically in the deepest parts with an abundance of basking sites.	--/--/CSC	**Low Potential:** Some ponds and reservoirs in the planning areas support suitable aquatic habitat. CNDDB documents an occurrence in Stenner Creek on University land.
Coast horned lizard *Phrynosoma coronatum (blainvillii* population)	Frequents a wide variety of habitats, commonly occurring in lowlands along sandy washes, coastal sage scrub and chaparral in arid and semi-arid climate conditions. Species prefers friable, rocky or shallow sandy soils.	--/--/CSC	**Suitable Conditions Absent**: The project sites do not support sandy soil, gravelly washes, or sage scrub habitats.
Birds			
Cooper's hawk *Accipiter cooperii*	Deciduous riparian woodland habitat throughout California. Cooper's hawks nest in deciduous, mixed-deciduous, and evergreen forests, as well as in suburban and urban environments. Cooper's hawks tend to nest in more open areas that have older and larger trees.	MBTA/--/--	**Low Potential:** Smith Reservoir riparian corridor adjacent to the proposed Oppenheimer site and the Stenner Creek riparian area adjacent to the Plant Sciences site support marginal conditions for this species.

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/CDFW	Rationale for Expecting Presence or Absence
tricolored blackbird *Agelaius tricolor*	(Nesting colony); requires open water, protected nesting substrate such as cattails or tall rushes, and foraging area with insect prey.	MBTA/--/CSC	**Low Potential:** Some ponds in the planning areas support suitable aquatic habitat. CNDDB documents an occurrence in Pennington Creek on Poly Canyon. Pre-disturbance nesting bird surveys are recommended.
grasshopper sparrow *Ammodramus savannarum*	A small grassland bird that largely occurs in the plains states and eastern U.S. Has breeding range in California grasslands.	-- / -- / CSC	**Low Potential:** The non-native annual grasslands associated with grazing areas could support this species.
golden eagle *Aquila chrysaetos*	Usually occurring in mountainous areas with varying vegetative cover; removed from people. May forage in grasslands and other open habitats. Nests on cliff edges and rarely in tall trees.	MBTA/-- /FP, Sec.3503.5	**Suitable Conditions Absent**: the planning areas do not support cliffs for nesting habitat.
great blue heron *Ardea herodias*	Common throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains above foothills.	MBTA/--/--	**Potential**: This species may be found foraging for small mammals in the pastures lands and other grass land areas.
burrowing owl *Athene cunicularia*	Open, dry grasslands, deserts and scrublands. Subterranean nester, dependent upon burrowing mammals.	MBTA/-- /CSC	**Low Potential:** The Campus is outside the breeding range for burrowing owl. However, burrowing owls could occupy the campus grass lands during the winter months.
ferruginous hawk *Buteo regalis*	(Wintering) open grasslands, sagebrush flats, desert scrub, low foothills, and fringes of pinyon-juniper habitats; eats lagomorphs, ground squirrels, and mice.	MBTA/--/--	**Low Potential:** Brizzolara Creek and Stenner Creek riparian areas support marginal conditions for this species
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	Forests to open riparian woodlands with thick under story.	FT, MBTA/SE/--	**Low Potential:** Brizzolara Creek and Stenner Creek riparian areas support marginal conditions for this species

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/CDFW	Rationale for Expecting Presence or Absence
white-tailed kite *Elanus leucurus*	Open grasslands, meadows, or marshlands for foraging close to isolated trees for nesting and perching.	MBTA/--/FP	**Potential:** Brizzolara Creek and Stenner Creek riparian areas support suitable conditions for this species. Nests must be avoided.
California horned lark *Eremophila alpestris actia*	Occurs in short grass prairies, coastal plains, fallow grain fields and alkali flats. Found in coastal regions from Sonoma to San Diego county, and west to the San Joaquin Valley. .	MBTA/--/--	**Low Potential:** The non-native annual grasslands associated with the grazing areas could support this species.
merlin *Falco columbarius*	A small falcon that winters in California and the plains states. Breeds in Canada and Alaska. Nests in trees associated with open forests adjacent to open areas. Preys on small birds	MBTA/--/--	**Low Potential:** Brizzolara Creek and Stenner Creek riparian areas support marginal conditions for this species
Prairie falcon *Falco mexicanus*	Occurs in dry, open terrain that is level or hilly and breeds on cliffs.	MBTA/--/WL	**Suitable Conditions Absent:** The non-native annual grasslands associated with the grazing areas could provide foraging area for this species. Nesting habitat is not present in the project areas.
California black rail *Laterallus jamaicensis coturniculus*	Shore birds known to frequent tidal salt marshes. Utilize densely vegetated mud flats and high tide line in salt water marsh systems.	--/ST/--	**Suitable Conditions Absent:** The planning areas do not contain tidal salt marshes or densely vegetated mudflats.
loggerheaded shrike *Lanius ludovicianua*	A predatory passerine that frequents open areas with scattered shrubs. Commonly observed foraging in grassland, desert scrubs, and waste places. Builds nests in isolated trees or shrubs in the vicinity of foraging areas.	-- / -- / CSC	**Potential:** The grasslands associated with grazing areas and pastures could support this species.
purple martin *Progne subis*	Occupies valley foothill and montane hardwood forests, conifer forests, and riparian habitats. May nest in old woodpecker cavities or in human-made structures such as bridges and culverts. Feeds on insects.	--/--/CSC	**Low Potential:** Brizzolara Creek and Stenner Creek riparian areas support marginal conditions for this species.

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/CDFW	Rationale for Expecting Presence or Absence
California clapper rail *Rallus longirostris obsoletus*	Occurs within salt and brackish marshes dominated by pickleweed and Pacific cordgrass. Currently, this species is restricted to marsh areas within the vicinity of San Francisco Bay. The last Califronia clapper rail to be sighted in Morro Bay was documented in 1939.	FE/SE/--	**Suitable Conditions Absent:** The planning areas do not contain tidal salt marshes or densely vegetated mudflats.
Class Aves Other migratory bird species (nesting)	Annual grasslands, coastal scrub, chaparral, and oak woodlands may provide nesting habitat.	MBTA/--/--	**Potential:** Potential nesting habitat occurs throughout the planning areas. Pre-disturbance nesting bird surveys are recommended to avoid impacts to nesting birds.
Mammals			
Pallid bat *Antrozous pallidus*	Prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Night roosts may be in more open sites, such as porches and buildings.	--/--/CSC	**Low Potential:** The hillside adjacent to the Oppenheimer site could provide day roost and foraging areas. The existing buildings could provide night roosts.
Townsends big-eared bat *Corynorhinus townsendii*	Occurs in a wide variety of habitats; most common in mesic (wet) sites. May use trees for day and night roosts; however, requires caves, mines, rock faces, bridges or buildings for maternity roosts. Maternity roosts are in relatively warm sites.	--/--/CSC	**Low Potential:** Low use structures near riparian areas and trees in riparian areas may provide day and night roost opportunities. CNDDB documents an occurrence in Chorro Creek, neighboring University land.
Morro Bay kangaroo rat *Dipodomys heermanni morroensis*	Typically occurs in habitats associated with stabilized dunes and coastal dune scrub communities with dominant vegetation including mock heather, buck brush, and deer weed.	SE/FE/--	**Suitable Conditions Absent:** The planning areas are located southeast of this species historic range and does not contain the appropriate habitats.
Western mastiff bat *Eumops perotis*	Found in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in cliff faces, high buildings, trees, and tunnels.	--/--/CSC	**Low Potential:** The various low use agricultural structures provide marginal night roost habitats; suitable maternity roosts sites are not present.

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/CDFW	Rationale for Expecting Presence or Absence
San Diego desert woodrat *Neotoma lepida intermedia*	Ranges from Baja California northward to northern San Luis Obispo County. Typically occurs in woodlands and coastal scrub habitats. Desert woodrats build nests within cracks and rock crevices, or in clumps of cactus.	--/--/CSC	**Suitable Conditions Absent:** The planning areas do not support woodland communities with significant rock crevices.
big free-tailed bat *Nyctinomops macrotis*	Rare vagrant in California, probable resident in Texas, New Mexico, and southern Arizona. Probably does not breed in California. Prefers rugged, rocky canyons but will roost on buildings or in caves and trees.	--/--/CSC	**Low Potential:** The various low use agricultural structures provide marginal night roost habitats; suitable maternity roosts sites are not present.
American badger *Taxidea taxus*	Occurs in open stages of shrub, forest, and herbaceous habitats; needs uncultivated ground with friable soils.	--/--/CSC	**Low Potential:** The N4 Residential Neighborhood site may support badgers.

General references: Unless otherwise noted all habitat and distribution data provided by CNDDB.

Status Codes
--= No status

Federal:
FE = Federal Endangered
FT= Federal Threatened
FC= Federal Candidate
CH= Federal Critical Habitat
PCH= Proposed Federal Critical Habitat
MBTA= Protected by Federal Migratory Bird Treaty Act

State:
SE= State Endangered
ST= State Threatened
SCT= State Candidate Threatened

California Department of Fish and Game:
CSC= California Special Concern Species
FP= Fully Protected Species
SA= Not formally listed but included in CDFG "Special Animal" List.

Rationale Terms:
Species Present: Species was observed or has been reported in the survey area.
Potential: The survey area is within the species range and supports the appropriate habitat, soils, and elevation.
Low Potential: The survey area is in the species range and supports the appropriate habitat and/or soils but other factors (past disturbances, presence of predators) may preclude species occurrence.
Suitable Conditions Absent: The survey area is not within the species range and/or does not support the appropriate habitat, soils, and/or elevation for the species.

PHOTO 1:

View of the combined drainages on the Slack and Grand site. The photo shows the location where the combined drainages enter the municipal storm water system.

Photo taken on March 10, 2017.

PHOTO 2:

View of the Slack and Grand site looking north east from grand Avenue.

Photo taken on March 10, 2017.

PHOTO 3:

View of the Slack and Grand site's northern most drainage channel.

Photo taken on March 10, 2017.

PHOTO 4:

Representative view of the vegetation in the southern drainage at the Slack and Grand site.

Photo taken on March 10, 2017.

PHOTO 5:

View of the Brizzolara Creek fish ladder at the intersection of Brizzolara Creek and Highland Drive.

Photo taken on March 10, 2017.

PHOTO 6:

Representative view of fresh water marsh vegetation in an existing detention basin located between existing sports fields and Highland Avenue.

Photo taken on March 10, 2017.

PHOTO 7:

Representative view of existing sports fields in the planning areas.

Photo taken on March 10, 2017.

PHOTO 8:

Representative view of freshwater marsh (background) and Arroyo willow thicket (foreground) habitats in the planning areas.

Photo taken on March 10, 2017.

PHOTO 9:

Representative view of the roadside drainage that is located adjacent to Mount Bishop Road.

Photo taken on March 10, 2017.

PHOTO 10:

View of a small vernal pool located on the N4 Residential Neighborhood Parcel.

Photo taken on March 10, 2017.

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Slack and Grand Observed Plant List

Scientific Name	**Common Name**	**Native**	**Species Status / Notes**
Vascular Plants nomenclature follows " The Jepson Manual" and http://ucjeps.berkeley.edu/interchange.html			
ANGIOSPERMS (DICOTS)			
Amaranthaceae	**Amaranth family**		
Amaranthus albus	Tumbleweed	No	
Anacardiaceae	**Sumac family**		
Schinus molle	Peruvian pepper tree	No	Cal IPC: High
Toxicodendron diversilobum	poison oak	Yes	
Apiaceae	**Carrot family**		
Foeniculum vulgare	sweet fennel	No	Cal IPC: High
Sanicula crassicaulis	Pacific snakeroot	Yes	
Sanicula hoffmannii	Hoffman's snakeroot	Yes	CNPS Rank 4.2
Araliaceae	**Ginseng family**		
Hedera helix	English ivy	No	Cal IPC: High
Asclepiadaceae	**Milkweed family**		
Asclepias fascicularis	narrow-leaf milkweed	Yes	
Asteraceae	**Sunflower family**		
Artemisia californica	California sagebrush	Yes	
Artemisia douglasiana	mugwort	Yes	
Baccharis pilularis var. consanguinea	coyote brush	Yes	
Carduus pycnocephalus	Italian thistle	No	Cal IPC: Moderate
Centaurea melitensis	tocolote	No	
Gnaphalium palustre	Lowland cudweed	Yes	
Hazardia squarrosa	Saw-toothed goldenbush	Yes	
Helminthotheca echioides	bristly ox-tongue	No	
Hemizonia congesta ssp. *congesta*	hayfield tarweed	Yes	
Hypochaeris glabra	smooth cat's ear	No	Cal IPC: limited
Hypochaeris radicata	rough cat's ear	No	Cal IPC: moderate
Lactuca serriola	prickly lettuce	No	
Logfia gallica	narrow-leafed filago	No	
Pseudognaphalium californicum	lady's tobacco	Yes	
Senecio vulgaris	ragwort	No	
Silybum marianum	milk thistle	No	
Sonchus asper	prickly sow thistle	No	
Sonchus oleraceus	sow thistle	No	
Xanthium spinosum	spiny cocklebur	Yes	
Uropappus lindleyi	silver puffs	Yes	
Betulaceae	**Birch family**		
Alnus rhombifolia	White alder	Yes	
Boraginaceae	**Borage family**		

Scientific Name	**Common Name**	**Native**	**Species Status / Notes**
Eucrypta chrysanthemifolia	Common eucrypta	Yes	
Brassicaceae	**Mustard family**		
Brassica nigra	black mustard	No	
Hirschfeldia incana	summer mustard	No	
Cactaceae	**Cactus family**		
Opunita ficus-indica	Prickly pear cactus	No	
Caprifoliaceae	**Honeysuckle family**		
Symphoricarpos mollis	creeping snowberry	Yes	
Caryophyllaceae	**Pink family**		
Silene gallica	catchfly	No	
Stellaria media	chickweed	No	
Convolvulaceae	**Morning glory family**		
Calystegia macrostegia	coast morning glory	*Yes*	
Cucurbitaceae	**Gourd family**		
Marah fabaceus var. fabaceus	wild cucumber	Yes	
Euphorbiaceae	**Spurge family**		
Euphorbia spathulata	Spurge	No	
Fabaceae	**Pea family**		
Acmispon glaber	deer weed	Yes	
Lupinus albifrons	Silver bush lupine	Yes	
Lupinus succulentis	succulent lupine	Yes	
Medicago polymorpha	bur clover	No	Cal IPC: limited
Trifolium hirtum	rose clover	No	Cal IPC: Moderate
Vicia sativa	spring vetch	No	
Vicia villosa	hairy vetch	No	Cal IPC: limited
Fagaceae	**Oak family**		
Quercus agrifolia	coast live oak	Yes	
Geraniaceae	**Geranium family**		
Erodium cicutarium	red-stemmed filaree	No	Cal IPC: limited
Erodium botrys	filaree	No	
Erodium moschatum	White stemmed filaree	No	
Geranium dissectum	Cut-leaved geranium	No	
Pelargonium sp.	Ornamental geranium	No	
Hippocastanaceae	**Buckeye Family**		
Aesculus californicus	California buckeye		
Lamiaceae	**Mint Family**		
Salvia spathacea	pitcher sage	Yes	
Stachys bullata	hedge nettle	Yes	
Malvaceae	**Mallow family**		
Malva parviflora	cheeseweed	No	

Scientific Name	**Common Name**	**Native**	**Species Status / Notes**
Myrsinaceae	**Myrsine Family**		
Lysimachia arvensis	scarlet pimpernel	No	
Myrtaceae	**Myrtle family**		
Eucalyptus globulus	blue gum	No	Cal IPC: Moderate
Eucalyptus sideroxylon	Red iron bark	No	
Oleaceae	**Ash family**		
Olea europaea	Olive	No	
Paeoniaceae	**Peony Family**		
Paeonia californica	California peony	Yes	
Phrymaceae	**lopseed family**		**formally Scrophulariaceae**
Mimulus aurantiacus	sticky monkey flower	*Yes*	
Plantaginaceae	**Plantain family**		
Keckiella cordifolia	Climbing penstemon	Yes	
Plantanaceae	**Sycamore Family**		
Platanus racemosa	western sycamore	Yes	
Polygonaceae	**Buckwheat family**		
Polygonum aviculare	prostrate knotweed	No	
Rumex crispus	curly dock	No	
Rhamnaceae	**Buckthorn family**		
Rhamnus crocea	spiny redberry	Yes	
Rhamnus ilicifolia	Evergreen buckthorn	Yes	
Rosaceae	**Rose family**		
Cotoneaster pannosus	Cotoneaster	No	Cal-IPC Moderate
Heteromeles arbutifolia	toyon	Yes	
Rubiaceae	**Madder Family**		
Galium andrewsii	phlox-leaved bedstraw	Yes	
Galium porrigens	climbing bedstraw	Yes	
Salicaceae	**Willow family**		
Salix lasiolepis	arroyo willow	Yes	
ANGIOSPERMS (MONOCOTS)			
Agavaceae	**Century plant family**		
Agave americana	Century plant	No	
Cyperaceae	**Sedge family**		
Carex nudata	Naked sedge	Yes	
Cyperus eragrostis	tall flat sedge	Yes	
Iridaeceae	**Iris family**		
Sisyrinchium bellum	blue-eyed-grass	Yes	
Juncaceae	**Rush family**		
Juncus patens		Yes	
Liliaceae	**Lily family**		

Scientific Name	**Common Name**	**Native**	**Species Status / Notes**
Asparagus asparagoides	African asparagus fern	No	Cal IPC: moderate
Poaceae	**Grass family**		
Arundo donax	giant reed	No	
Avena barbata	slender wild oats	No	Cal IPC: moderate
Avena fatua	Wild oats	No	
Brachypodium distachyon	False brome	No	Cal IPC: moderate
Bromus diandrus	ripgut brome	No	Cal IPC: moderate
Bromus hordeaceus	soft chess brome	No	Cal IPC: limited
Bromus madritensis	Spanish brome	No	
Festuca perennis	Italian ryegrass	No	
Gastridium phleoides	nit grass	No	
Hordeum marinum	barley	No	
Hordeum murinum	Foxtail	No	
Melica imperfecta	melic grass	Yes	
Melica torreyana	Torrey melic	Yes	
Phalaris aquatica	harding grass	No	
Stipa lepida	narrow-leafed needle grass	Yes	
Stipa pulchra	purple needle-grass	Yes	
Stipa miliaceae	smilo grass	No	
Themidaceae	**Brodiaea family**		
Dichelostemma capitatum	blue dicks	Yes	
Emmenanthe penduliflora	Whispering bells	Yes	

TERRA • VERDE
Environmental Consulting

September 20, 2017

Paige Horn, Project Manager
AMCAL Multi-Housing, Inc.
30141 Agoura Road, Suite 100
Agoura Hills, CA 91301

RE: Spring Botanical Survey and Habitat Assessment Letter Report for the Grand Avenue Faculty and Staff Housing Project, Cal Poly, San Luis Obispo, California

Dear Ms. Horn,

Per your request, Terra Verde Environmental Consulting, LLC (Terra Verde) conducted a spring botanical survey and habitat assessment of the area proposed for development of the Grand Avenue Faculty and Staff Housing Project (project) located at the intersection of Grand Avenue and Slack Street in San Luis Obispo, California (see Attachment A: Figure 1 – Project Vicinity Map). The proposed project will include constructing up to 420 new apartment-style units for staff and faculty in accordance with the California Polytechnic State University (Cal Poly) San Luis Obispo Campus Master Plan (Master Plan). The botanical survey and habitat assessment were timed to support and inform the preliminary design phase of the project. During the survey, Terra Verde botanists conducted a focused botanical survey and habitat assessment of the entire property for special-status species that have potential to occur on the proposed project site (see Attachment A: Figure 2 – Survey Area Map). This included two intermittent drainages and one ephemeral upland swale feature identified on site. This letter report summarizes the survey findings.

Background

Prior to conducting the survey, background research was conducted of all pertinent literature and databases pertaining to sensitive resources in the project area. Specifically, the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) was accessed to identify regionally-occurring sensitive plant and wildlife species which have potential to occur on site or in the immediate surrounding area (i.e., within two miles). In addition, United States Geological Survey (USGS) topographic maps, United States Fish and Wildlife Service (USFWS) National Wetlands Inventory, and USFWS Critical Habitat maps were utilized to identify potential aquatic resources and/or designated Critical Habitat that may occur within or adjacent to the project area.

The field survey that Terra Verde staff conducted was of sufficient detail and biological expertise to determine species presence and/or their likelihood of occurrence during

construction and future operations. The field survey was conducted within the typical blooming period for most plant species and followed an above average rain year. Further, habitat requirements were specifically evaluated for any special-status plant and wildlife species documented within the vicinity of the survey area based on the CNDDB records.

Survey Methodology

The survey was completed by Terra Verde botanists Kristen Nelson and Amy Golub during the morning hours of May 17 and 18, 2017. The survey included an inventory of all identifiable plants observed, incidental wildlife observations, vegetation community classification, and an evaluation of habitat on site for the potential to support special-status botanical and wildlife species. Weather conditions were favorable for detection of special-status species (50 – 66 degrees Fahrenheit [°F], calm, and clear).

Special-status botanical resources that were determined to have potential to occur on site included those identified during background research within two miles of the project site (see Attachment A: Figure 3 – 2-mile CNDDB and Critical Habitat Map). These included the following which were the focus of the survey efforts:

- La Panza mariposa lily (*Calochortus simulans*), California Rare Plant Rank (CRPR) 1B.3
- San Luis Obispo fountain thistle (*Cirsium fontinale* var. *obispoense*), CRPR 1B.2, Federally Endangered, State Endangered
- Jones' layia (*Layia jonesii*), CRPR 1B.2
- Mouse-gray dudleya (*Dudleya abramsii* subsp. *murina*), CRPR 1B.3
- Chaparral ragwort (*Senecio aphanactis*), CRPR 2B.2
- San Luis Obispo owl's-clover (*Castilleja densiflora* subsp. *obispoensis*), CRPR 1B.2
- Palmer's monardella (*Monardella palmeri*), CRPR 1B.2
- Congdon's tarplant (*Centromadia parryi* subsp. *congdonii*), CRPR 1B.1
- Brewer's spineflower (*Chorizanthe breweri*), CRPR 1B.3
- Miles' milkvetch (*Astragalus didymocarpus* var. *milesianus*), CRPR 1B.2
- Hoffman's sanicle (*Sanicula hoffmannii*), CRPR 4.3
- Serpentine bunchgrasses (CDFW Sensitive Natural Community)

The survey was appropriately timed to coincide with the peak blooming period for all special-status plant species determined to have the potential to occur on site.

The property was also assessed for suitable habitat for the federally threatened California red-legged (CRLF; *Rana draytonii*) and all other potentially occurring special-status wildlife species identified in the CNDDB query (see Attachment A: Figure 3 – 2-mile CNDDB and Critical Habitat Map). This included all aquatic resource areas on the site which were thoroughly examined during the survey effort for potential to support CRLF and other special-status species.

The surveys were conducted by walking transects across the entire project area to maximize visual coverage of the survey area, as well as a visual scan of the surrounding habitat areas. All botanical and wildlife species observed in the survey area were identified to the lowest taxonomic level possible. Botanical species identifications and taxonomic nomenclature followed *The Jepson Manual: Vascular Plants of California*, 2nd edition (Baldwin et al., 2012) as well as taxonomic updates provided in the Jepson eFlora (Jepson Flora Project, 2017). The second edition of *A Manual of California Vegetation* (MCV; Sawyer et al., 2009) was used for vegetation community classification.

Survey Results and Special-status Species Discussion

The project area currently serves as a horse grazing pasture for a herd of Cal Poly mustangs. As such, the majority of the property is highly disturbed by past and present grazing activities and supports a mixture of non-native, annual grasses and forbs with ornamental plantings lining the two intermittent drainages, herein referred to as the northwestern and central drainage (refer to Figure 2), as well as Grand Avenue. Vegetation communities identified on site included annual brome grassland, California sagebrush scrub, and a wetland community that most closely corresponds to perennial rye grass fields. In addition, areas containing ornamental and anthropogenic vegetation were identified, which do not correspond to a vegetation community classification. A total of 109 vascular plant species were identified, of which 60 (55 percent) were non-native (see Attachment B – Botanical and Wildlife Species Observed). The number and abundance of non-native taxa substantially exceeds that of native taxa, reflecting the high level of disturbance on site.

Vegetation Communities

The annual brome grassland habitat on site comprised a majority of the survey area including the eastern swale feature and was dominated by false brome (*Brachypodium distachyon*), with foxtail barley (*Hordeum murinum*), wild oat (*Avena fatua*), and black mustard (*Brassica nigra)* also occurring at high cover. This community showed evidence of intensive grazing with some areas almost completely void of vegetation. This community composition most closely corresponds to the *Bromus* (*diandrus, hordeaceus*) – *Brachypodium distachyon* Semi-Natural Herbaceous Stands, annual brome grasslands, in the MCV classification system.

Intact coastal scrub habitat was present in the northern portion of the survey area and was dominated by species typical of this community including California sagebrush (*Artemisia californica*), bush monkey flower (*Diplacus* [*Mimulus*] *aurantiacus*), coyote brush (*Baccharis pilularis*), and poison oak (*Toxicodendron diversilobum*). This community composition most closely corresponds to the *Artemisia californica* Shrubland Alliance, California sagebrush scrub, in the MCV classification system.

One federal wetland feature was identified in the southern reaches of the central drainage feature. The wetland was dominated by perennial rye grass (*Festuca perennis*) with common spike rush (*Eleocharis macrostachya*), toad rush (*Juncus bufonius*), and Mediterranean barley (*Hordeum marinum* subsp. *gussoneanum*) occurring throughout. This community most closely

corresponds to the *Lolium perenne* Semi-Natural Herbaceous Stands, perennial rye grass fields, in the MCV classification system.

In addition to these communities, the two intermittent drainage features on site are dominated by ornamental plantings. In particular, ornamental olive trees (*Olea europa*), blue gum (*Eucalyptus globulus*), mission prickly-pear (*Opuntia ficus-indica*), and American century plant (*Agave americana*) formed a mostly continuous shrub and tree canopy along the northwestern and central drainage features on site. Although this composition of ornamental vegetation occurs in association with the drainages, it does not correspond to a formal vegetation community classification.

Special-status Species

Suitable habitat is present on site for four special-status plant species and one sensitive natural community: La Panza mariposa lily, Jones' layia, San Luis Obispo owl's-clover, Miles' milkvetch, and serpentine bunchgrass grassland. However, no special-status species or sensitive natural communities were observed during an appropriately-timed botanical survey; therefore none of these species expected to occur on site. It should be noted that ten individuals of Hoffman's sanicle were observed by SWCA Environmental Consulting, Inc. (SWCA) biologists in the upper slopes of Slack and Grand Residential Neighborhood site during past biological surveys in support of preparing the Draft Environmental Impact Report (EIR); however, this species was not observed during May survey efforts conducted by Terra Verde. As such, this species is not expected to occur on site and in concurrence with SWCA's determination in the Draft EIR, the development of this neighborhood is not expected to impact these occurrences.

Suitable to marginally suitable habitat is present on site for two special-status wildlife species: CRLF and Monterey dusky-footed woodrat (*Neotoma macrotis luciana*), as well as migratory nesting birds. According to the CNDDB, three occurrences of CRLF have been documented within a two-mile radius of the project site. The closest CRLF occurrence (CNDDB Occurrence 155) was documented in 1998 northeast of the proposed project area. The intermittent drainage features within the survey area provide poor quality habitat for CRLF breeding and foraging due to the steep banks and lack of perennial flows, deep pool habitat, and overhanging riparian vegetation and protective cover. The drainage features are hydrologically connected to San Luis Obispo Creek; however, pass through approximately one mile of subsurface storm drains before eventually discharging into San Luis Obispo Creek. Due to the lack of habitat connectivity there are limited opportunities for upstream CRLF dispersal within the subject drainages. Upland areas may provide marginally suitable dispersal habitat for CRLF if present, with increased potential during favorable conditions (i.e., wet conditions). No CRLF were observed during the survey effort. Similarly, based on the degraded and low quality of habitat on site, USFWS-designated Critical habitat is not expected to be impacted as a result of the proposed project.

Several woodrat (*Neotoma* sp.) houses were observed in the understory of the ornamental plantings lining the ephemeral drainage features during the survey effort. Woodrats cannot be

identified to the subspecies level without trapping. As such, observed woodrat houses in the project area have potential to be occupied by the special-status Monterey dusky-footed woodrat or common dusky-footed woodrat (*Neotoma fuscipes*).

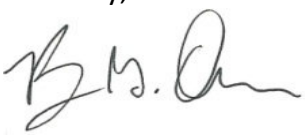
In addition, suitable habitat is present in the grassland habitat and ornamental shrub community along the drainages for migratory nesting birds during the typical avian nesting season (February 1 through August 31). This includes observation of an active red-tailed hawk nest within the central drainage feature (see Attachment A: Figure 2 – Survey Area Map). Based on current site conditions and results of the biological surveys, no other special-status wildlife species are expected to occur on site.

Conclusion

The proposed project area is dominated by non-native annual grasses and herbs, as well as ornamentally planted species. The site is currently used as a horse pasture and shows evidence of frequent disturbance associated with heavy grazing. No special-status plant or wildlife species were observed during the survey effort. Similarly, only low-quality aquatic habitat was observed within the survey area. As such, it is expected that USFWS-designated Critical Habitat for CRLF will not be affected by the proposed project. Though a majority of the habitat is considered poor quality for CRLF breeding and foraging, there is a potential, however low, for upland dispersal of CRLF through the project area if present, particularly during wet conditions. In addition, suitable habitat is present for Monterey dusky-footed woodrat and migratory nesting birds.

If you should have any questions and/or require additional information for review purposes, please contact me at bdugas@terraverdeweb.com or 805-701-4648.

Sincerely,



Brian Dugas
Principal Biologist

Attachment A – Project Maps
- Figure 1: Project Vicinity Map
- Figure 2: Survey Area Map
- Figure 3: 2-mile CNDDB and Critical Habitat Map

Attachment B – Botanical and Wildlife Species Observed
Attachment C – Site Photographs

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Attachment A – Project Maps

Figure 1: Project Vicinity Map
Figure 2: Survey Area Map
Figure 3: 2-mile CNDDB Results Map

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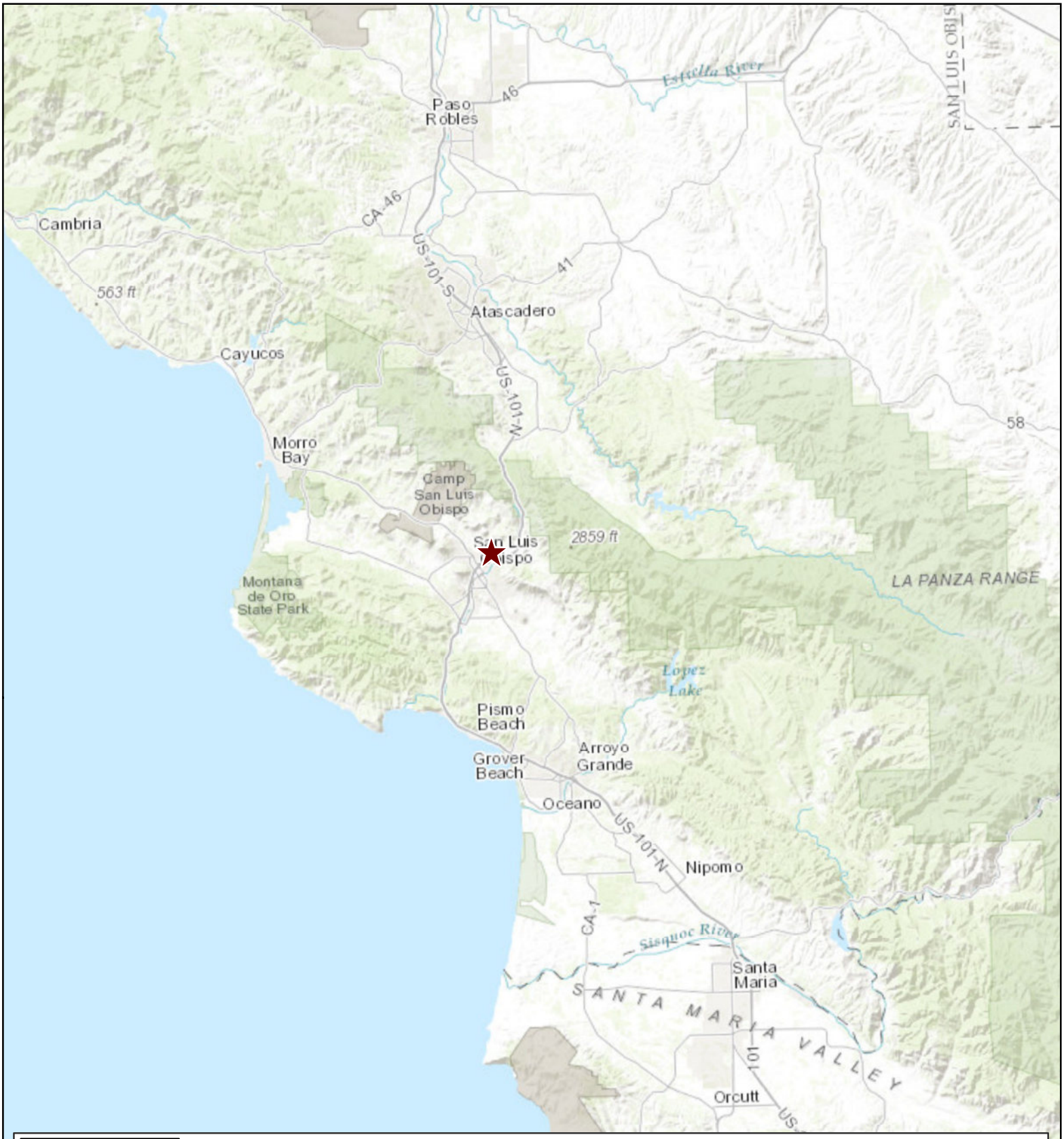
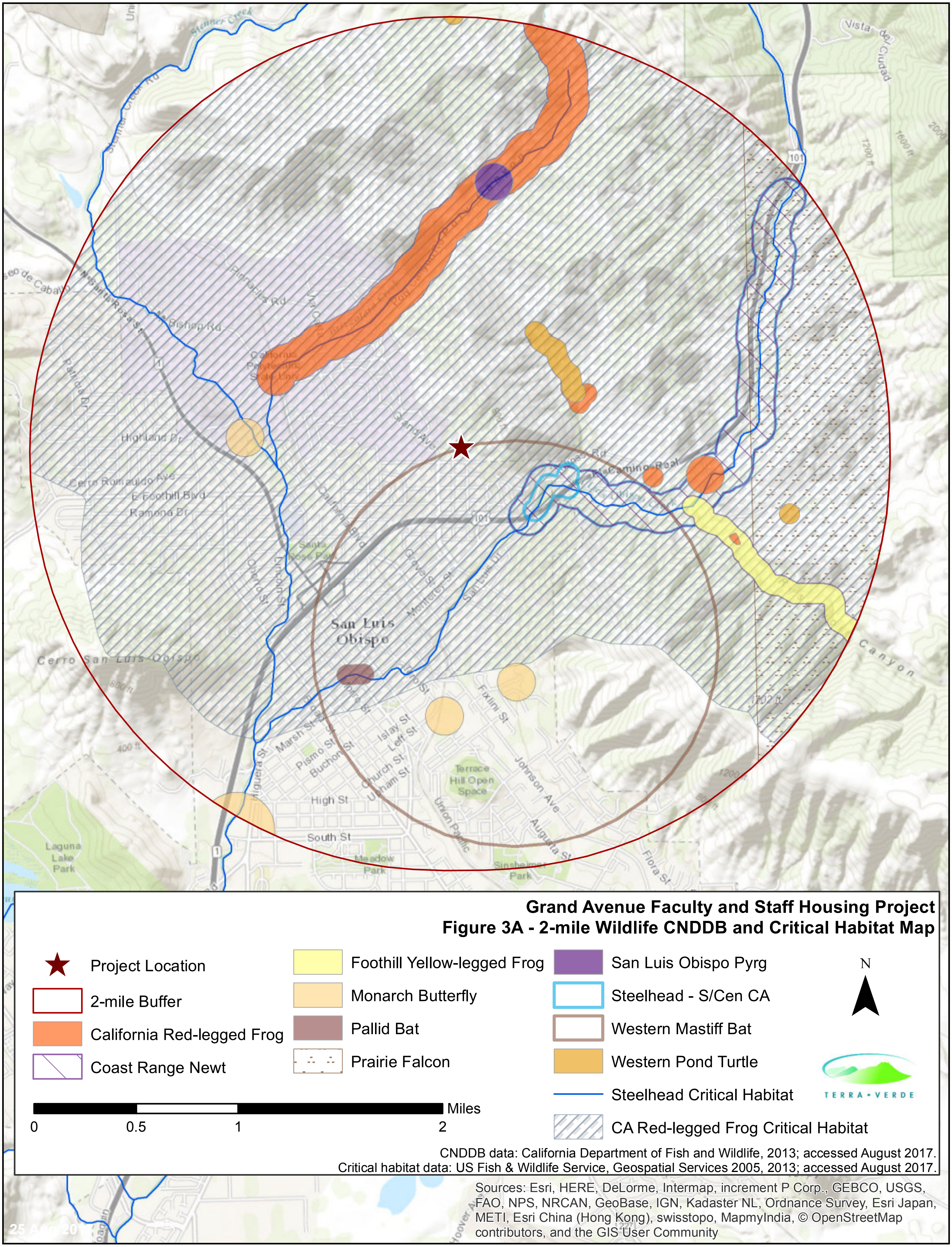


Grand Avenue Faculty and Staff Housing Project
Figure 1 - Project Vicinity Map

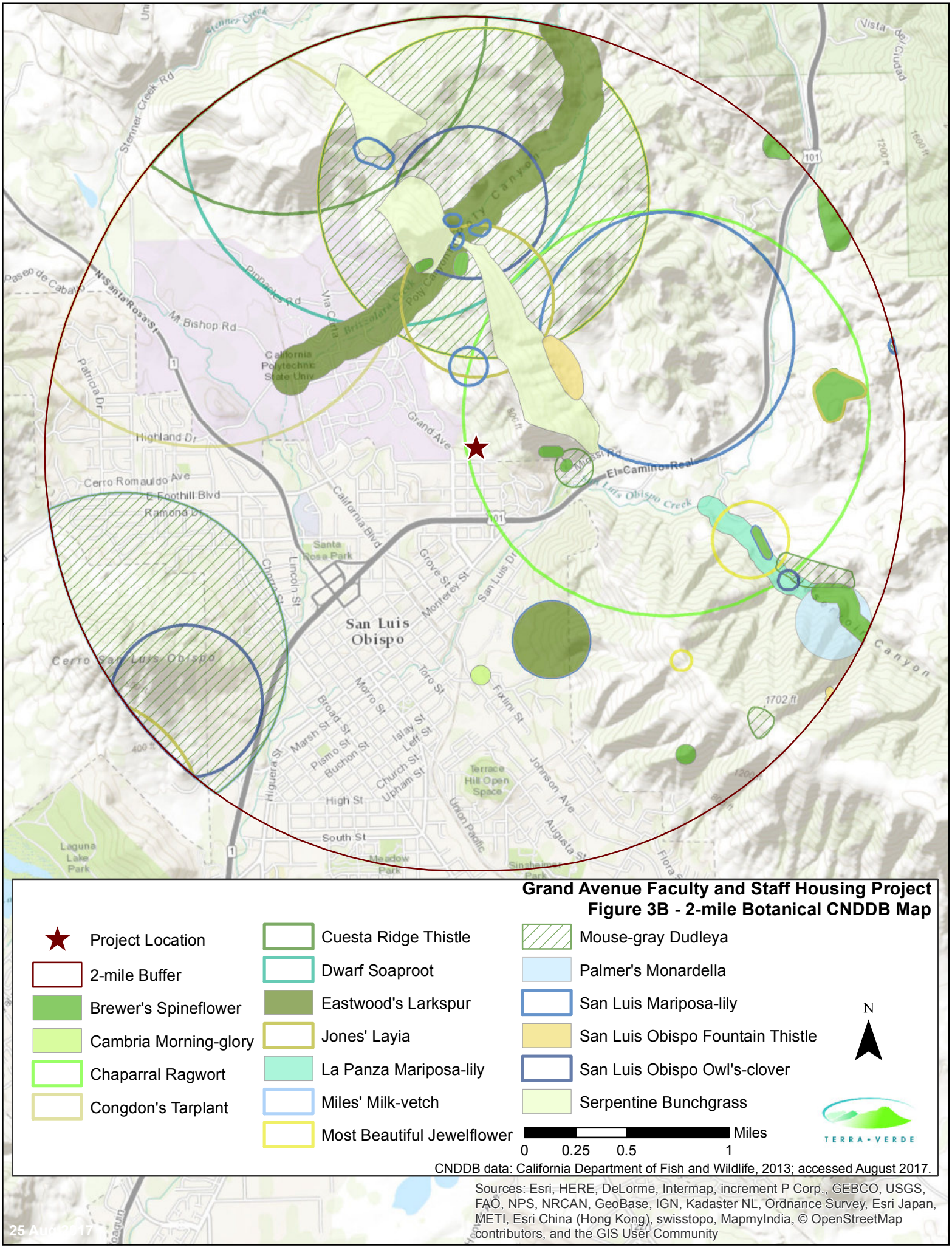
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

25 Aug 2017

Grand Avenue Faculty and Staff Housing Project
Figure 2 - Survey Area Map



Grand Avenue Faculty and Staff Housing Project
Figure 3A - 2-mile Wildlife CNDDB and Critical Habitat Map
Project Location
2-mile Buffer
California Red-legged Frog
Coast Range Newt
Foothill Yellow-legged Frog
Monarch Butterfly
Pallid Bat
Prairie Falcon
San Luis Obispo Pyrg
Steelhead - S/Cen CA
Western Mastiff Bat
Western Pond Turtle
Steelhead Critical Habitat
CA Red-legged Frog Critical Habitat
N
TERRA • VERDE
Miles
0
0.5
1
2
CNDDB data: California Department of Fish and Wildlife, 2013; accessed August 2017.
Critical habitat data: US Fish & Wildlife Service, Geospatial Services 2005, 2013; accessed August 2017.
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
San Luis Obispo
Cerro San Luis Obispo
Pinnacles Rd
Bishop Rd
Grand Ave
California Blvd
Highland Dr
Cerro Romauldo Ave
E Foothill Blvd
Ramona Dr
Santa Rosa St
Patricia Dr
Stenner Creek Rd
Johnson Ave
Terrace Hill Open Space
High St
South St
Laguna Lake Park
Meadow Park
Sinsheimer Park
Higuera St
Marsh St
Pismo St
Buchon St
Islay St
Church St
Upham St
Fixlini St
Augusta St
Flora St
Monterey St
Grove St
San Luis Dr
Canyon
Vista del Ciudad


Grand Avenue Faculty and Staff Housing Project
Figure 3B - 2-mile Botanical CNDDB Map
Project Location
2-mile Buffer
Brewer's Spineflower
Cambria Morning-glory
Chaparral Ragwort
Congdon's Tarplant
Cuesta Ridge Thistle
Dwarf Soaproot
Eastwood's Larkspur
Jones' Layia
La Panza Mariposa-lily
Miles' Milk-vetch
Most Beautiful Jewelflower
Mouse-gray Dudleya
Palmer's Monardella
San Luis Mariposa-lily
San Luis Obispo Fountain Thistle
San Luis Obispo Owl's-clover
Serpentine Bunchgrass
N
0 0.25 0.5 1 Miles
TERRA • VERDE
CNDDB data: California Department of Fish and Wildlife, 2013; accessed August 2017.
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
25 August 17
San Luis Obispo
Cerro San Luis Obispo
California Polytechnic State Univ
Santa Rosa Park
Terrace Hill Open Space
Laguna Lake Park
Meadow Park
Sinsheimer Park
Stenner Creek Rd
N Santa Rosa St
M Bishop Rd
Highland Dr
Cerro Romauldo Ave
E Foothill Blvd
Ramona Dr
Patricia Dr
Grand Ave
California Blvd
Lincoln St
Grove St
Monterey St
San Luis Dr
Micheltorena St
El Camino Real
Luis Obispo Creek
Toro St
Morro St
Broad St
Marsh St
Pismo St
Buchon St
Islay St
Left St
Church St
Upham St
Higuera St
Fixlini St
Johnson Ave
Augusta St
High St
South St
Union Pacific
Vista del Ciudad
1702 ft
1600 ft
1200 ft
800 ft
400 ft
101
1

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Attachment B: Botanical and Wildlife Species Observed

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Grand Avenue Faculty and Staff Housing Project
Plant Species Observed
May 17 and 18, 2017

*Indicates non-native species

Scientific Name	Common Name	2016 Wetland Indicator Status
Adoxaceae	**Muskroot Family**	
Sambucus nigra subsp. *caerulea*	Blue elderberry	
Agavaceae	**Century Plant Family**	
*Agave americana**	American century plant	
Apiaceae	**Carrot Family**	
*Foeniculum vulgare**	Fennel	
Sanicula crassicaulis	Gamble weed	
Anacardiaceae	**Sumac Family**	
Toxicodendron diversilobum	Poison oak	
*Schinus molle**	Pepper tree	
Apocynaceae	**Dogbane Family**	
Asclepias fascicularis	Narrow-leaf milkweed	FAC
Asparagaceae	**Asparagus Family**	
*Asparagus asparagoides**	African asparagus fern	
Asteraceae	**Composite Family**	
Artemisia californica	California sagebrush	
Artemisia douglasiana	Mugwort	FAC
Baccharis pilularis	Coyote brush	
*Carduus pycnocephalus**	Italian thistle	
*Carthamus lanatus**	Woolly distaff thistle	
*Centaurea calcitrapa**	Purple star-thistle	
*Centaurea melitensis**	Tocalote	
Cynara cardunculus subsp. *cardunculus**	Artichoke	
Deinandra fasciculata	Clustered tarweed	
*Erigeron bonariensis**	Flax-leaved horseweed	
Gamochaeta ustulata	Featherweed	
Hazardia squarrosa	Saw-toothed goldenbush	
*Helminthotheca echioides**	Bristly ox-tongue	FAC
Hemizonia congesta subsp. *luzulifolia*	Hayfield tarweed	
*Logfia gallica**	Daggerleaf cottonrose	
Microseris douglasii	Douglas' microseris	
Pseudognaphalium beneolens	Cudweed	
Pseudognaphalium californicum	Ladies tobacco	

Scientific Name	Common Name	2016 Wetland Indicator Status
*Pseudognaphalium luteoalbum**	Jersey cudweed	FAC
*Sonchus asper**	Prickly sow thistle	FAC
*Sonchus oleraceus**	Common sow thistle	
*Silybum marianum**	Milk thistle	
Xanthium spinosum	Spiny cocklebur	
Boraginaceae	**Borage Family**	
Eucrypta chrysanthemifolia	Common eurcrypta	
Brassicaceae	**Mustard Family**	
*Brassica nigra**	Mustard	
*Hirschfeldia incana**	Mediterranean hoary mustard	
*Lepidium didymium**	Lesser swine cress	
Cactaceae	**Cactus Family**	
*Opuntia ficus-indica**	Mission prickly-pear	
Caprifoliaceae	**Honeysuckle Family**	
*Symphoricarpos mollis**	Creeping snowberry	
Caryophyllaceae	**Pink Family**	
*Silene gallica**	Small-flower catchfly	
*Spergularia villosa**	Hairy-sand-spurry	
Chenopodiaceae	**Goosefoot family**	
*Chenopodium album**	Lamb's quarters	
Convolvulaceae	**Morning-glory Family**	
Calystegia macrostegia	Island false bindweed	
Cucurbitaceae	**Gourd Family**	
Marah fabacea	California man-root	
Cyperaceae	**Sedge Family**	
Cyperus eragrostis	Umbrella sedge	FACW
Eleocharis macrostachya	Common spikerush	OBL**
Euphorbiaceae	**Spurge Family**	
Croton setiger	Turkey-mullein	
*Euphorbia peplus**	Petty spurge	
Fabaceae	**Legume Family**	
Acmispon americanus	American bird's foot trefoil	
Acmispon glaber	Deerweed	
Lupinus succulentus	Arroyo lupine	
*Medicago polymorpha**	California burclover	
*Melilotus indicus**	Sourclover	
*Trifolium hirtum**	Rose clover	
*Vicia sativa**	Spring vetch	

Scientific Name	Common Name	2016 Wetland Indicator Status
*Vicia villosa**	Hairy vetch	
Fagaceae	**Oak Family**	
Quercus agrifolia	Coast live oak	
Geraniaceae	**Geranium Family**	
*Erodium botrys**	Big heron bill	
*Erodium brachycarpum**	Foothill filaree	
*Erodium cicutarium **	Red-stem filaree	
*Geranium dissectum**	Cut leaved geranium	
Iridaceae	**Iris Family**	
Sisyrinchium bellum	Western blue-eyed-grass	FACW
Juncaceae	**Rush Family**	
Juncus bufonius	Toad rush	FACW
Juncus patens	Spreading rush	FACW
Lamiaceae	**Mint Family**	
*Marrubium vulgare**	Common horehound	
Salvia mellifera	Black sage	
Stachys bullata	California hedge nettle	
Liliaceae	**Lily Family**	
Bloomeria crocea	Common goldenstar	
Lythraceae	**Loosestrife Family**	
*Lythrum hyssopifolia**	Hyssop loosestrife	
Moraceae	**Mulberry Family**	
*Ficus carica**	Edible fig	
Myrsinaceae	**Myrsine Family**	
*Lysimachia arvensis**	Scarlet pimpernel	
Myrtaceae	**Myrtle Family**	
*Eucalyptus globulus**	Blue gum	
*Eucalyptus sideroxylon**	Red iron bark	
Oleaceae	**Olive Family**	
*Olea europa**	Olive	
Oxalidaceae	**Oxalis Family**	
Oxalis pes-caprae*	Bermuda buttercup	
Phrymaceae	**Lopseed Family**	
Diplacus [Mimulus] aurantiacus	Bush monkey flower	
Erythranthe [Mimulus] guttatus	Seep monkey flower	
Plantaginaceae	**Plantain Family**	
Keckiella cordifolia	Climbing penstemon	
Plantago erecta	California plantain	

Scientific Name	Common Name	2016 Wetland Indicator Status
Plantago subnuda	Mexican plantain	FACW
Platanaceae	**Sycamore Family**	
Platanus racemosa	Western sycamore	FAC
Poaceae	**Grass Family**	
*Avena barbata**	Slender oat	
*Avena fatua**	Wild oat	
*Brachypodium distachyon**	False brome	
*Bromus diandrus**	Ripgut brome	
*Bromus hordeaceus**	Soft chess brome	
Bromus madritensis subsp. *rubens**	Foxtail brome	
*Cynodon dactylon**	Bermuda grass	
*Festuca myuros**	Rattail fescue	
*Festuca perennis**	Italian rye grass	FAC
*Gastridium phleoides**	Nit grass	
Hordeum marinum subsp. *gussoneanum**	Mediterranean barley	FAC
*Hordeum murinum**	Foxtail barley	
Melica imperfecta	Little California melica	
*Pennisetum clandestinum**	Kikuyu grass	
*Phalaris aquatica**	Harding grass	
*Phalaris minor**	Little-seeded canary grass	
*Polypogon monspeliensis**	Rabbitfoot grass	FACW
Stipa lepida	Foothill needle grass	
Polygonaceae	**Buckwheat Family**	
Eriogonum elongatum	Long-stem wild buckwheat	
*Polygonum aviculare**	Knotweed	FAC
*Rumex crispus**	Curley dock	FAC
*Rumex pulcher**	Fiddle dock	FAC
Rhamnaceae	**Buckthorn Family**	
Rhamnus crocea	Spiny redberry	
Rosaceae	**Rose Family**	
Heteromeles arbutifolia	Toyon	
Rosa californica	California rose	FAC
Rubus ursinus	California blackberry	FAC
Rubiaceae	**Madder Family**	
Galium andrewsii	Phlox-leaved bedstraw	
Galium porrigens	Climbing bedstraw	
Sapindaceae	**Soapberry Family**	

Scientific Name	Common Name	2016 Wetland Indicator Status
Aesculus californica	California buckeye61	
Solanaceae	**Nightshade Family**	
Solanum douglasii	Douglas' nightshade	FAC

OBL - Obligate Wetland species, designated as a Hydrophyte, almost always occurs in wetlands

FACW - Facultative Wetland species, designated as a Hydrophyte, usually occurs in wetlands, but may occur in non-wetlands

FAC - Facultative species, designated as a Hydrophyte, occurs in wetlands and non-wetlands

** NWPL Rating based on 1988 National List.

Grand Avenue Faculty and Staff Housing Project
Wildlife Species Observed
May 17 and 18, 2017

Scientific Name	Common Name	Listing Status
Avifauna		
Aphelocoma californica	Western scrub-jay	N/A
Buteo jamaicensis	Red-tailed hawk (nesting)	N/A
Cathartes aura	Turkey vulture	N/A
Haemorhous mexicanus	House finch	N/A
Streptopelia decaocto	Eurasian collared-dove	N/A
Reptiles		
Sceloporus occidentalis bocourtii	Fence lizard	N/A
Mammals		
Neotoma sp.	Woodrat	*N/A or CDFW - SSC
Thomomys bottae	Botta's pocket gopher	N/A

FP: Fully protected
WL: Watch list
SSC: California species of special concern
**Neotoma fuscipes luciana* is considered SSC however species not identifiable without trapping.

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Attachment C: Site Photographs

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Photo 1. View of annual brome grassland habitat and ornamental plantings along southern drainage, view northeast (May 17, 2017).

Photo 2. View of areas void of vegetation due to frequent horse grazing, view east (May 17, 2017).

Photo 3. View of annual brome grassland and ornamental plantings along each drainage feature, view southwest (May 17, 2017).

Photo 4. View of ornamentally planting olive trees along northern drainage, view south (May 17, 2017).

Photo 5. View of upland swale feature in eastern portion of survey area, view north (May 18, 2017).

Photo 6. View of typical vegetation along intermittent drainage features. Note dominance of Mission cactus and olive trees, view north (May 18, 2017).

Appendix D:
Geologic Hazards Report for the Slack Street and Grand Avenue Apartments

GEOLOGIC HAZARDS REPORT
SLACK STREET AND GRAND AVENUE APARTMENTS
GRAND AVENUE AND SLACK STREET
SAN LUIS OBISPO, CALIFORNIA

April 19, 2017
(Revised April 26, 2017)

Prepared for
Mr. Eric Wohlers
AMCAL Equities, Inc.

Prepared by
Earth Systems Pacific
4378 Old Santa Fe Road
San Luis Obispo, CA 93401

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Pacific

4378 Old Santa Fe Road
San Luis Obispo, CA 93401
Ph: 805.544.3276
esp@earthsystems.com
www.earthsystems.com

April 19, 2016
(Revised April 26, 2017)

FILE NO.: SL-17635-SL

Mr. Eric Wohlers
AMCAL Equities, Inc.
30141 Agoura Road, Suite 100
Agoura Hills, CA 91301

PROJECT: SLACK STREET AND GRAND AVENUE APARTMENTS
GRAND AVENUE AND SLACK STREET
SAN LUIS OBISPO, CALIFORNIA

SUBJECT: Geologic Hazards Report

REF.: Proposal for a Geotechnical Engineering Report, Geologic Hazard Report, Infiltration Testing, Corrosivity Testing, and Consultation, by Earth Systems Pacific, Doc. No. 1702-087.PRP.REV, revised March 9, 2017.

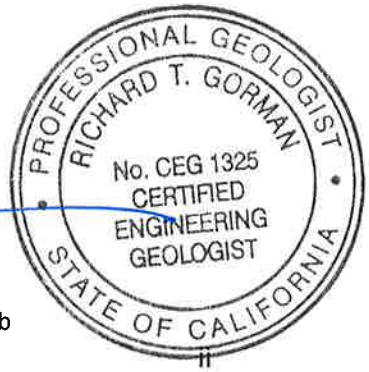
Dear Mr. Wohlers:

In accordance with the authorization of the referenced proposal, this geologic hazards report has been prepared for the proposed Village at Grand and Slack Street on the Cal Poly campus in San Luis Obispo, California. This report is based upon a review of geologic maps and literature, a site reconnaissance and subsurface exploration, and engineering geologic evaluation of the information obtained. This report describes the general geologic characteristics, it identifies existing and potential geologic hazards at the site, and it summarizes impacts that these conditions may have upon the project. This report was revised to address potential concerns related to expansive soils and on-site effluent disposal systems as they relate to the site geology. Two bound copies of this report are provided for your use; as authorized, electronic copies of this report have been distributed as indicated below.

We appreciate the opportunity to have provided engineering geology services for this project and look forward to working with you again in the future. If there are any questions concerning this report, please do not hesitate to contact the undersigned.

Sincerely,

Earth Systems Pacific



Richard T. Gorman, C.E.G.

Doc. No.: 1704-082.GEO.REV/tb

TABLE OF CONTENTS

APPENDIX

1.0 INTRODUCTION

Planned Development

We understand that the project will involve construction of approximately 420 apartments in 15 buildings, creating neighborhoods across a 21.8-acre parcel at the corner of Grand Avenue and Slack Street. The buildings will be two to five stories with slab on grade floors. It is assumed that the buildings will be of stud construction with steel moment or braced frames and/or concrete frames and podium decks.

A partially subterranean, drive-out parking structure will be constructed on the lower portion of the site; additional surface parking will also be provided throughout the site. The parking structure will make up the majority of the first two floors of one of the neighborhoods with retail units at the front, and a podium deck supporting residential units and common areas, including a pool.

A second pool and common area are planned near the upper portion of the site. BBQ areas, parks, gardens, a sports court, and open space are also planned. We anticipate the drive and parking areas will be surfaced with Hot Mix Asphalt (HMA).

Based upon preliminary grading plans, unretained cuts of up to 25 feet and fills up to 25 feet thick are anticipated. Retaining walls as part of the buildings and isolated site walls may be constructed with heights up to 30 feet. PCC aprons and slabs for trash enclosures will be constructed, and underground utilities will be installed as part of the project.

Scope of Work

This geologic hazards report was prepared by a Certified Engineering Geologist, and was based upon a review of geologic maps, air stereo photographs; and a subsurface field exploration to observe the geologic profile.

The report is intended to comply with common engineering geology practice in this area under similar conditions at this time. It is our intent that this report be used exclusively by the client to form the geologic basis of the design of the project. Application beyond this intent is strictly at the user's risk. If future property owners wish to use this report, such use will be allowed to the extent the report is applicable, only if each user agrees to be bound by the same contractual conditions as the original client, or by contractual conditions that may be applicable at the time of the report's use. This report is not intended to fulfill the requirements and design information contained in a soils/geotechnical engineering report.

In the event that there are any changes in the nature, design, or location of improvements, or if any assumptions used in the preparation of this report prove to be incorrect, the conclusions contained in this report shall not be considered valid unless the changes are reviewed and the conclusions presented in this report are verified or modified in writing. The conclusions presented in this report are considered preliminary until such time as any peer review or review by any jurisdiction has been completed, conditions are observed by the engineering geologist in the field during construction.

Site Description

The site is northeast of the intersection of Grand Avenue and Slack Street, overlooking the southern end of the campus of California Polytechnic State University (Cal Poly), San Luis Obispo, in San Luis Obispo County, California (see the Vicinity Map in the Appendix). The site slopes down generally from east to west with the lowest elevation of the site being near the intersection of Grand Avenue and Slack Street. The site elevation ranges from approximately elevation 370 to 550 feet above sea level. A relatively shallow but well defined tree-lined drainage swale bisects the site.

2.0 INVESTIGATION METHODOLOGY

Site Reconnaissance and Literature Review

A site reconnaissance was performed on March 30 and 31, 2017 to observe and map the current geologic condition of the site with respect to erosion, geologic structure, and slope stability. A review of previously published geologic reports and geologic maps of the project site area and adjacent sites was also performed.

Air Stereo Photograph Review

Air stereo photographs (Golden State Aerial Surveys, 2002) were reviewed to observe the geomorphology of the site area with respect to the landsliding.

Subsurface Investigation

On March 30 & 31, 2017, 16 trenches were excavated on site with a track-mounted excavator using a 24-inch bucket. The approximate locations of the trenches are shown on the Trench Location Map in the Appendix. Soils encountered in the trenches were categorized and logged in general accordance with the Unified Soil Classification System and ASTM D 2488-09a. Logs of the trench profiles can also be found in the Appendix. Bulk soil samples were obtained from the trench spoils.

3.0 GENERAL GEOLOGIC SUBSURFACE PROFILE

The general geologic subsurface profile observed in the trenches consisted colluvial soil underlain by ancient landslide debris, alluvium, and/or sandstone bedrock of the Franciscan Mélange.

The colluvium generally consists of sandy fat clay that is brown to dark brown with trace amounts of fine to coarse gravel. It was in a medium stiff to stiff and moist to very moist condition. Some localized areas of medium dense, brown clayey sand were also noted within the colluvial soils. The thickness of the colluvium ranged from approximately 1 to 5 feet.

Alluvium was noted in Trenches 2 and 3. It was observed in the buried channel of the south-trending drainage swale and consisted of orange brown, medium dense, clayey sand or medium stiff sandy lean clay with trace to some gravel and cobbles. The alluvium was in a moist to wet condition and was found to be up to 4 feet thick in the locations exposed by the trenches.

Landslide debris was observed in Trenches 4, 8, 9, 14, and 15. Two soil types were predominant within the debris mass; the upper soils generally consist of orange brown clayey sand with gravel in a medium stiff to stiff condition, with a trace amount of cobbles and abundant caliche deposits. The lower slide debris was gray/orange brown/olive mottled sandy fat clay in a medium stiff and moist condition with trace gravel and cobbles and abundant caliche deposits. The slide debris ranged from 1 to 14 feet thick in the trenches.

Two types of bedrock were found underlying the soils on the project site. Sandstone of the Franciscan Mélange was found in all the trenches excavated on the site. The sandstone was light brown to light yellow brown, very soft to hard, with localized areas that were difficult to excavate. It was intensely to moderately weathered and in some areas exhibited a blocky and fractured structure. The sandstone was observed to be moist to wet. Metavolcanic rock was found in the eastern half of Trench 4. It was gray brown, soft to moderately hard, sheared, weathered and fractured. There was a predominant and sheared contact between the metavolcanic rock and the sandstone bedrock observed in this trench.

The sandstone bedrock was generally soft to hard and severely to moderately weathered condition.

The trench logs are provided in the Appendix and indicate areas which vary from the general descriptions above.

4.0 GEOLOGY

Geologic Setting

The site lies on a lower western flank of the northwest trending Santa Lucia Mountain Range. In the vicinity of the site, the lower flank transitions to a relatively broad and rounded ridge that slopes gently to moderately to the west and south. A well-developed west trending drainage crosses through the central part of the site, while two shallow, relatively south trending, drainage swales are present in the southeastern quadrant and northwester corner of the site. The geologic map of the San Luis Obispo Quadrangle (Wiegers, 2010) indicates that the site is underlain by Franciscan Mélange bedrock of the Franciscan Complex (see Geologic Map in the Appendix).

Based on site observations and our subsurface exploration, ancient landslide debris is present within and along the southern bank of the west trending drainage swale, see Trench Location Map. The northern portion of the ancient landslide debris has been eroded out of the drainage swale but is still present along the southern bank of the swale.

Faulting

The Hosgri, Los Osos (Irish Hills segment), and San Andreas faults are the most significant regional *active* faults within a 65-mile radius of the site, which could affect the site during its anticipated lifespan (see the Historical Earthquake/Fault Map in the Appendix). The closest *active* fault to the site is the Irish Hills segment of the Los Osos Fault, located approximately 3.75 miles southwest. The closest mapped fault to the site (regardless of activity) is the Late Quaternary age Cambria Fault; it is located approximately 1/2-mile northeast (see Historical Earthquake/Fault Map).

Groundwater

Subsurface water was encountered in Trenches 1, 2 and 6. The subsurface water encountered in Trench 1 at the soil/bedrock contact after remaining open for a couple hours. The subsurface water encountered in Trench 2 was flowing along the sandstone/buried alluvium contact at a depth of 10 feet and was encountered immediately after excavation. In Trench 6 a spring was observed within a wedge failure that occurred in the trench sidewall several minutes after the trench was excavated.

As water was flowing in the main drainage channel through the center of the site, Trench 16 was excavated along the bank and was backfilled rapidly.

Surficial seepage was also evident along sections of the eastern portion of the site. This seepage could lead to shallow, 1-2 feet, and surficial slumping. This risk could be reduced by grading, retention, or installations of drains.

Slope Stability

No evidence of significant *active* landsliding was observed on the site during the site reconnaissance or in the review of the aerial photographs. A small, shallow soil slump type landslide is present near the eastern edge of the site, see Trench Location Map in the Appendix. Trench 4 indicated that this soil slump landslide is approximately 4 to 5 feet deep. The loose soil in the slump could be removed or retained to reduce its impact on the site improvements.

The ancient landslide debris that is present within and along the southern bank of the west trending drainage swale is considered to be inactive as the majority of the ancient landslide debris has been eroded out of the drainage swale. It is assumed that the ancient landslide debris present along the southern bank of the swale will be removed during the construction of the project in the improvement areas. However, along the eastern boundary of the site, a small portion will remain. The material could be retained or regraded to reduce the potential for future impact on the site and minimize the associated risk.

5.0 SEISMICITY

Earthquake History

The historic seismicity in the site region was researched using EQSEARCH (Blake, updated 2016) and the Boore and Joyner (1997) method of analysis for very dense soil/soft rock sites (S_C, California Building Code, 2013). EQSEARCH is a software program that performs automated searches of a catalog of historical Central California earthquakes. As the program searches the catalog, it determines the epicentral distance from the selected site to each of the earthquakes within the specified search area. The epicentral distances should be considered estimates, particularly for earthquake data prior to 1932, when instruments were first used to record earthquake events. The parameters used for the search consisted of Richter magnitudes ranging from 5.0 to 9.0, epicenters within a 65-mile radius from the site, and the time period from 1800 to 2016.

Results of the search indicated that 46 earthquakes have occurred within the search parameters; this information is summarized on the Historical Earthquake/Fault Map. Based upon these historical earthquakes, the highest peak horizontal ground acceleration (PGA) estimated to have occurred at the site is 0.26g; this earthquake had a 5.9 magnitude, occurred in 1906, and was located approximately 2.8 miles northwest of the site, which was also the closest earthquake to the site. This earthquake probably occurred on the Los Osos Fault. The largest magnitude earthquake that the search revealed was a 7.9 magnitude earthquake. This earthquake was located approximately 48 miles east and was known as the 1857 earthquake on the San Andreas Fault. It produced an estimated PGA of 0.11g at the site.

Ground Acceleration Parameters

The site is located in a seismically active area, as is most of California. The site has the potential to experience strong ground shaking from earthquakes on regional and/or local causative faults. There are several faults in the vicinity of the project site that are capable of producing strong ground motion, including the Hosgri-San Simeon, Los Osos and San Andreas faults. During an earthquake along any of these faults, seismically-induced ground shaking would be expected to occur. The severity of the shaking will be influenced largely by the distance of the site to the seismic source.

To characterize the seismicity at the site and to provide seismic design parameters for the architect/engineer, a General Procedure Ground Motion Analysis was performed to calculate the ground motions at the site. The ground motions are based on the CBC (CBSC, 2013) General Procedure that were obtained from the United States Geological Survey Earthquake Hazards Program website (USGS, 2017) and the 2010 ASCE 7 Standard Analysis Method, for Site Class "C" (very dense soil/soft rock). The results of this analysis are presented in the following table.

SUMMARY OF DESIGN RESPONSE ACCELERATION PARAMETERS

Mapped Spectral Response Acceleration for Site Class "B"		**Site Coefficients for Site Class "C"**		**Adjusted MCE Spectral Response Accelerations for Site Class "C"**		**Design Spectral Response Accelerations for Site Class "C"**	
Seismic Parameters	**Values (g)**	**Site Coefficients**	**Value**	**Seismic Parameters**	**Values (g)**	**Seismic Parameters**	**Values (g)**
S_S	1.121	F_a	1.000	S_{MS}	1.121	S_{DS}	0.747
S_1	0.428	F_v	1.372	S_{M1}	0.587	S_{D1}	0.391
Geometric Mean Peak Ground Acceleration (PGA_M) = 0.443g							

Seismic Hazards

Surface Ground Rupture

Surface ground rupture is the displacement and cracking of the ground surface that occurs along a fault trace during an earthquake. Unlike seismically-induced ground shaking, which can affect a wide geographic area, surface ground rupture is confined to the area very near the fault. The project site is not located in an Alquist-Priolo State Earthquake Zone, and there are no mapped faults crossing the lot. The closest *active* fault to the site is the Irish Hills segment of the Los Osos Fault, located approximately 3.75 miles southwest. The closest mapped fault to the site (regardless of activity) is the Late Quaternary age Cambria Fault; it is located approximately 1/2-mile northeast. As surface ground rupture requires the presence of a fault, the potential for surface fault rupture to occur at the site is considered to be very low.

Liquefaction and Lateral Spreading

The term liquefaction refers to the liquefied condition and subsequent softening that can occur in soils when they are subjected to cyclic strains, such as those generated during a seismic event. Studies of areas where liquefaction has occurred have led to the conclusion that saturated soil conditions, low soil density, grain sizes within a certain range, and a sufficiently strong earthquake, in combination, create a potential for liquefaction. Due to the presence of relatively shallow sandstone bedrock underlying the site, the potential for seismically induced liquefaction and lateral spreading are considered to be nil.

Tsunami Potential

A seismic sea wave or tsunami, which means "harbor wave," is produced by a large displacement of the ocean bottom and can move at velocities of up to 500 miles per hour in deep ocean water. Hazardous tsunamis along the California coastline can be caused by vertical displacement of submarine faults, or by submarine landslides. Tsunamis along the central California coast are relatively rare, and only a few such events are well documented.

The project site is over 12 miles from the Pacific Ocean at an approximate elevation of 390 feet above mean sea level. It is not located in the County of San Luis Obispo Tsunami Inundation Zone (July, 2009). Due to its distance from the ocean and elevation, the potential for the site to be affected by a tsunami event is considered to be nil.

6.0 FLOODING AND EROSION

According to the United States Department of Homeland Security, Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map, Panel No. 06079C1067G for the unincorporated area of San Luis Obispo County, California (November 16, 2012), the project site is not located within a 100-year flood zone or located within Flood Zone X, which indicates areas

that have been determined to have less than a 0.2 percent chance of being flooded in any given year. Consequently, the potential for flooding to affect the site is considered to be low.

Surface water runoff on site is by sheet flow over the gently sloping terrain and directed into the existing drainage swales. No evidence of significant surficial erosion, other than the three main drainage channels, was observed on within the site area during the site reconnaissance.

7.0 EXPANSIVE SOIL

The site soils are moderately to highly expansive. Expansive soils tend to swell with increases in soil moisture and shrink as soil moisture decreases; the upper 2 to 3 feet of soil is the zone most affected by these seasonal soil moisture fluctuations. The volume changes that the soils undergo in this cyclical pattern can stress and damage foundations and slabs-on-grade if precautionary measures are not incorporated in design and in the construction procedure.

In addition to the potential for structural damage, surficial slope instability can be created by this seasonal volume change due to moisture. When the expansive soils expand on a slope, they expand perpendicular to the slope face. However, when the soils dry and shrink, it creates cracks perpendicular slope leaving soil immediately above the crack unsupported. This upper soil then tends to move down the slope until the crack is closed and the soil is resupported. This is often referred to a expansive soil creep.

Use of deeper footings in combination with preserving or augmenting the soil moisture, and use of a layer of nonexpansive material beneath slabs are typical local recommendations to reduce the potential for structural damage related to expansive soils. There are a number of other options available, including caissons and grade beams, post-tensioned slab foundations, and deep nonexpansive pads.

To reduce the potential for expansive soil creep to significantly impact the site, fill soils used for construction of fill slopes could be selected from the less expansive site soils. Improvements should be set back from the top of the slopes to reduce the impact of this movement on the improvements. Natural cut slopes should be evaluated as to the thickness of the expansive soil to remain. Reducing the slope inclination of these cut slopes will aid in reducing the soil creep. In some locations, retaining walls to support thicker layers of highly expansive soil on steeper slopes may be required.

Revegetating the slopes and reducing large moisture variations can also reduce the impact of soil creep.

8.0 NATURALLY OCCURRING ASBESTOS

Asbestos can occur naturally in certain rock formations, such as those that include serpentinite or ultramafic rock. There are no naturally occurring asbestos-bearing rock formations (serpentinite or ultramafic rock) on site. The site is underlain predominantly by ancient landslide debris and relatively shallow sandstone bedrock which are not asbestos-bearing geologic units. Therefore, the potential for naturally occurring asbestos to underlie the site is considered to be very low.

9.0 RADON

Radon is a naturally occurring, gaseous element formed by radioactive decay of radium atoms, and is associated with certain rock or soil units. When buildings are constructed above radon-bearing soil or rock, the gas can seep upward and gain entrance to the structure via cracks in concrete floors or walls, through floor drains, joints, bricks, or other conduits. Accumulation of radon gas within a structure can create significant health risks. Geologic units that are characterized by high equivalent uranium concentrations are generally Mesozoic granitic rocks, Tertiary sedimentary rocks derived from Mesozoic granitic rocks, and Tertiary marine sedimentary rocks.

10. SEPTIC TANKS AND LEACH FIELD DRAINAGE

As we understand the planned project. There are no on-site septic disposal systems planned. Therefore, there should be no adverse effects due to this type of effluent disposal at the site.

11. CONCLUSIONS

Based upon our assessment of the site, it is our professional opinion that there are no significant geologic or seismic hazards that would preclude the proposed construction of approximately 420 apartments in 15 buildings, provided that design and construction are in accordance with the recommendations of a geotechnical engineering report, current California Building Code requirements, and other applicable regulations.

During our site reconnaissance, no evidence of significant slope instability or active landsliding was observed on or immediately adjacent to the site. A shallow soil slump was observed on the eastern end of the project site and ancient slide debris was encountered adjacent to the main central drainage channel. However, due to the distance from planned improvements and relative shallow bedrock underlying the soil slump, it has a very low potential of impacting the proposed development. Further, as much as the ancient slide debris will be removed during grading; as long as the remaining debris is retained, regraded or cut no steeper than it current condition, it also presents a very low risk to the site.

The site is located in a seismically active area, as is most of California, and therefore has the potential to experience strong ground shaking. This potential can be mitigated by designing and constructing the building in accordance with current California Building Code requirements and other applicable regulations.

The site soils are expansive. The risk of structural damage or soil creep can be mitigated at the site by maintaining relatively uniform moisture contents across the site. Further, the structures should be designed to resist the movement associated with expansive soils and should be set back from the top and toe of slopes with expansive soils. Slope inclinations should be reduced in the highly expansive soils.

There are no asbestos-bearing rock formations (serpentinite or ultramafic rock) on the site, and the site is in an area of low radon potential. The site is not located within a 100-year flood zone. No evidence of erosion was noted in the vicinity of the proposed building area, the clayey colluvium soils that underlie the site have a low potential for erosion while the sandstone bedrock is considered to be relatively resistant to erosion.

12.0 CLOSURE

This report is valid for conditions as they exist at this time for the proposed development described in the "Introduction" section of this report. The study was intended to be performed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the locality of this project under similar conditions. No other representation, warranty, or guarantee, is either expressed or implied.

If changes with respect to project type or location become necessary, or if items not addressed in this report are incorporated into plans, this firm shall be notified for modifications to this report.

End of Text.

TECHNICAL REFERENCES

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United States Geologic Survey (USGS), Earthquake Hazards Program Website, 2017, http://earthquake.usgs.gov/hazards/designmaps/

Air Stereo Photographs

Date	Scale	Source	Flight No.
2002	1" = 1000'	Golden State Aerial Surveys	GS-00999-11-11 & 11-12

APPENDIX

Vicinity Map
Trench Location Map
Trench Profiles
Geologic Map
Historical Earthquake/Fault Map

NOT TO SCALE

Earth Systems Pacific
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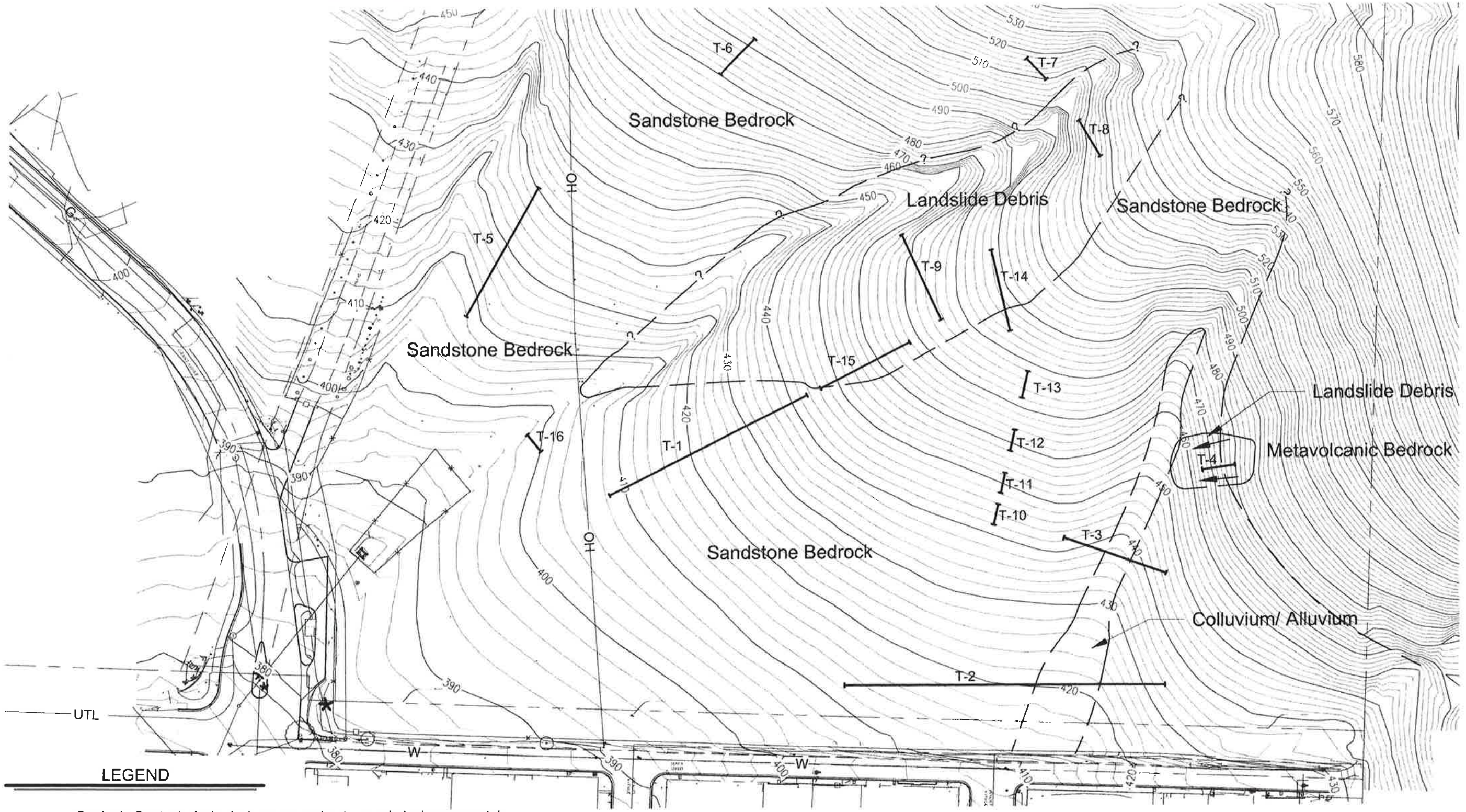
SITE VICINITY MAP

Slack Street and Grand Avenue Apartments
San Luis Obispo, California

Date
April 13, 2017

Project No.
SL-17635-SL

SLACK AND GRAND APRTS--04131717FRENCHLOCATIONS



SLACK AND GRAND APRTS - 041317TRENCHLOCATIONS

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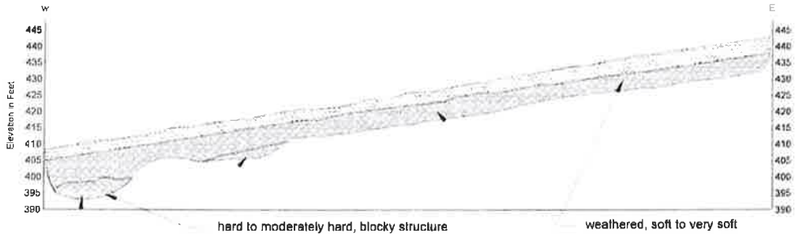
TRENCH LOCATION MAP

Slack Street and Grand Avenue Apartments
San Luis Obispo, California

Date
April 18, 2017

Project No.
SL-17635-SL

TRENCH: T-1



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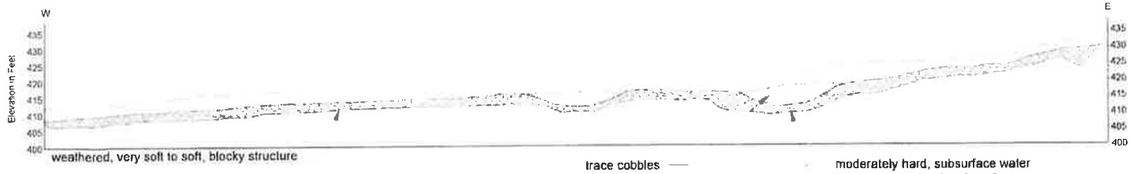

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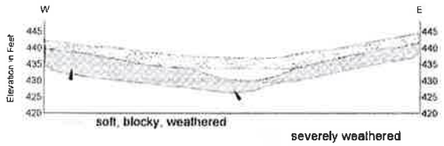

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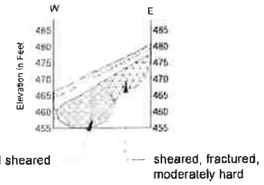

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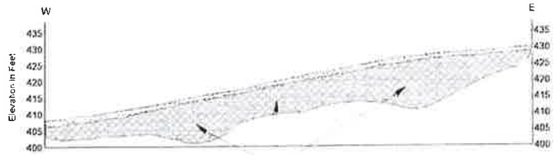

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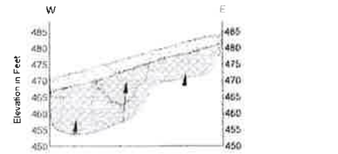

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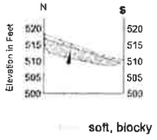

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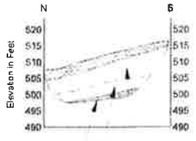

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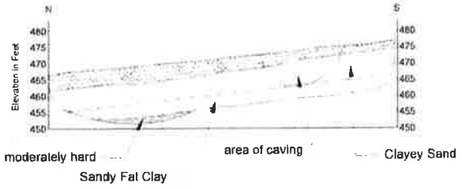
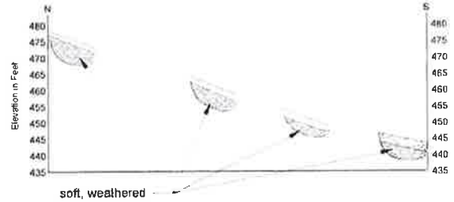


TRENCH: T-10 to T-13



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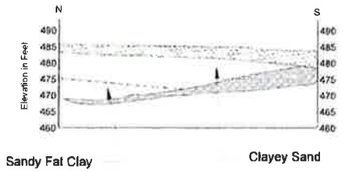

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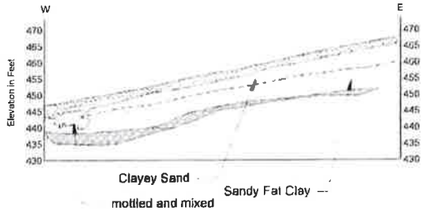

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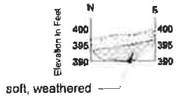

LEGEND

Colluvium: SANDY FAT CLAY, brown to dark brown, medium stiff to stiff, moist to very moist, trace gravel, some localized areas of CLAYEY SAND

Alluvium: CLAYEY SAND, orange brown, medium dense, moist, trace gravel and cobbles, some localized areas of SANDY LEAN CLAY

Landslide Debris: CLAYEY SAND WITH GRAVEL, orange brown, medium dense, moist, trace cobbles, caliche deposits
SANDY FAT CLAY, gray/orange brown/olive mottled, stiff, moist, trace gravel and cobbles, caliche deposits

Franciscan Melange: SANDSTONE, light brown to light yellow brown, very soft to moderately hard, moist to wet, intensely to moderately weathered, locally fractured, sheared, blocky

METAVOLCANIC ROCK, gray brown, soft to moderately hard, moist, weathered, sheared, fractured

0' 10' 20' 40
1" = 20'

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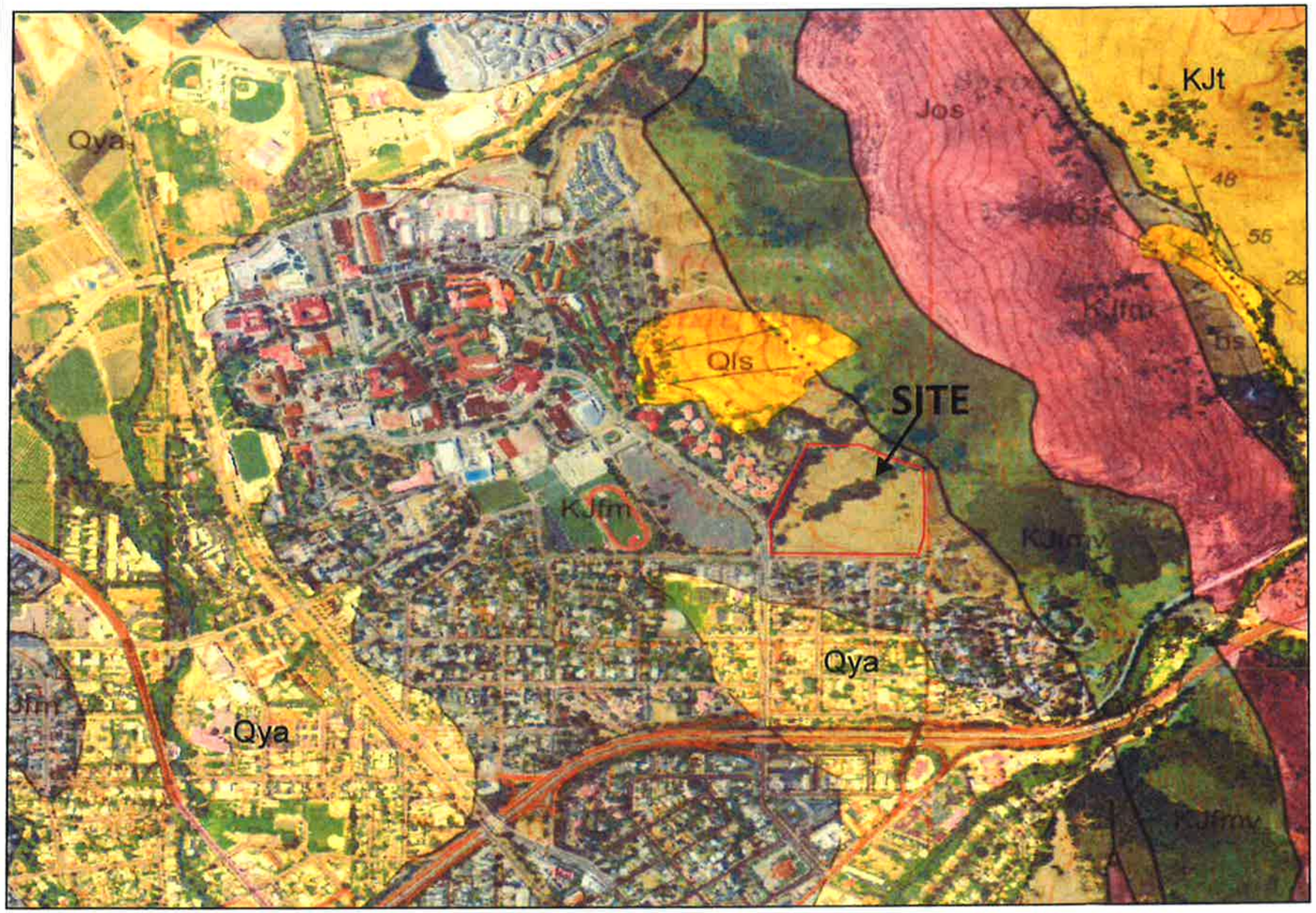
TRENCH PROFILES
Slack Street and Grand Avenue Apartments
San Luis Obispo, California

Date
April 19, 2017

Project No.
SL-17635-SL



*Extract from: Geologic Map of the San Luis Obispo Quadrangle, San Luis Obispo County, California: by Wiegers, 2010.

EXPLANATION

Geologic Units

Qya
Young Alluvial flood-Plain Deposits

Qls
Landslide Debris

KJt
Toro Formation

Jos
Serpentinized Ultramafic Rock

KJfm
Franciscan Melange

KJfmv
Franciscan Metavolcanic Rock

Geologic Symbols

Contact
Dashed where approximately located or inferred

High-angle fault
Dashed where approximately located or inferred; dotted where concealed

Thrust or reverse fault
Dashed where approximately located or inferred; dotted where concealed. Saw-teeth on upper plate. Dip of fault plane between 30° and 80°

Anticline
Showing axis at surface. Dashed where approximately located; dotted where concealed

Syncline
Showing axis at surface. Dashed where approximately located; dotted where concealed

30 90
Horizontal Inclined Vertical
Strike and dip of beds

N

Approx. Scale: 1" = 1000'

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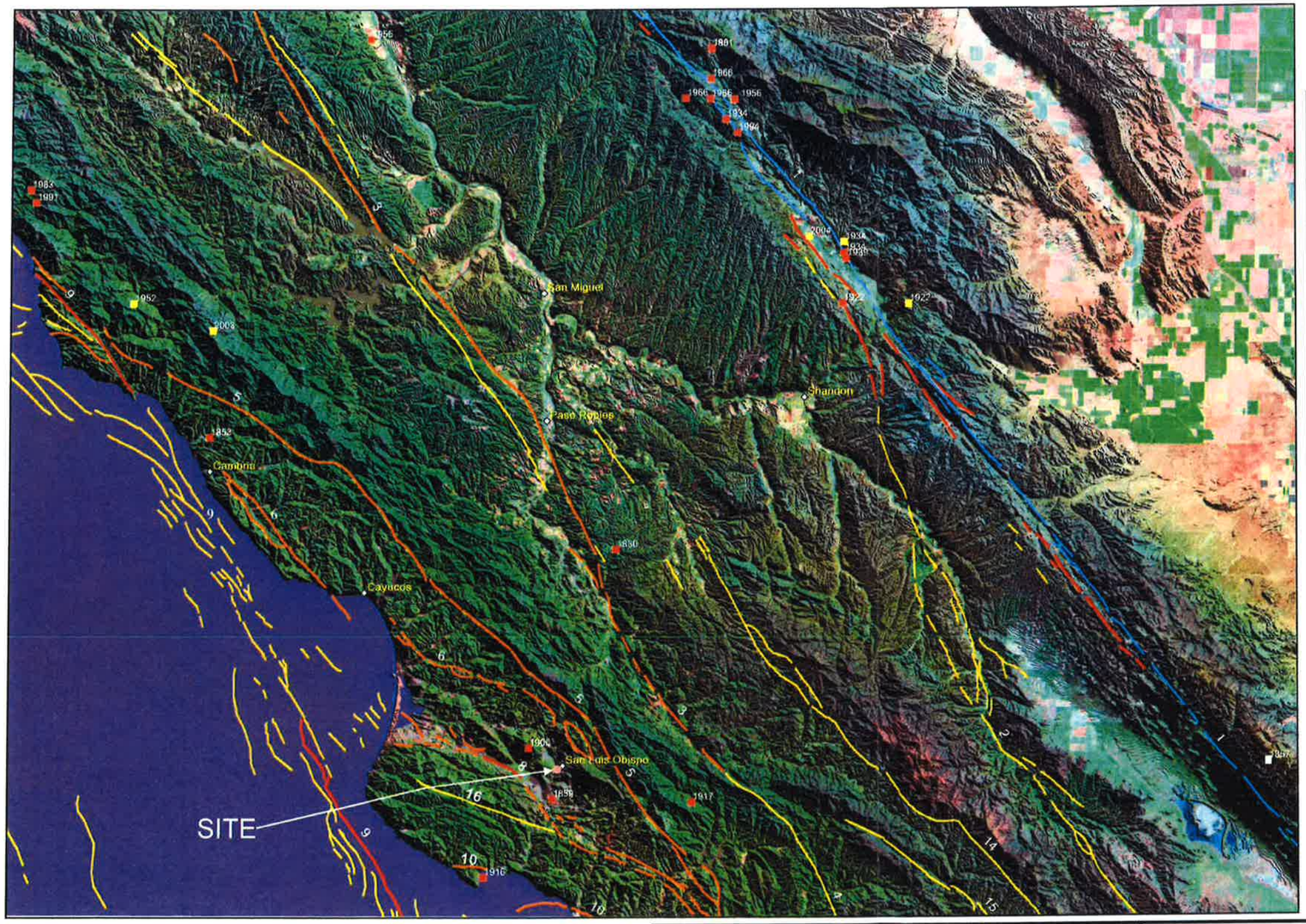
GEOLOGIC MAP
SLACK STREET AND GRAND AVENUE APARTMENTS
Grand Avenue and Slack Street
San Luis Obispo, California

Date
April 2017

Project No.
SL-17635-SL



LEGEND

- Historic rupture (<200 years)
- Holocene fault (<10,000 years)
- Late Quaternary (<700,000 years)
- Quaternary fault (<1.6 million)

HISTORICAL EARTHQUAKE MAGNITUDE

■ 5.0 to 5.9 ■ 6.0 to 6.9 □ 7.0 to 7.9

FAULTS

1	San Andreas	11	Casmalia
2	San Juan	12	Lions Head
3	Rinconada	13	Oceano
4	East Huasna	14	La Panza
5	Oceanic	15	South Cuyama
6	Cambria	16	Edna
7	West Huasna		
8	Los Osos		
9	Hosgri-San Simeon		
10	San Luis Range		

(Not all faults shown on map)

REFERENCES

Blake, T.F., EQSEARCH, updated 2016,
Jennings, C.W, & Bryant, W.A., 2010

N

(Approximate Scale: 1" = 6 miles)

EARTH SYSTEMS PACIFIC
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HISTORICAL EARTHQUAKE/FAULT MAP
SLACK STREET AND GRAND AVENUE APARTMENTS
Grand Avenue and Slack Street
San Luis Obispo, California

Date
April 2017

Project No.
SL-17635-SL

Appendix E:
Transportation Impact Study for the 2017 Campus Master Plan

TRANSPORTATION IMPACT STUDY

for the

2017 CAMPUS MASTER PLAN

CAL POLY
SAN LUIS OBISPO

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EXECUTIVE SUMMARY

This report describes the analysis of the traffic effects of proposed Cal Poly Campus Master Plan (CMP) 2035. This project is intended to enable the University to meet its long-term educational and research goals in an environmentally sustainable manner. The CMP includes, among other things, increased enrollment, a larger increase in on-campus student housing, development of on-campus or campus-adjacent residential neighborhoods geared towards faculty and staff.

Traffic operations were analyzed for a Near-Term (2021) condition comprised of project components currently in the pipeline, and for a horizon year (2035) condition with full build-out of the CMP. The analyses encompassed 43 surface street intersections, 10 freeway segments, local conditions for bicyclists and pedestrians, and effects on transit. Comparisons of the No Project scenarios to the Plus Project scenarios show that:

- The increase in traffic due to higher enrollment and more faculty and staff positions would be more than offset by the reductions in traffic from having more students live on-campus in parking-restricted housing. The CMP would result in fewer cars entering and leaving the campus in the AM and PM peak hours and in off-peak hours as well.
- The five proposed neighborhoods would make it possible for more of Cal Poly's faculty and staff to live within walking or biking distance of their jobs, and so would reduce the number of long-distance car trips associated with the university. If, and to the extent that, the apartments are made available to the general rental housing market, their effect would be the enable more people who work in San Luis Obispo to live in the city and enjoy much shorter commutes. This will relieve congestion on US 101 north and south of the city and on State Route 1 (Hwy 1) west of the city. However, it will increase traffic on the roads in the immediate vicinity of the neighborhoods.
- The Project was found not to have significant impacts at off-campus intersection in the near term. At full build-out of the CMP there would be significant impacts at six intersections. Appropriate measures to mitigate these impacts are identified in the final chapter of this report. However, at Intersection #6, Santa Rosa St./Foothill Blvd., the improvement may be infeasible due to right-of-way constraints, therefore, impact at this intersection is considered significant and unavoidable.
- The Near-Term Project would have a significant impact on one segment of US 101 within the City of San Luis Obispo and the full build-out of the CMP would have a significant impact on two additional freeway segments. In each case the segment would have a poor LOS whether Cal Poly implemented the CMP or not, but with the CMP the LOS would be slightly worse. Freeway improvements are under Caltrans responsibility and as such, the University cannot guarantee implementation of these improvements. Therefore, these impacts are considered significant and unavoidable.
- The CMP would promote walking and biking as replacements for cars trips to and from the Cal Poly campus. This is consistent with both CSU and City of San Luis Obispo policies. The increased use of alternative transportation will reduce the vehicle-miles of travel (VMTs) associated with the campus.
- The Project would likely decrease ridership on SLO Transit during the peak hours because of the reduction in students living in the city and taking the bus to campus. However, it will increase transit use during off-peak hours because there will be more students living on campus without access to cars. The net effect would be a slight (less than 1%) decrease in overall transit usage.

The overall conclusion is that the CMP is consistent with CSU and City of San Luis Obispo policies to encourage walking, biking, and transit use as replacements for driving to and from the campus. It is recommended that the University work with the City and Caltrans to implement the measures that have been identified in this report to mitigate localized impacts on the roads close to campus.

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EXHIBITS

1 INTRODUCTION

1.1 Purpose and Scope of the Study

The purpose of this Transportation Impact Study (TIS) is to evaluate potential off-site[1] traffic and transportation impacts of the California Polytechnic State University, San Luis Obispo (Cal Poly) 2035 Campus Master Plan, herein called the "the Project".

This TIS focuses on the area in the vicinity of the campus and on the routes that vehicles will take to or from the campus on the City of San Luis Obispo public street network. Forty-three (43) off-campus study intersections were selected for analysis based on the projected distribution of Cal Poly-related traffic. These are shown in Exhibit 1. Exhibit 2 shows the type of traffic control in place at each intersection, and also shows the identification number used for this study, for the City's traffic counting program and for the City's General Plan.

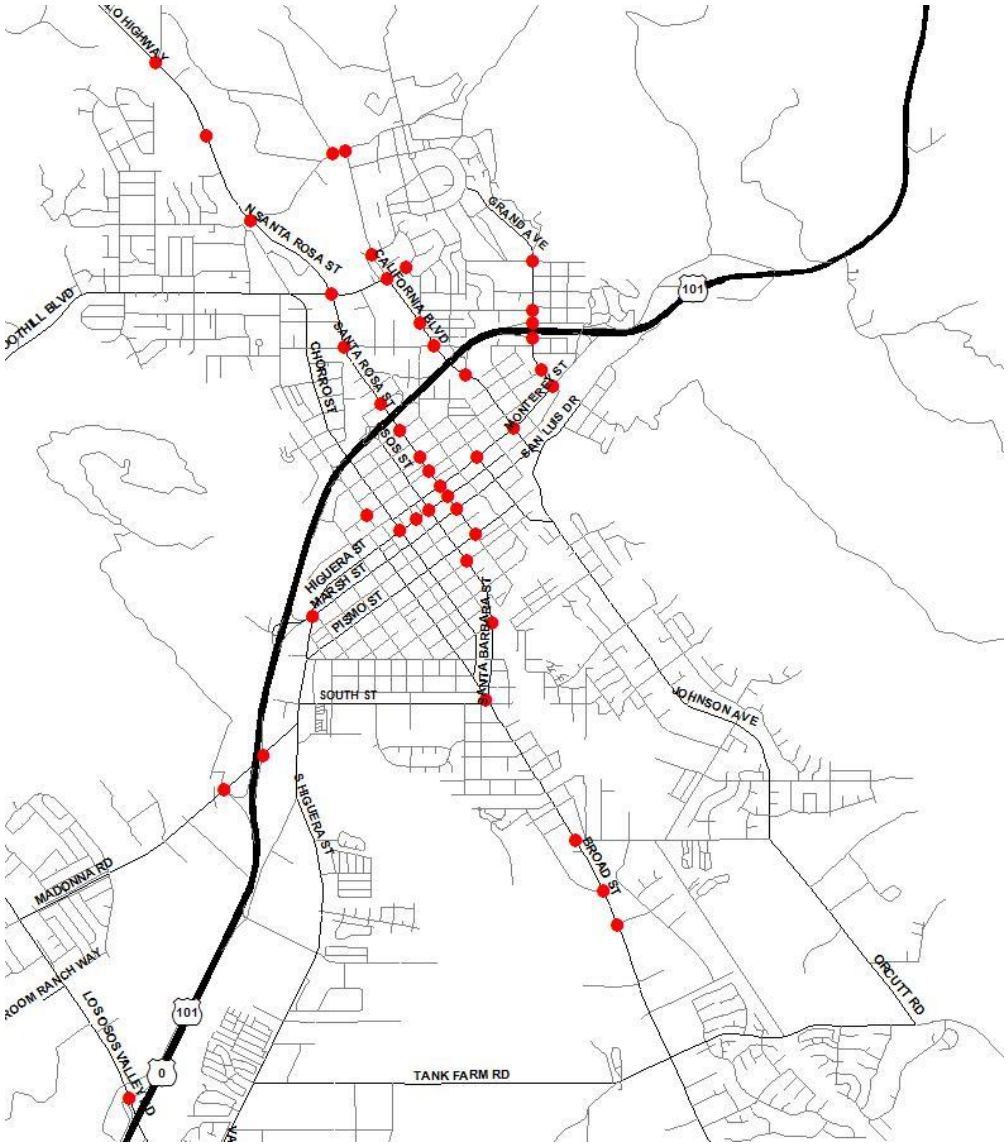


Exhibit 1: Study Intersections (map)

[1] On-site circulation issues were studied as part of the Master Plan development.

Study ID	City ID	GP ID	Intersection Name	Control Type
1	115	N/A	Hwy 1/Stenner Creek Rd	TWSC
2	99	N/A	Santa Rosa St/Highland Dr	Signalized
3	116	N/A	Mt Bishop Rd/Highland Dr	TWSC
4	117	N/A	California Blvd/Highland Dr	AWSC
5	118	N/A	California Blvd/Campus Wy	AWSC
6	33	6	Santa Rosa St/Foothill Blvd	Signalized
7	32	7	California Blvd/Foothill Blvd	Signalized
8	119	N/A	Carpenter St/Foothill Blvd	TWSC
9	38	8	Grand Ave/Slack St	AWSC
10	39	N/A	Grand Ave/Fredericks St	TWSC
11	40	13	Grand Ave/Hwy 101 SB Ramps	TWSC
12	41	14	Grand Ave/Hwy 101 NB Ramps	TWSC
13	42	N/A	Grand Ave/Mill St	TWSC
14	43	50	Grand Ave/Monterey St	Signalized
15	101	11	Santa Rosa St/Murray Ave	Signalized
16	102	17	Santa Rosa St/Olive St	Signalized
17	103	18	Santa Rosa St/Walnut St	Signalized
18	17	N/A	California Blvd/Hathway Ave	TWSC
19	18	12	California Blvd/Taft St	TWSC
20	19	222	California Blvd/Hwy 101 NB Ramps	TWSC
21	104	43	Santa Rosa St/Mill St	Signalized
22	105	46	Santa Rosa St/Palm St	Signalized
23	106	47	Santa Rosa St/Monterey St	Signalized
24	107	51	Santa Rosa St/Higuera St	Signalized
25	59	48	Johnson Ave/Monterey Ave	Signalized
26	21	49	California Blvd/Monterey St	Signalized
27	3	19	Broad St/Palm St	AWSC
28	29	26	Chorro St/Higuera St	Signalized
29	44	27	Morro St/Higuera St	Signalized
30	45	28	Osos St/Higuera St	Signalized
31	108	53	Santa Rosa St/Marsh St	Signalized
32	109	56	Santa Rosa St/Pismo St	AWSC
33	96	41	Osos St/Buchon St	Signalized
34	47	29	Higuera St/Marsh St	Signalized
35	97	88	Santa Barbara Ave/Upham St	Signalized
36	98	90	Broad St/South St/Santa Barbara Ave	Signalized
37	84	73	US-101 SB Ramps/Madonna Rd	Signalized
38	83	74	US-101 NB Ramps/Madonna Rd	Signalized
39	81	81	Los Osos Valley Rd/Hwy 101 SB Ramps	Signalized
40	11	92	Broad St/Orcutt Rd	Signalized
41	10	94	Broad St/Rockview Pl	TWSC
42	12	95	Broad St/Capitolio Wy	TWSC
43*	N/A	N/A	Hwy 1/Project Driveway	TWSC

* This is a future intersection for the 2035 With Project scenario only.

Exhibit 2: Study Intersections (list)

In addition to intersections, this study also analyzed portions of the state highway network (see Exhibit 3). The portions selected for study are those where the Project resulted in 100 or more additional vehicle-trips in either the AM or PM peak-hour.

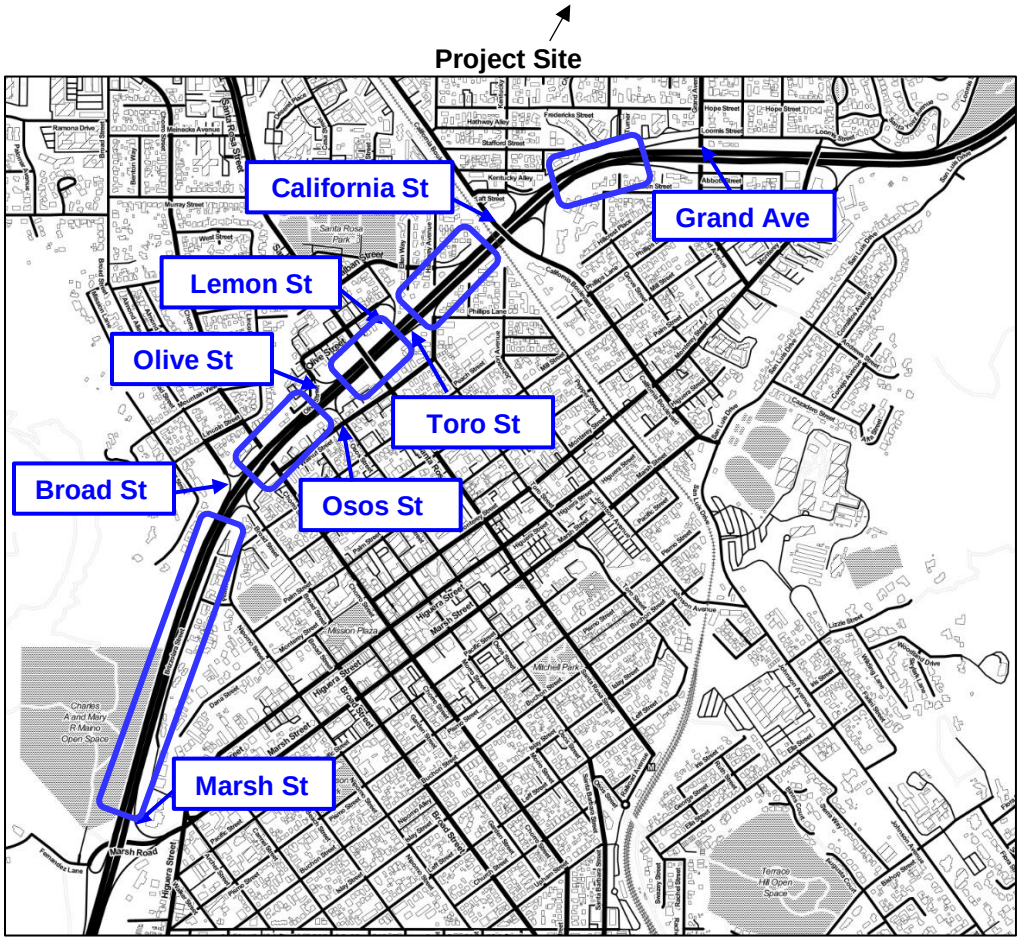


Exhibit 3: Study Freeway Segments

This TIS analyzes the following five scenarios:

- Existing Conditions
- Year 2021 No Project Conditions
- Year 2021 Plus Near-Term Project conditions
- Year 2035 No Project conditions
- Year 2035 Plus Project conditions.

Under each of the "Plus Project" scenarios, Project-generated vehicular traffic impacts were analyzed under typical weekday AM and PM peak hour conditions. Project impacts on public transit system, and bikeway and pedestrian facilities were also analyzed.

1.2 Intersection Analysis

Traffic operational conditions at intersections are described in terms of traffic Level of Service (LOS) which ranges from LOS A, which indicates that vehicles experience little delay in passing through the intersection, to LOS F, which indicates that vehicles are likely to encounter long queues and stop-and-go conditions. The LOS thresholds are presented in Exhibit 4. In this TIS intersection LOS was analyzed using Synchro 9 software. The software package is based on the methodology outlined in the Highway Capacity Manual.

Level of Service	Description	Average Control Delay (seconds/vehicle)	
		Signalized	Unsignalized & Roundabouts
A	Volume-to-capacity ratio is low and either the progression is exceptionally favorable or the cycle length is short. If due to favourable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.	≤ 10	≤ 10
B	Volume-to-capacity ratio is low and either the progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.	> 10 to 20	> 10 to 15
C	Progression is favorable or the cycle length is moderate. Individual *cycle failures* (i.e. one or more queued vehicles are not able to depart as a result of insuffucient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	> 20 to 35	> 15 to 25
D	Volume-to-capacity ratio is high and either progression is ineffective or cycle length is long. Most vehicles stop and individual cycle failures are noticeable.	> 35 to 55	> 25 to 35
E	Volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.	> 55 to 80	> 35 to 50
F	Volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	> 80	> 50
Source: *Highway Capacity Manual 2010*, Transportation Research Board			
Note: The description is from the HCM 2010 chapter on signalized intersections. For signalized intersections and roundabouts the LOS is based on the average for all vehicles entering the intersection. For unsignalized intersections the LOS is based on the delay for the worst-performing approach.			

Exhibit 4: Intersection Level of Service Thresholds

The California State University Transportation Impact Study Manual[2] defines the significance criteria for the transportation-related impacts of the proposed Campus Master Plan 2035 project on roadways and intersections as follows:

Off-Site Traffic Operations

- *A roadway segment or intersection operates at LOS D or better under a no project scenario and the addition of project trips causes overall traffic operations on the facility to operate at LOS E or F.*
- *A roadway segment or intersection operates at LOS E or F under a no project scenario and the project adds both 10 or more peak hour trips and 5 seconds or more of peak hour delay, during the same peak hour.*
- *If an intersection operates at a very poor LOS F (control delay of 120 seconds or more), the significance criterion shall be an increase in v/c ratio of 0.02 or more.*

The City of San Luis Obispo has established[3] the following policies and programs that are relevant to this study:

Under "Traffic Reduction Policies"

2.1.1 Multi-level Programs

The City shall support county-wide and community-based efforts aimed at substantially reducing the number of vehicle trips and parking demand.

2.1.3. Work-based Trip Reduction

The City shall encourage employers within the city limits and work with the county to work with employers outside of the City limits to participate in trip reduction programs.

Under "Traffic Reduction Programs"

2.2.4. Incentives for Educational Institutions

The City shall continue to work with Cal Poly, Cuesta College, and other educational institutions to provide incentives to all students, faculty and staff to use alternative forms of transportation.

Under "Traffic Management Policies"

7.1.2. Street Network

… Where feasible, roundabouts shall be the City's preferred intersection control alternative due to the vehicle speed reduction, safety, and operational benefits of roundabouts.

1.3 Freeway Analysis

The Caltrans has established guidelines[4] for analyzing impacts on the state highway system. These guidelines require that a project's impacts be analyzed when a project:

1. Generates over 100 peak hour trips assigned to a State highway facility

[2] *California State University Transportation Impact Study Manual*, November 2012

[3] City of San Luis Obispo 2035 General Plan, Chapter 4 - Circulation

[4] Caltrans Guide for the Preparation of Traffic Impact Studies

2. Generates 50 to 100 peak hour trips assigned to a State highway facility – and, affected State highway facilities are experiencing noticeable delay; approaching unstable traffic flow conditions (LOS “C” or “D”).
3. Generates 1 to 49 peak hour trips assigned to a State highway facility – the following are examples that may require a full TIS or some lesser analysis:

   a. Affected State highway facilities experiencing significant delay; unstable or forced traffic flow conditions (LOS “E” or “F”).

   b. The potential risk for a traffic incident is significantly increased (i.e., congestion related collisions, non-standard sight distance considerations, increase in traffic conflict points, etc.).

1.4 Bicycle and Pedestrian Analysis

The Transportation Impact Study Manual of the California State University specifies that the TIS should provide the following information regarding potential for bicycle and pedestrian impacts:

- A qualitative description of existing bicycle and pedestrian facilities in the project vicinity, including identifying the location and type of bicycle facilities, presence of sidewalks, and the level of usage.
- A summary of policies from area general plans or master plan related to bicycle and pedestrian travel
- Evaluation of how the project affects the current and planned bicycle and pedestrian facilities in the study area, and whether the project creates any significant conflicts with applicable bicycle and pedestrian policies.
- A map showing existing and planned bicycle facilities in the study area.

The City of San Luis Obispo has established the following policies and programs that are relevant to this study:

Under “Bicycle Transportation Policies”

4.1.2. Campus and School Site Trips

The City shall encourage the use of bicycles by students and staff traveling to local educational facilities.

4.1.13. Campus Coordination

The City shall consider the Cal Poly and Cuesta Master Plans to better coordinate the planning and implementation of safe and convenient bicycle access and facilities to local college campuses.

Under “Bicycle Transportation Programs”

4.2.1. Bike Share

The City shall evaluate a bike share program in coordination with Cal Poly and other educational institutions.

4.2.3. Campus Master Plans

The City shall work with Cal Poly and Cuesta College to de-emphasize the use of automobiles and promote the use of alternative forms of transportation in their master plans.

Under “Walking Policies”

5.1.3. New Development

New development shall provide sidewalks and pedestrian paths consistent with City policies, plans, programs and standards. When evaluating transportation impact, the City shall use a Multimodal Level of Service analysis.

The City of San Luis Obispo requires bicycle and pedestrian LOS be determined for study intersections. In the HCM 2010:

- There is no methodology for calculating bicycle LOS at stop-controlled intersections. The assumption is that the bicycle would stop and then proceed without encountering a delay.
- Similarly, there is no methodology for calculating pedestrian LOS at all-way stop-controlled intersections or on the stop-controlled approaches of side-street stop-controlled intersections. There is, however, a methodology for calculating the LOS for the crosswalks across the approaches that are not stop-controlled.

1.5 Transit Analysis

Similarly, the CSU Manual specifies that the TIS should provide the following information regarding the potential for transit impacts:

- A qualitative description of transit service and route connectivity in the project area, including campus shuttle service, local bus service, and regional bus or rail service
- Evaluation of the project’s consistency with applicable transit policies and identification of conflicts with existing and planned routes and level of services. Examples of conflicts include a project transit demand that will exceed the existing or planned service capacity or a required change in bus routing due to the physical or operational requirements of the project that lengthens transit trip times or headways.
- A map showing transit routes within two miles of the project site.

The City of San Luis Obispo has established the following policies and programs that are relevant to this study:

Under “Transit Policies”

3.1.4. Campus Service

The City shall continue to work with Cal Poly to maintain and expand the "fare subsidy program" for campus affiliates. The City shall work with Cuesta College and other schools to establish similar programs.

The City’s guide for transportation impact analysis states that transit level of service analysis should be conducted at segments scoped in the traffic study that have current or planned transit service. Transit frequency, load factor, and LOS score should be reported for transit routes servicing the project. Project impacts are considered significant if the Project traffic causes minimum LOS standards to be exceeded or further degrades already exceeded LOS standards and there is contextual significance to the impact.

1.6 Travel Demand Model

The City of San Luis Obispo maintains a travel demand model for use in forecasting future traffic and provided this model to the University for use in this TIS. In accordance with industry best practice the model was calibrated (adjusted) to improve its accuracy in the vicinity of the Project.

The model was checked to identify any adjustments needed to improve its accuracy for university-related trips. The inbound and outbound trips from the model were compared to traffic counts, as shown in Exhibit 5. The comparison found that the model under-estimated traffic in the PM peak hour and over-

estimated traffic in the AM peak hour and in off-peak hours. The model also assigned too much traffic to the California Boulevard/Campus Way entryway and too little traffic to the Santa Rosa/Highland Drive entryway.

In addition, the units used in the model to represent Cal Poly would be problematic if used to analyze the proposed Campus Master Plan. For example, the model has a unit "On-Campus Students" to represent all Cal Poly students residing on campus. However, the CMP envisages two distinct types of on-campus student, namely freshmen and sophomores who will not be allowed to have cars on campus, and upperclassmen who will be less restricted in having cars on campus. Since the trip generation rates for these two groups is different, these need to be represented separately in the model used to evaluate the CMP.

Time Period		Intersection #1 Hwy 1/ Stenner Creek Rd		Intersection #2 Santa Rosa St/ Highland Dr		Intersection #5 California Blvd/ Campus Wy		Intersection #9 Grand Ave/ Slack St		Total	
		Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
Daily	Traffic Counts	102	226	3,519	3,852	4,967	4,745	5,356	5,925	13,944	14,748
	Model Volume	102	100	3,099	3,326	5,580	5,969	6,658	5,784	15,438	15,179
	Model/Count	100%	44%	88%	86%	112%	126%	124%	98%	111%	103%
	Error (vehicles)	0	-126	-420	-526	613	1,224	1,302	-141	1,495	431
AM Peak Hour	Traffic Counts	19	8	553	100	612	126	737	103	1,921	337
	Model Volume	2	17	704	75	969	75	1,114	268	2,789	435
	Model/Count	12%	212%	127%	75%	158%	60%	151%	260%	145%	129%
	Error (vehicles)	-17	9	151	-25	357	-51	377	165	868	98
PM Peak Hour	Traffic Counts	7	27	242	460	323	527	265	578	837	1,592
	Model Volume	10	4	89	343	200	573	255	513	555	1,432
	Model/Count	149%	15%	37%	75%	62%	109%	96%	89%	66%	90%
	Error (vehicles)	3	-23	-153	-117	-123	46	-10	-65	-282	-160
Off-Peak Periods	Traffic Counts	76	191	2,724	3,292	4,032	4,092	4,354	5,244	11,186	12,819
	Model Volume	89	79	2,306	2,908	4,411	5,322	5,289	5,003	12,094	13,312
	Model/Count	117%	42%	85%	88%	109%	130%	121%	95%	108%	104%
	Error (vehicles)	13	-112	-418	-384	379	1,230	935	-241	908	493

Exhibit 5: Comparison of Actual and Model Volumes at Campus Entryways Prior to Adjustment

To improve the accuracy to the model for university-related trips the independent variable used to forecast vehicle trips to and from the campus was changed from persons (on-campus students, off-campus students, and faculty/staff) to parking spaces (spaces reserved for residence halls, other spaces). Changes were also made to the traffic analysis zones representing the campus to get a more accurate distribution of trips among campus entryways. Comparing the revised model volumes to traffic counts (see Exhibit 6), it can be seen that the errors were reduced.

Time Period		Intersection #1		Intersection #2		Intersection #5		Intersection #9		Total	
		Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
Daily	Traffic Counts	102	226	3,519	3,852	4,967	4,745	5,356	5,925	13,944	14,748
	Model Volume	107	111	2,851	3,741	4,680	5,991	5,577	5,864	13,215	15,706
	Model/Count	105%	49%	81%	97%	94%	126%	104%	99%	95%	106%
	Error (vehicles)	5	-115	-668	-111	-287	1,246	221	-61	-729	958
AM Peak Hour	Traffic Counts	19	8	553	100	612	126	737	103	1,921	337
	Model Volume	18	2	558	94	822	82	824	270	2,221	449
	Model/Count	94%	31%	101%	94%	134%	65%	112%	262%	116%	133%
	Error (vehicles)	-1	-6	5	-6	210	-44	87	167	300	112
PM Peak Hour	Traffic Counts	7	27	242	460	323	527	265	578	837	1,592
	Model Volume	4	12	59	475	110	714	181	675	354	1,876
	Model/Count	60%	43%	24%	103%	34%	136%	68%	117%	42%	118%
	Error (vehicles)	-3	-15	-183	15	-213	187	-84	97	-483	284
Off-Peak Periods	Traffic Counts	76	191	2,724	3,292	4,032	4,092	4,354	5,244	11,186	12,819
	Model Volume	85	97	2,235	3,171	3,748	5,195	4,572	4,918	10,640	13,381
	Model/Count	112%	51%	82%	96%	93%	127%	105%	94%	95%	104%
	Error (vehicles)	9	-94	-489	-121	-284	1,103	218	-326	-546	562

Exhibit 6: Comparison of Actual and Model Volumes at Campus Entryways After Adjustment

Caltrans has published guidelines[5] for use in determining whether a model is sufficiently accurate for use. These guidelines include allowable deviations from traffic counts, which require that the higher-volume routes be more accurate (in percentage terms) than less important routes. Exhibit 7 is a plot of post-calibration model volumes versus traffic counts with the Caltrans allowable deviation shown in shading. The exhibit shows the close correlation between the model volumes and the actual volumes' well within the allowable deviation. Exhibit 8 lists the full range of validation tests and shows that the calibrated model passes all of the tests for accuracy. It can therefore be used as a basis for forecasting the traffic effects of the Campus Master Plan.

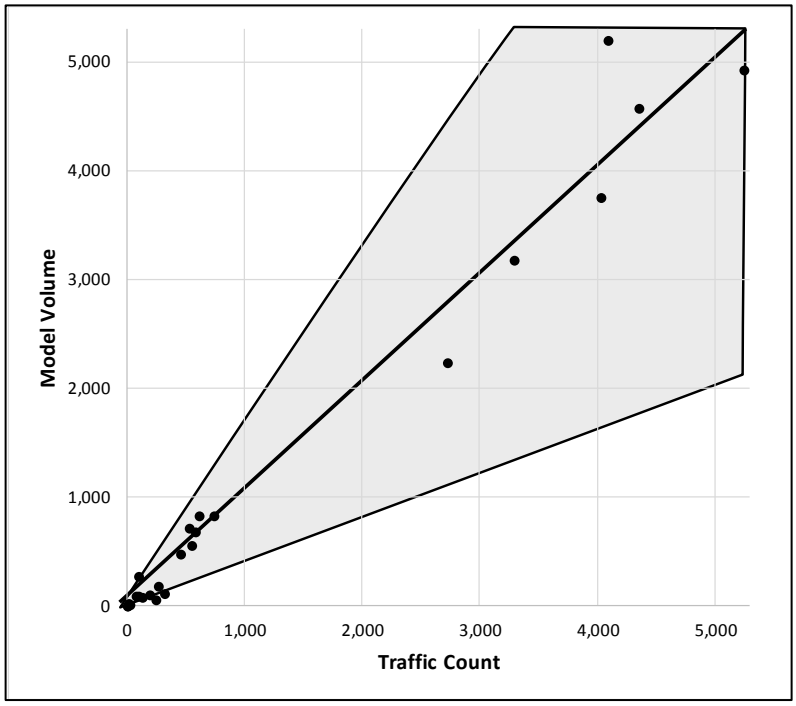


Exhibit 7: Model Volumes versus Traffic Counts After Adjustment

Validation Item	Criterion for Acceptance	Model Value	Model Passes Test?
Model/Count Ratio =	within 10%	1.01	✓
Percent Within Caltrans Maximum Deviation =	> 75%	83%	✓
Percent Root Mean Square Error =	< 30%	24%	✓
Coefficient of Determination (R2) =	> 0.77	97%	✓
Correlation Coefficient =	> 0.88	99%	✓

Exhibit 8: Results of Validation Tests

The SLO travel demand model provides a generalized estimate of the growth of bicycle and pedestrian trip making. In accordance with City guidelines, peak hour intersection bicycle and pedestrian volumes were estimated by applying the forecasted citywide percentage increase in bicycle and pedestrian trips to the existing bicycle and pedestrian intersection movement counts. Future pedestrian volumes on study roadway segments were estimated in the same manner.

[5] *Travel Forecasting Guidelines*, Caltrans, November 1992

2 SETTING AND EXISTING CONDITIONS

2.1 Existing Campus Uses & Enrollment

Cal Poly San Luis Obispo is located adjacent to the City of San Luis Obispo, in the California's Central Coast, approximately half-way between San Francisco and Los Angeles.

The City of San Luis Obispo has a population of approximately 45,000. It is one of seven incorporated cities in San Luis Obispo County, which has a total population of approximately 280,000. The Cal Poly campus is located approximately 2 miles north of the City's downtown core. The campus is bounded by Hwy 1 and California Boulevard on the west, Slack Street to the south, Stenner Creek Road to the north, and forested hills to the east. As a major academic and sports center as well as the largest employer in the county[6], the university attracts both local and regional traffic.

The Cal Poly campus contains a diverse and complex mix of academic building facilities, on-site housing, parking facilities, recreational/sports facilities, and other facilities and uses. In Fall 2016 the campus had:

- 20,944 enrolled students ('headcount')
- 34% of the students living on campus. This included nearly all freshmen.
- There were spaces for 7,188 students to reside on campus with another 1,475 spaces under construction.
- The University employed 3,172 faculty and staff members.

2.2 Existing Roadway Conditions

2.2.1 General Traffic Patterns in the Project Area

The city of San Luis Obispo is a regional employment center with a severe jobs/housing imbalance. According to data from the U.S. Census Bureau, 77% of the people employed in San Luis Obispo live outside the city and commute in (see Exhibit 9). There is a much smaller (approximately 1/3rd) but still substantial volume of out-commuting to other cities. This pattern puts a substantial strain on the highways connecting San Luis Obispo to other cities to the north, south, and west during peak commuting times.

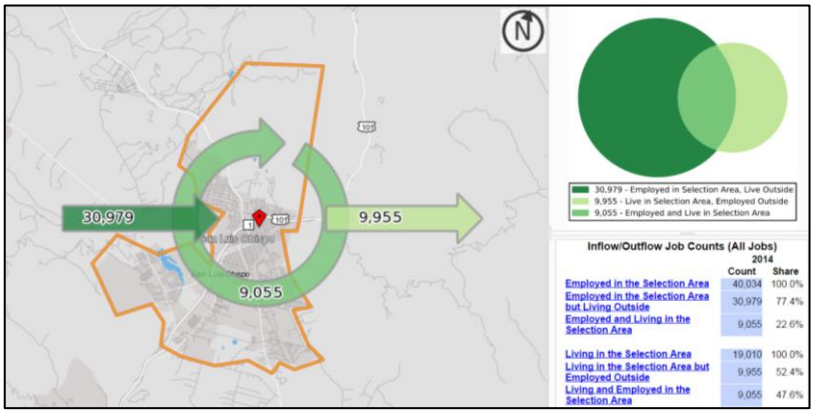


Exhibit 9: Census Data on Commuting Patterns

2.2.2 Existing and Planned Roadway Network

Important off-campus roadways in the vicinity of the Cal Poly include (see Exhibit 1):

[6] Cal Poly University has approximately 3,100 employees. The second-largest employer, Atascadero State Hospital, has approximately 2,000 employees.

- **US Highway 101 (US 101)** is a north-south freeway that runs Port Angeles in Washington State through Oregon and north and central California, terminating in Los Angeles. In San Luis Obispo County US 101 is classified as a Principal Arterial. It the main route connecting the City of San Luis Obispo to the cities of Paso Robles, Templeton, and Atascadero to the north and to the cities of Arroyo Grande, Grover Beach, Oceano, Pismo Beach and Nipomo to the south. During weekday peak periods, US 101 carries a significant amount of commuter traffic traveling to San Luis Obispo and between communities north and south of the city. Per 2015 Caltrans traffic count data, US 101 carries an Annual Average Daily Traffic (AADT) of 52,800 vehicles and a peak month ADT of 58,000 vehicles between the its junction with Hwy 1 and the California Boulevard interchange.
- **State Route 1 (Hwy 1)** also known as the Pacific Coast Highway is a north-south state highway that runs from Orange County to Mendocino County. In northern San Luis Obispo County, Hwy 1 connects the coastal towns of San Simeon, Cambria, Cayucos, and Morro Bay to San Luis Obispo. In the City of San Luis Obispo it is an arterial named Santa Rosa Street. Hwy 1 is the western boundary of the Cal Poly campus where it is a divided 4-lane arterial. Per 2015 Caltrans traffic count data, Hwy 1 carries an AADT of 32,800 vehicles and a peak month ADT of 35,500 vehicles between the its junction with US 101 and Foothill Boulevard.
- **Grand Avenue** is a north-south residential arterial that connects Cal Poly at Slack Street to US 101 through a series of stop-controlled intersections. North of Slack Street, Grand Avenue narrows to a 2-lane roadway as it enters the Cal Poly campus. Grand Avenue is the most important entrance to Cal Poly in terms of number of vehicles (approximately 11,200 vehicles/day entering or leaving, 39% of all vehicles entering of leaving the campus).
- **California Boulevard** is a north-south arterial road connecting Cal Poly to US 101 and Monterey Street. It has a 3- or 4-lane cross section for most of its length, narrowing to 2-lanes once it enters the Cal Poly campus at Campus Way. California Boulevard is second most important entrance to Cal Poly in terms of number of vehicles (approximately 9,700 vehicles/day entering or leaving, 34% of all vehicles entering of leaving the campus).
- **Highland Drive** is a 2-lane arterial that connects the Cal Poly campus to Hwy 1. It is the third most important entrance to Cal Poly in terms of number of vehicles (approximately 7,400 vehicles/day entering or leaving, 25% of all vehicles entering of leaving the campus). West of Hwy 1 it serves a collector-distributor function for a residential neighborhood.
- **Stenner Creek Road** is a 2-lane rural road that provides access to several Cal Poly agriculture facilities and to the San Luis Obispo water treatment plant. It connects to the academic core via Mount Bishop Road. Stenner Creek Road is paved only for its southern-most 0.8 miles (from the treatment plant entrance to Hwy 1). It is the least important gateway to the campus, currently serving approximately 300 vehicles/day entering or leaving, or2% of all vehicles entering of leaving the campus.
- **Foothill Boulevard** is a 2-to-4 lane undivided arterial street with signalized intersections at California Boulevard and Santa Rosa Street. Foothill Boulevard is a major route to Cal Poly, via California Boulevard, from locations south and west of the campus.

The existing on-campus roadway circulation system consists of:

- **North Perimeter Road** is a 2-lane road that is the only route through campus for most motorized vehicles (there are other routes, such as South Perimeter Road, that are open only to State-owned or emergency vehicles). Perimeter Road runs in a curve from Grand Avenue north then west to University Drive.
- **University Drive** is a short 2-lane connector between North Perimeter Road and Highland Drive.
- **Village Drive** is a 2-lane access road connecting Poly Canyon Village to North Perimeter Road and to Via Carta.

- **Via Carta** is a 2-lane road providing access to various facilities north of the academic core. The portion of Via Carta in the academic core is closed to traffic.
- **Mount Bishop Road** is a 2-lane rural road providing access to outlying facilities in the northwest portion of the campus.

Based on information received from the City, the following roadway improvements were assumed for year 2035 Future Conditions without Project (see Exhibit 10):

- **Higuera Street** is widened by 1 lane in each direction between Marsh Street and South Street.
- **Orcutt Road** widened by 1 lane in each direction between Broad Street and Johnson Avenue
- **Tank Farm Road** widened by 1 lane in each direction between South Higuera Street and Broad Street.
- **Los Osos Valley Road** widened by 1 lane in each direction between South Higuera Street and Los Palos Drive, between the auto dealerships and the US-101 southbound ramps, and between Madonna Road and Laguna Lane.
- **Prado Road** widened and extended east to Broad Street and west to Madonna Road.
- **Broad Street** ramps to and from northbound US 101 closed.
- **Broad Street** near South St. narrowed.
- **Bullock Lane** paved and widened from Willow Creek Country Estates to Tank Farm Road.
- **New roads** constructed pursuant to the Orcutt, Margarita, and San Luis Ranch specific plans.

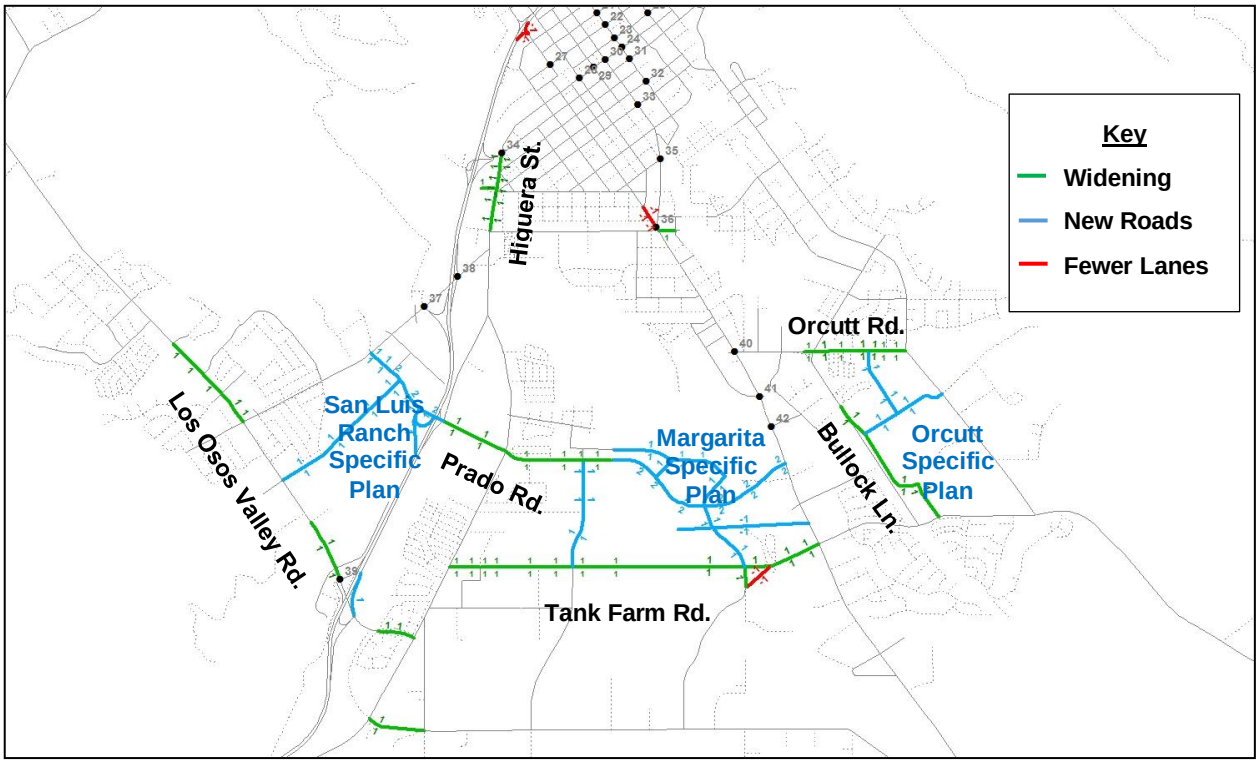


Exhibit 10: Planned Roadway Improvements

2.2.3 Existing Conditions at Study Intersections

Traffic counts were performed at forty-two (42) study intersections (one of the 43 study intersections does not exist under existing conditions) in Fall 2016 as part of the City's periodic traffic count program on dates when Cal Poly was in normal session. Existing traffic volumes and lane configurations at the study intersections are shown in Exhibit 11. The existing LOS operations for study intersections are summarized in Exhibit 12. As shown, four intersections do not meet the LOS target under existing conditions, namely:

- Intersection #17, Santa Rosa St/Walnut St, during the PM peak hour
- Intersection #19, California Blvd/Taft St, during the PM peak hour
- Intersection #37, US 101 SB Ramps/Madonna Rd, during the AM peak hour
- Intersection #41, Broad St/Rockview Pl, during the PM peak hour

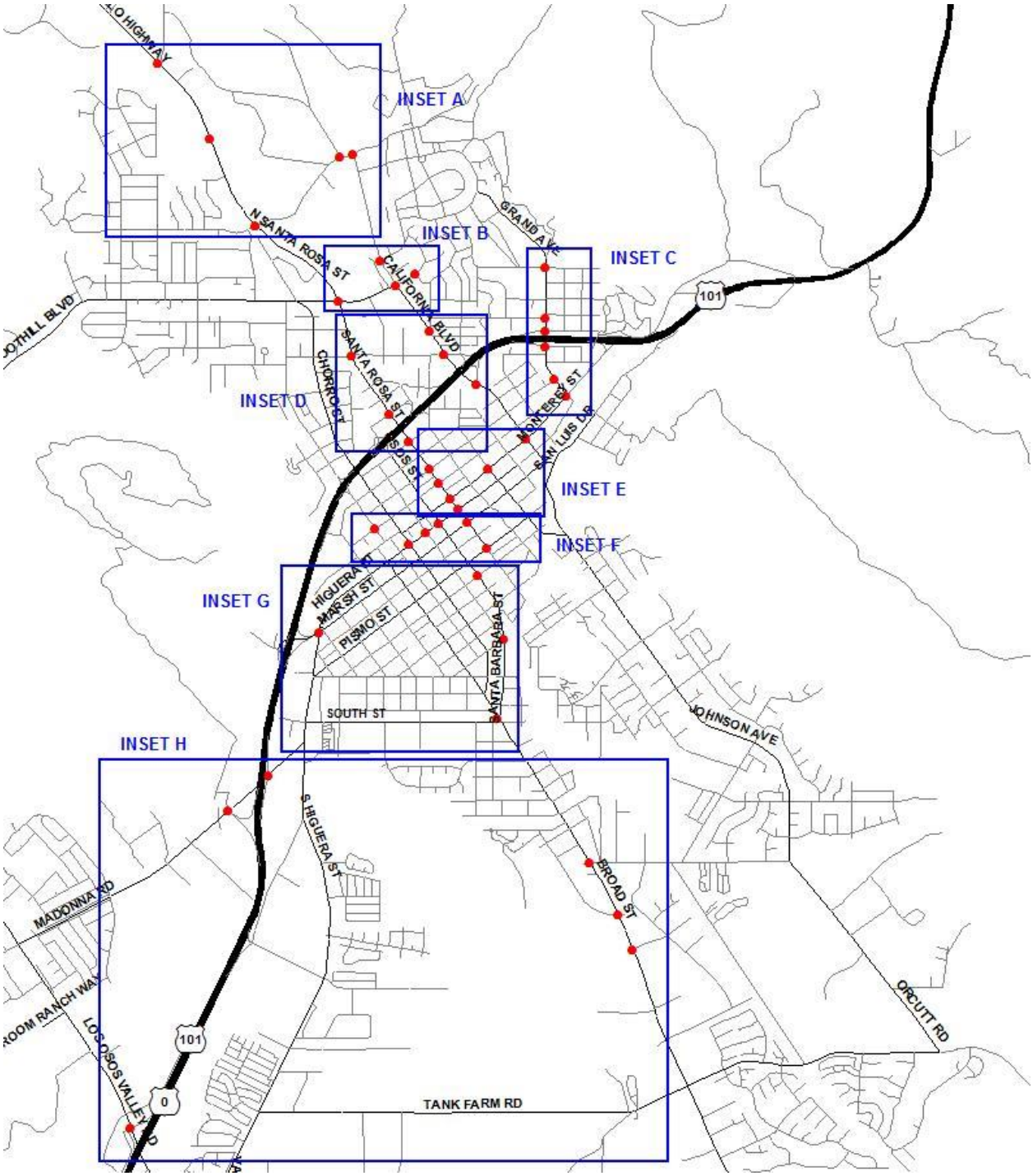


Exhibit 11: Existing Traffic Volumes and Lane Configurations

Key Map

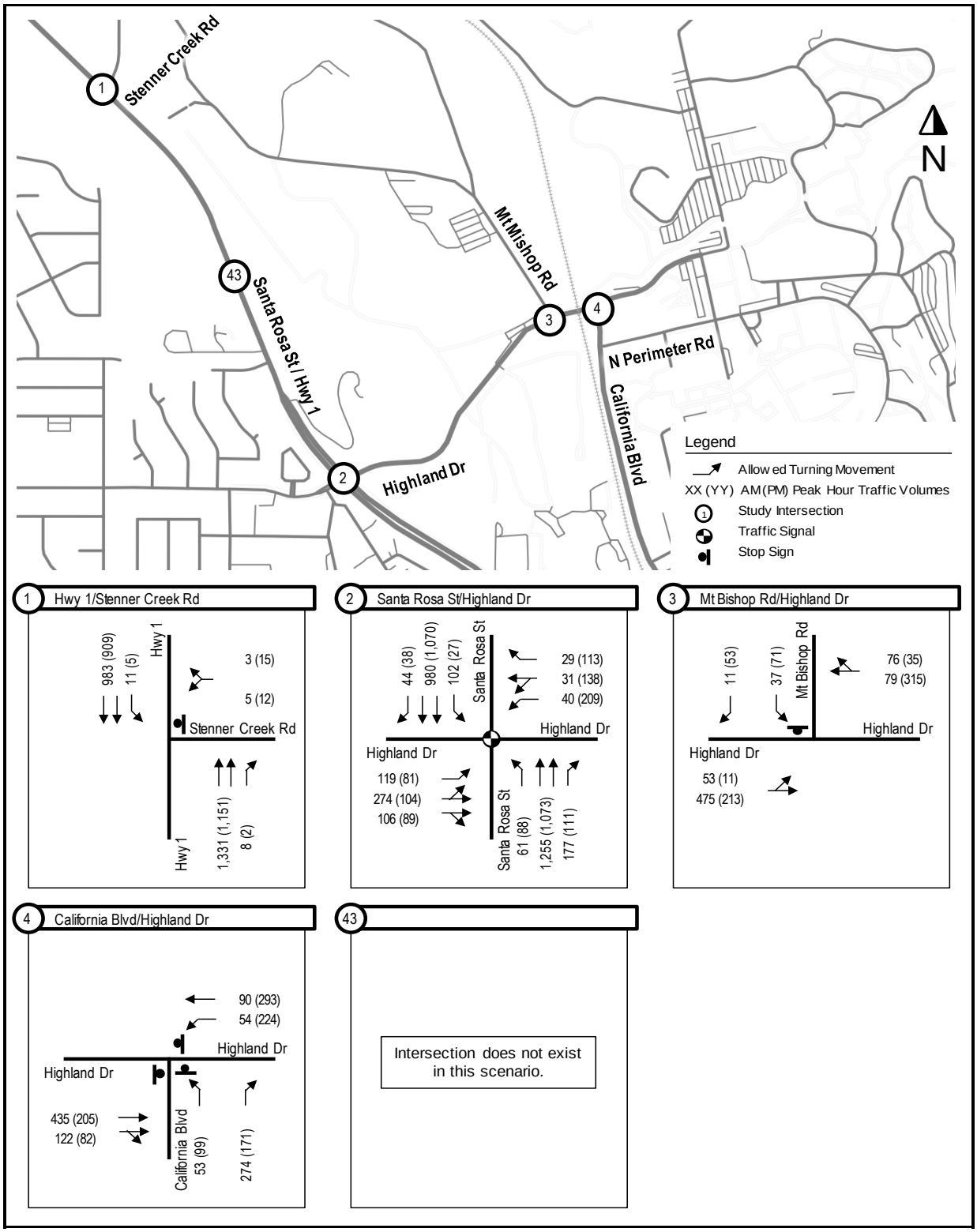


Exhibit 11: Existing Traffic Volumes and Lane Configurations (Map A)

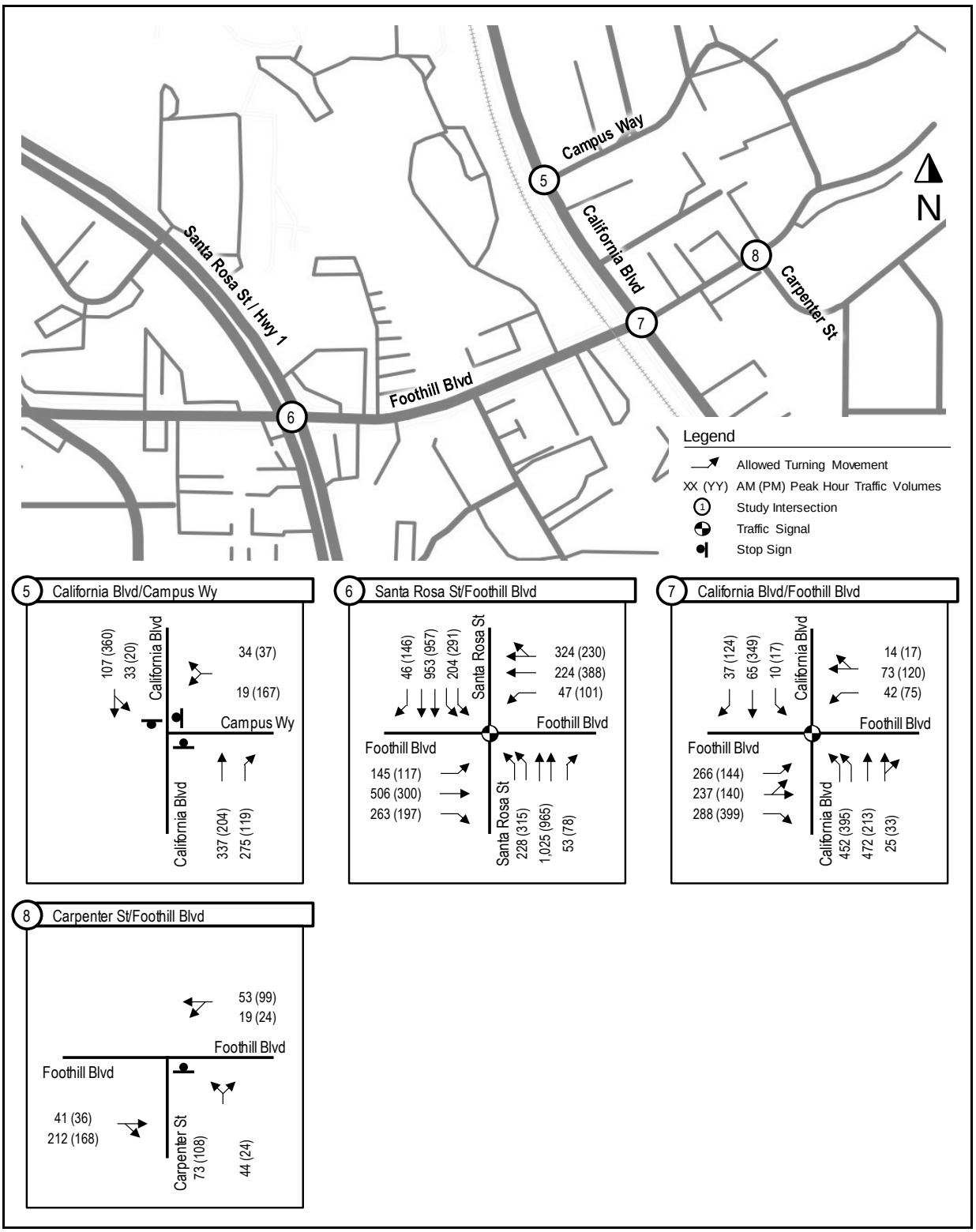


Exhibit 11: Existing Traffic Volumes and Lane Configurations (Map B)

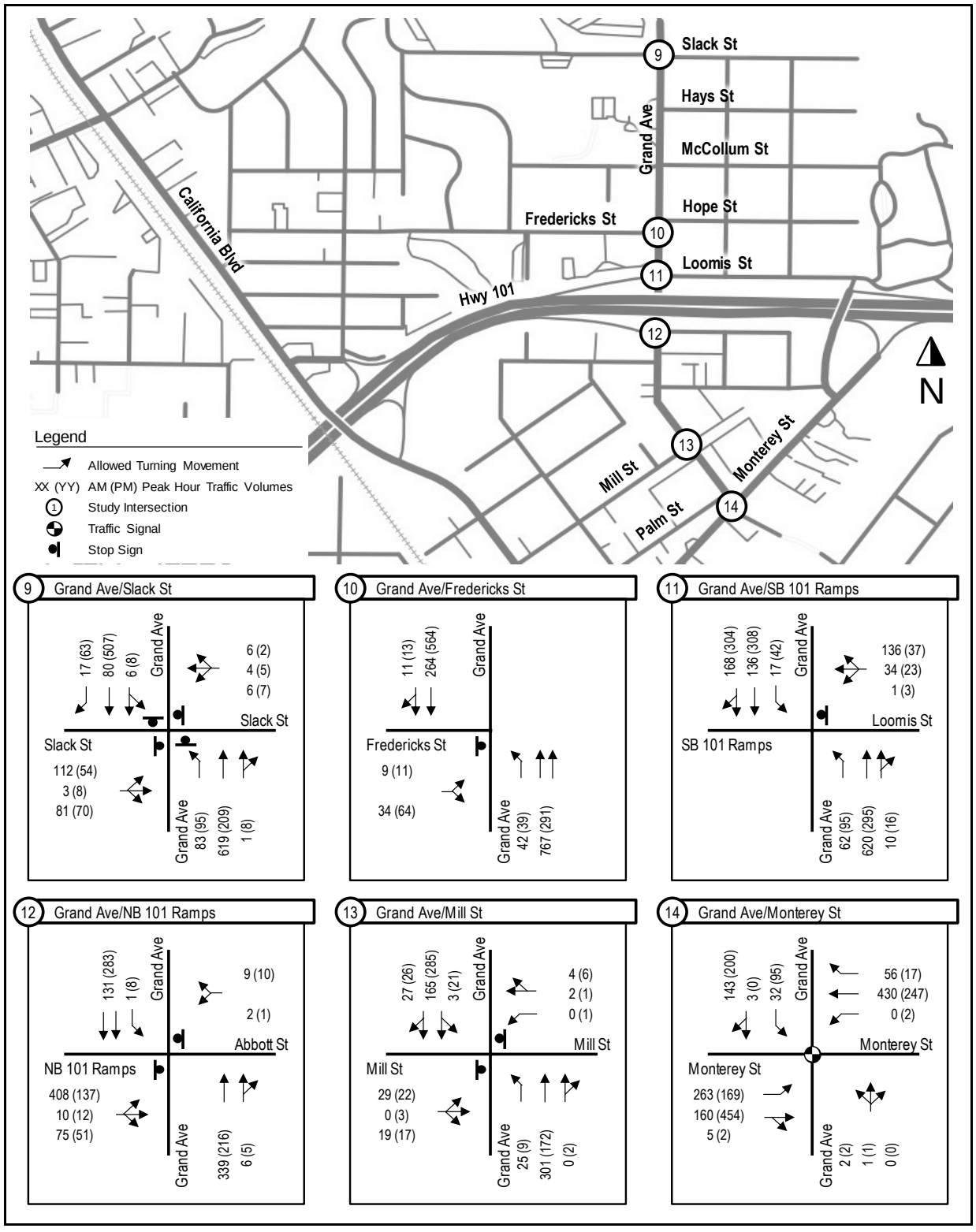


Exhibit 11: Existing Traffic Volumes and Lane Configurations (Map C)

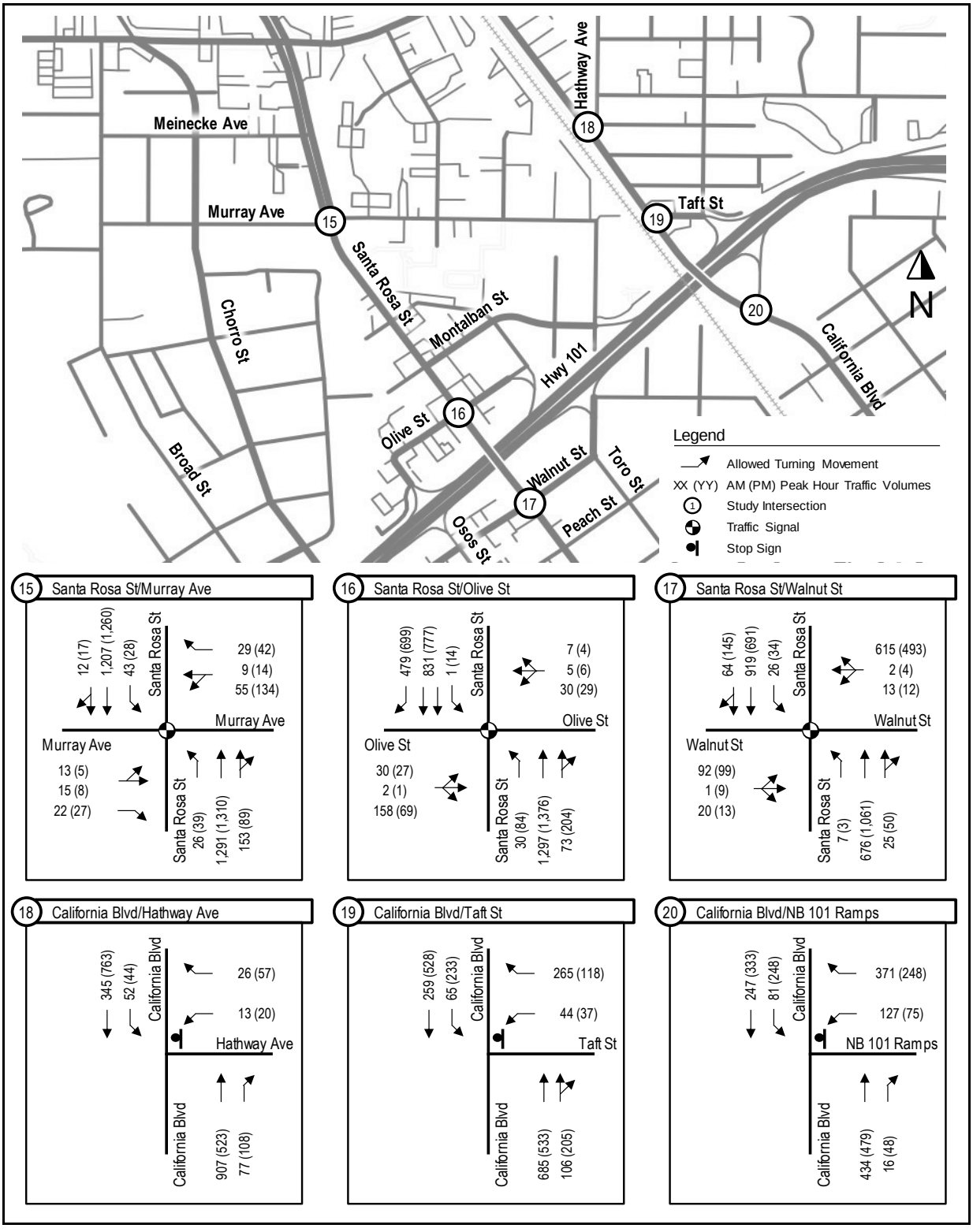


Exhibit 11: Existing Traffic Volumes and Lane Configurations (Map D)

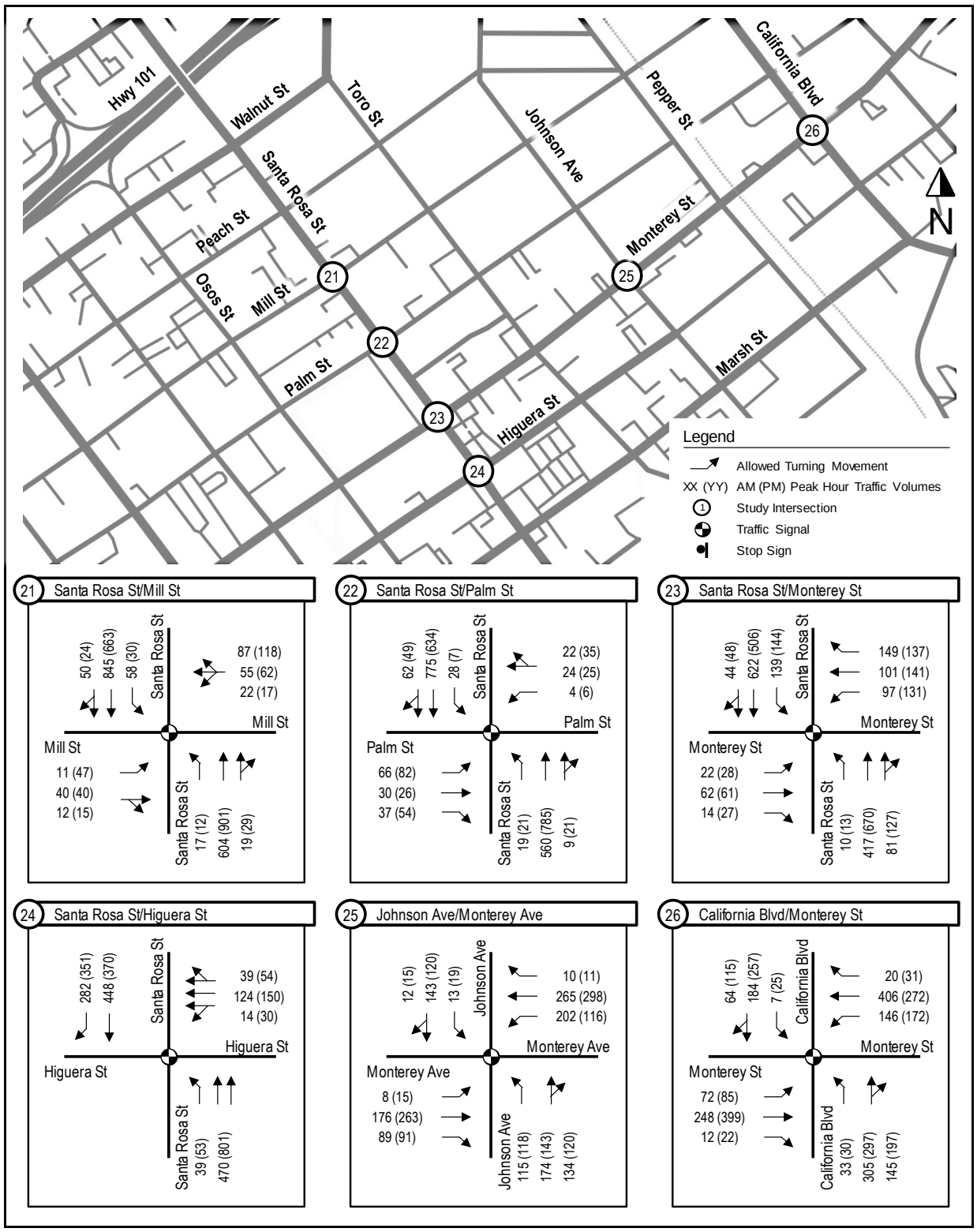


Exhibit 11: Existing Traffic Volumes and Lane Configurations (Map E)

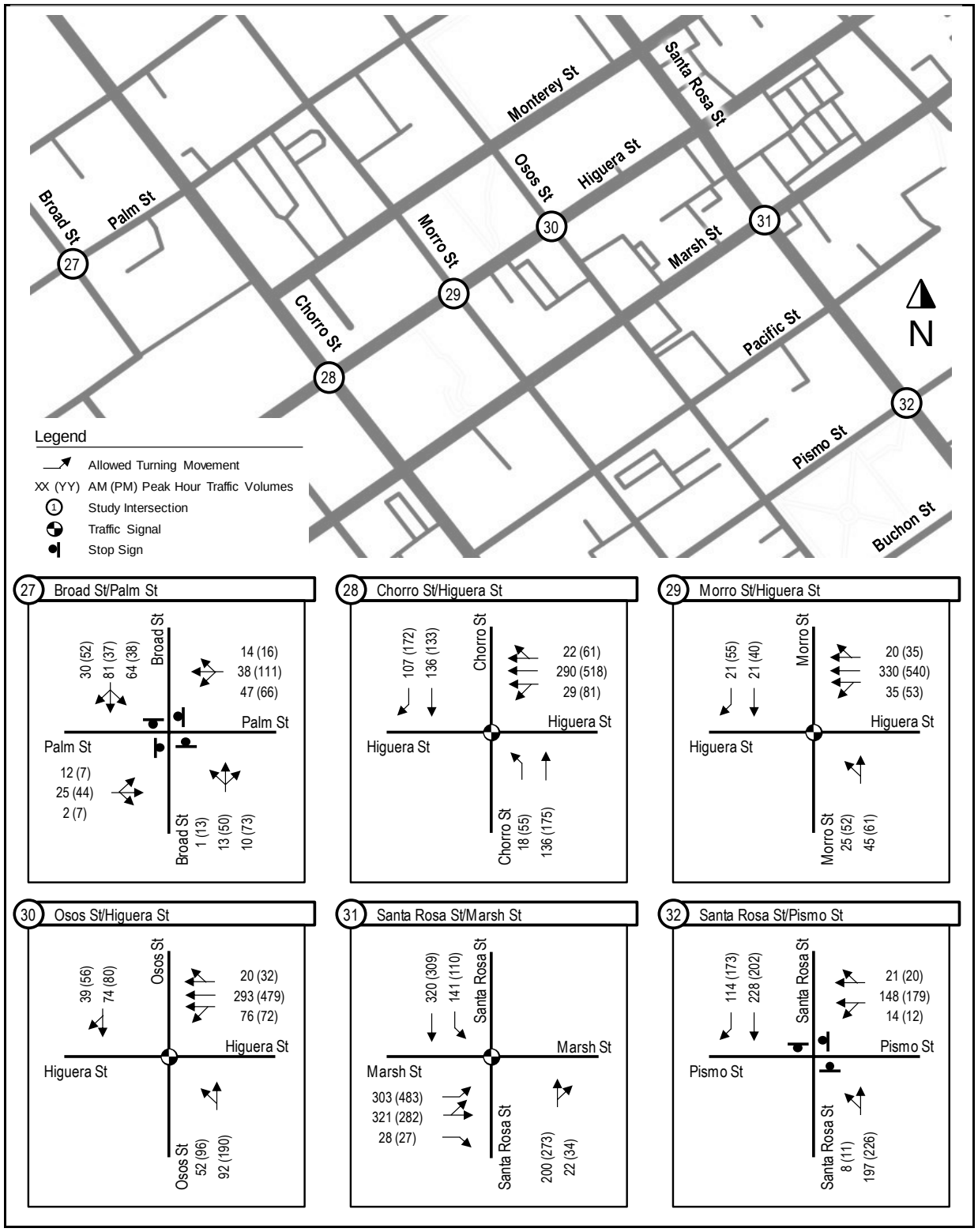


Exhibit 11: Existing Traffic Volumes and Lane Configurations (Map F)

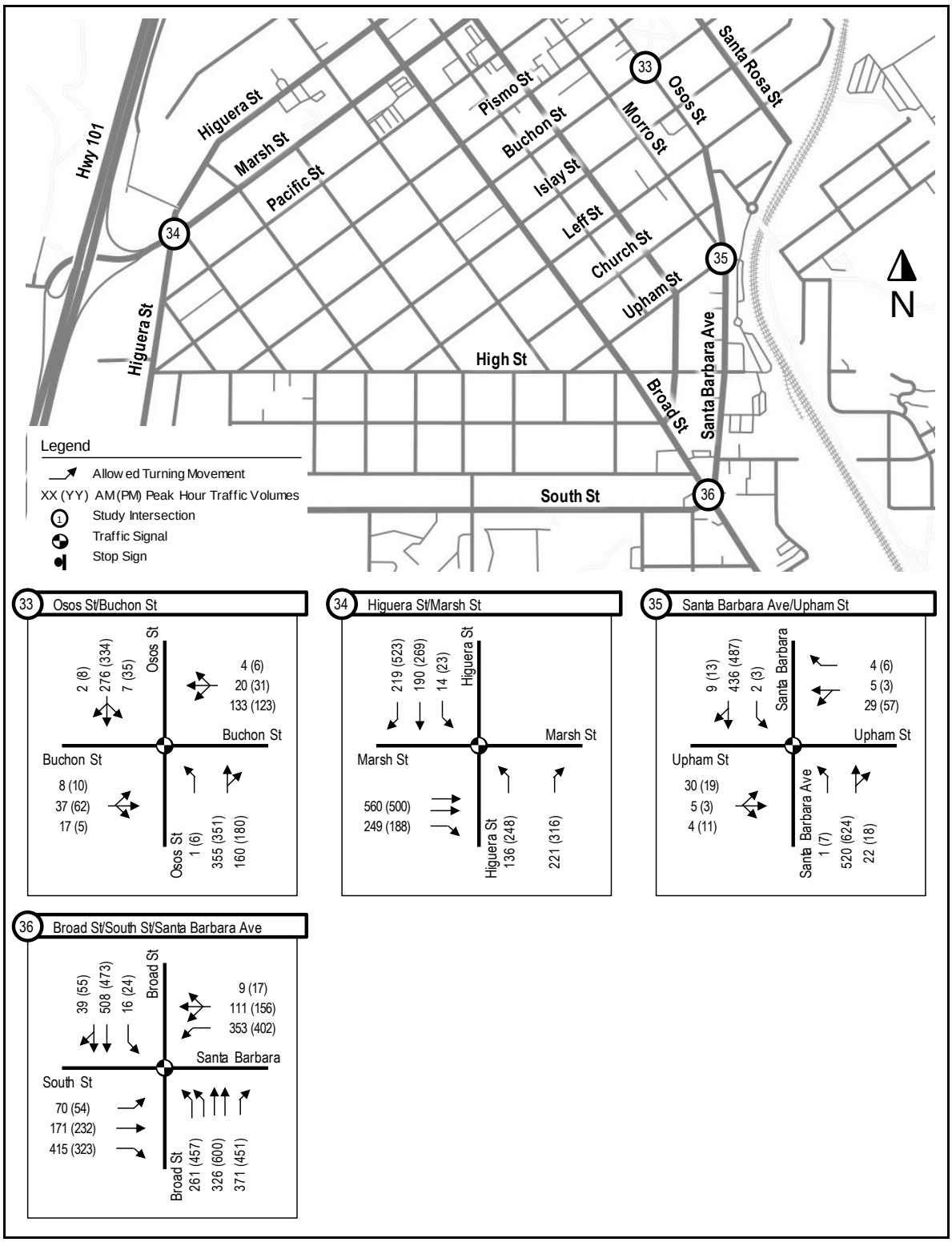


Exhibit 11: Existing Traffic Volumes and Lane Configurations (Map G)

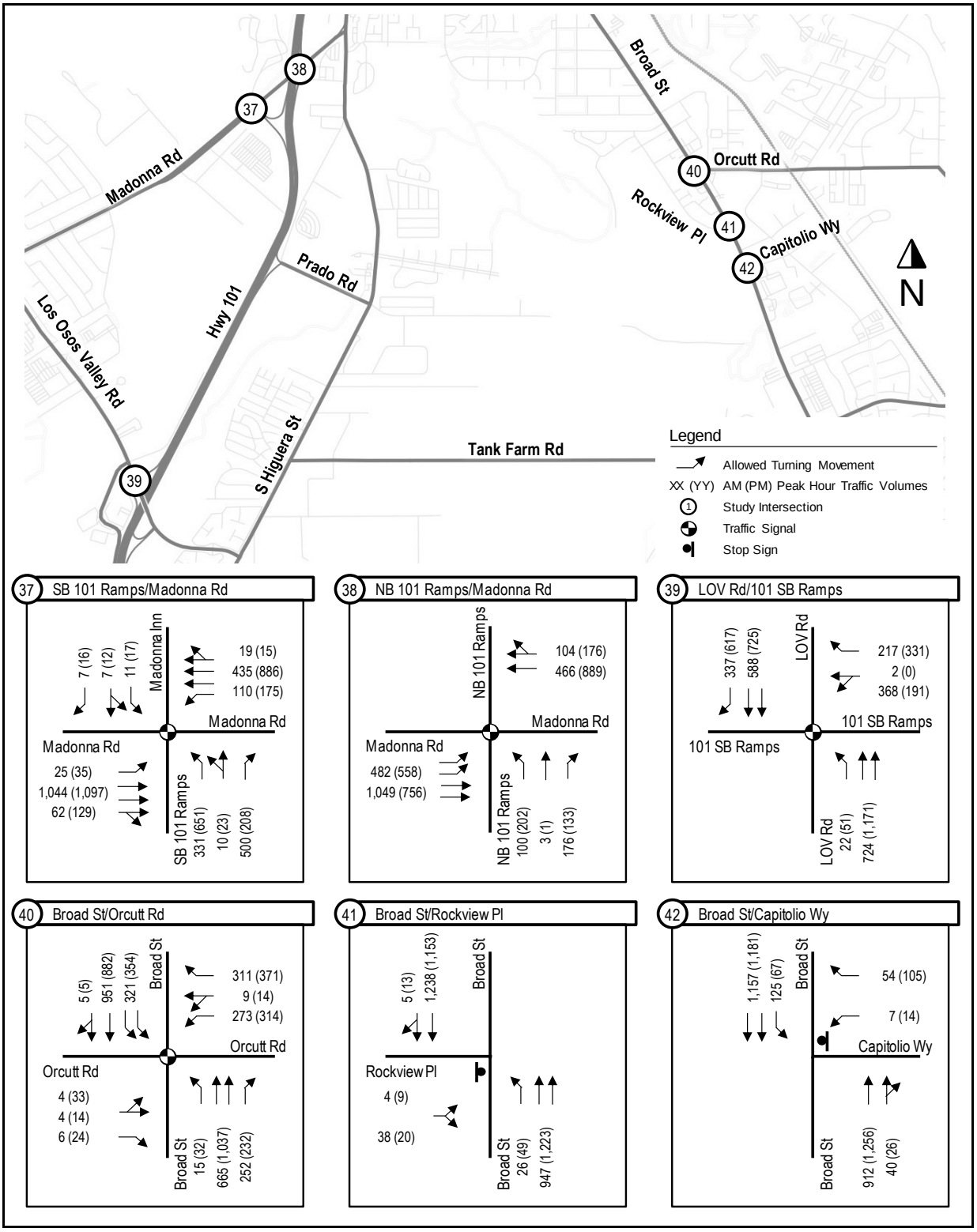


Exhibit 11: Existing Traffic Volumes and Lane Configurations (Map H)

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			Average Delay	HCM LOS	Average Delay	HCM LOS
1	Hwy 1/Stenner Creek Rd	TWSC	27.1	D	21.7	C
2	Santa Rosa St/Highland Dr	Signalized	33.7	C	36.8	D
3	Mt Bishop Rd/Highland Dr	TWSC	21.6	C	16.4	C
4	California Blvd/Highland Dr	AWSC	15.7	C	14.4	B
5	California Blvd/Campus Wy	AWSC	10.5	B	15.0	B
6	Santa Rosa St/Foothill Blvd	Signalized	51.1	D	45.4	D
7	California Blvd/Foothill Blvd	Signalized	30.5	C	22.2	C
8	Carpenter St/Foothill Blvd	TWSC	14.2	B	16.6	C
9	Grand Ave/Slack St	AWSC	33.0	D	12.6	B
10	Grand Ave/Fredericks St	TWSC	11.1	B	12.8	B
11	Grand Ave/US-101 SB Ramps	TWSC	14.5	B	10.9	B
12	Grand Ave/US-101 NB Ramps	Signalized	18.6	B	8.8	A
13	Grand Ave/Mill St	TWSC	12.5	B	13.6	B
14	Grand Ave/Monterey St	Signalized	7.5	A	7.6	A
15	Santa Rosa St/Murray Ave	Signalized	23.6	C	50.6	D
16	Santa Rosa St/Olive St	Signalized	6.4	A	7.4	A
17	Santa Rosa St/Walnut St	Signalized	21.8	C	61.0	**E**
18	California Blvd/Hathway Ave	TWSC	28.2	D	20.7	C
19	California Blvd/Taft St	TWSC	24.6	C	61.6	**F**
20	California Blvd/US-101 NB Ramps	TWSC	21.4	C	29.3	D
21	Santa Rosa St/Mill St	Signalized	5.5	A	6.2	A
22	Santa Rosa St/Palm St	Signalized	5.5	A	3.8	A
23	Santa Rosa St/Monterey St	Signalized	5.9	A	6.7	A
24	Santa Rosa St/Higuera St	Signalized	4.8	A	5.6	A
25	Johnson Ave/Monterey Ave	Signalized	12.0	B	10.3	B
26	California Blvd/Monterey St	Signalized	23.6	C	31.2	C
27	Broad St/Palm St	AWSC	9.2	A	9.2	A
28	Chorro St/Higuera St	Signalized	11.7	B	11.8	B
29	Morro St/Higuera St	Signalized	17.7	B	19.0	B
30	Osos St/Higuera St	Signalized	11.4	B	12.3	B
31	Santa Rosa St/Marsh St	Signalized	13.8	B	13.0	B
32	Santa Rosa St/Pismo St	AWSC	10.8	B	12.0	B
33	Osos St/Buchon St	Signalized	14.3	B	8.7	A
34	Higuera St/Marsh St	Signalized*	16.1	B	16.9	B
35	Santa Barbara Ave/Upham St	Signalized	8.1	A	8.4	A
36	Broad St/South St/Santa Barbara Ave	Signalized	43.9	D	36.2	D
37	US-101 SB Ramps/Madonna Rd	Signalized	70.7	**E**	40.8	D
38	US-101 NB Ramps/Madonna Rd	Signalized	16.6	B	22.7	C
39	Los Osos Valley Rd/US-101 SB Ramps	Signalized	28.4	C	35.8	D
40	Broad St/Orcutt Rd	Signalized	46.0	D	37.8	D
41	Broad St/Rockview Pl	TWSC	27.3	D	79.7	**F**
42	Broad St/Capitolio Wy	TWSC	15.7	C	24.0	C
43	Hwy 1/Project Driveway	N/A	Does not exist in this scenario			

*Intersection LOS was calculated using HCM 2000 Method, because of non-standard lane groups or phasing that do not conform to the HCM 2010 computational engine.
TWSC Intersection LOS is based on maximum approach delay.

Exhibit 12: Existing Auto Level of Service (LOS) at Study Intersections

2.2.4 Existing Conditions at Study Freeway Segments

The existing LOS for the study freeway segments are shown in Exhibit 13. The segment between Marsh Street and Broad Street was analyzed using the HCM methodology for basic freeway segments. The other segments have too little distance between ramps to be considered basic freeway segments and were instead analyzed as weaving segments.

	ID	Freeway Segment	Analysis Type	# of Lanes	AM Peak Hour			PM Peak Hour		
					Volume	Density	LOS	Volume	Density	LOS
US-101 NB	1	Marsh St to Broad St	Basic	2	2,942	25.2	C	3,545	32.1	D
	2	Broad St to Osos St	Weaving	2+Aux	2,770	19.0	B	3,454	23.9	C
	3	Osos St to Toro St	Weaving	2+Aux	2,203	14.4	B	3,076	20.6	C
	4	Toro St to California Blvd	Weaving	2+Aux	1,987	13.1	B	2,742	17.7	B
	5	California Blvd to Grand Ave	Weaving	2+Aux	1,586	10.2	B	2,715	17.6	B
US-101 SB	6	Grand Ave to Taft St	Weaving	2+Aux	2,275	14.8	B	1,440	9.1	A
	7	Taft St to Montalban St	Weaving	2+Aux	2,108	13.2	B	2,107	14.7	B
	8	Lemon St to Olive St	Weaving	2+Aux	2,235	14.3	B	2,671	18.3	B
	9	Olive St to Broad St	Weaving	2+Aux	2,490	16.7	B	3,191	22.3	C
	10	Broad St to Marsh St	Basic	2	2,522	21.3	C	3,294	28.9	D

Exhibit 13: Existing LOS at Study Freeway Segments

All of the study freeway segments were found to meet the target LOS of D or better under existing conditions.

2.2.5 Existing Parking Restrictions

The City of San Luis Obispo operates a residential parking permit system that prohibits non-residents, such as Cal Poly students or campus visitors, from parking in the neighborhoods south and west of campus. These restrictions are shown in Exhibit 14.

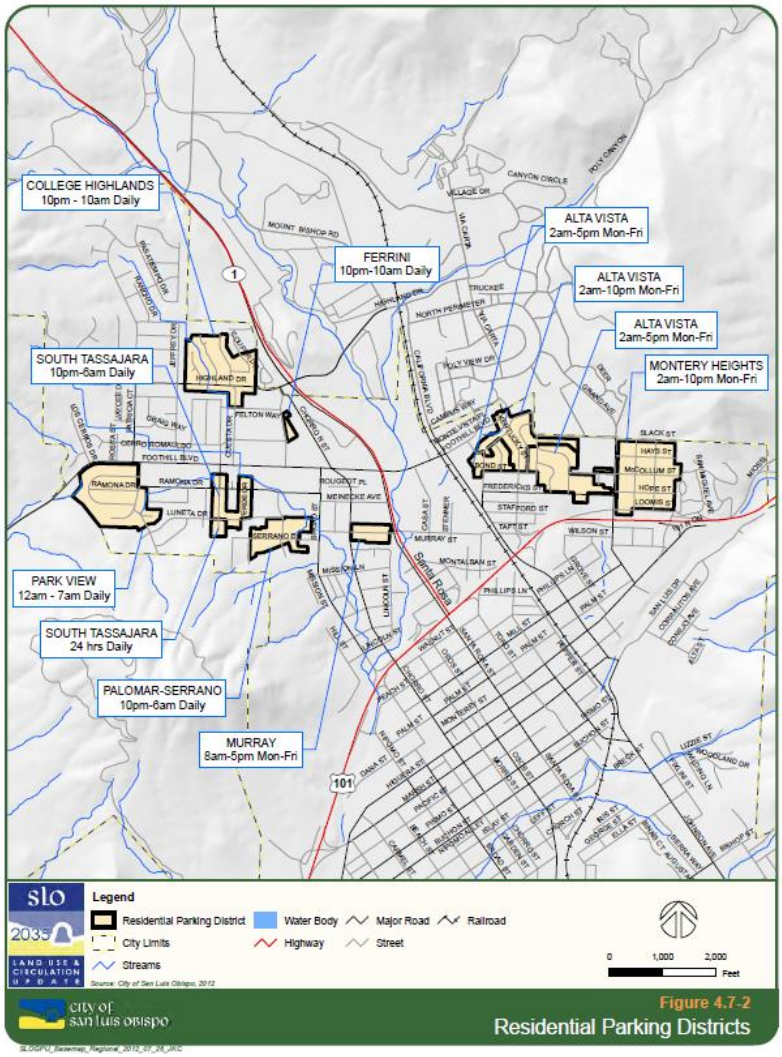


Exhibit 14: Residential Parking Districts

2.3 Existing Pedestrian Facilities

The major pedestrian facilities in the vicinity of Cal Poly are shown Exhibit 15. Note that city streets have sidewalks unless otherwise indicated.

Pedestrian counts were performed at the forty-two study intersections on the same day as the vehicular traffic counts. The results of these counts are shown in Exhibit 16.

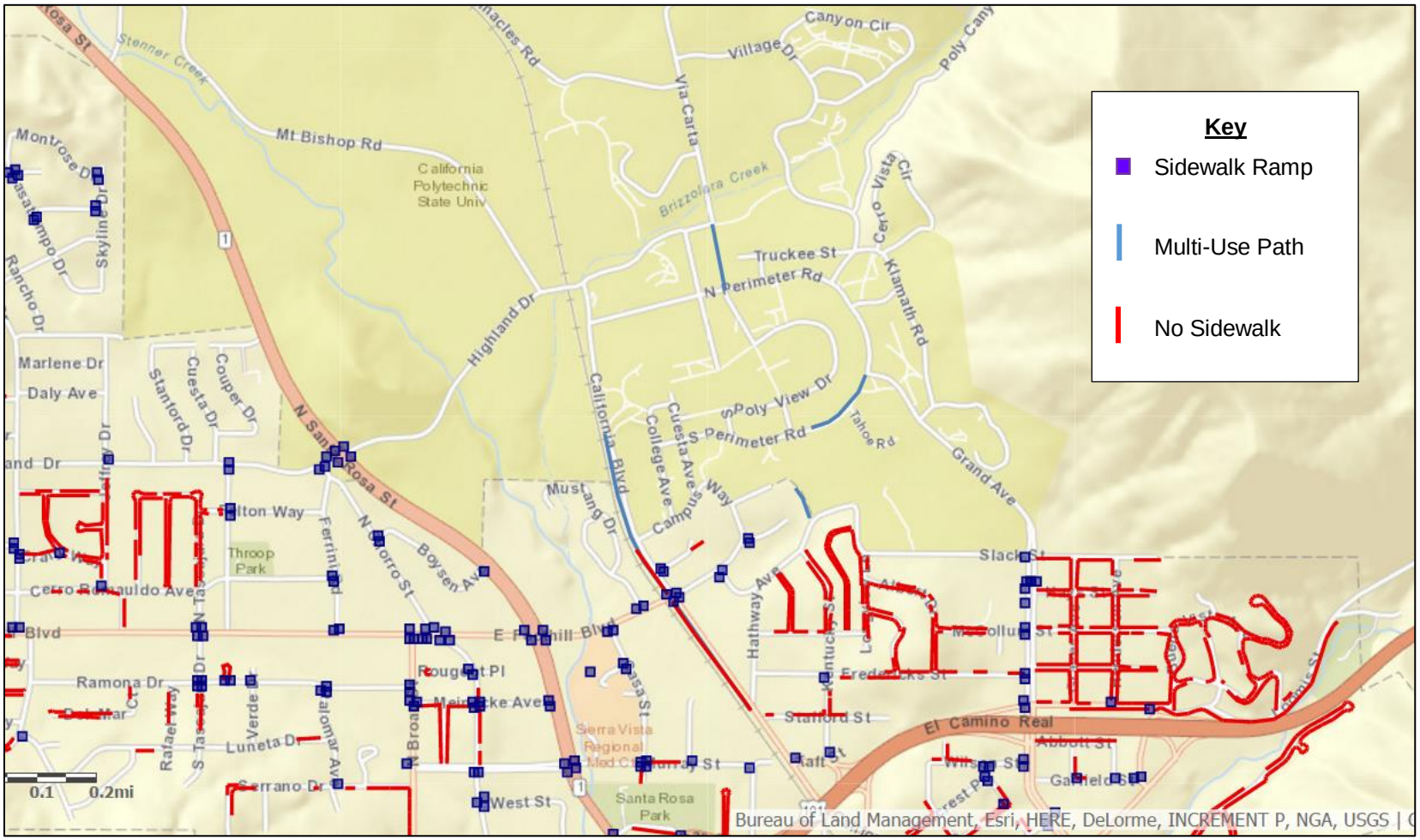


Exhibit 15: Existing Pedestrian Facilities in Vicinity of Cal Poly

Source: City of San Luis Obispo GIS maps, Sidewalk Ramps

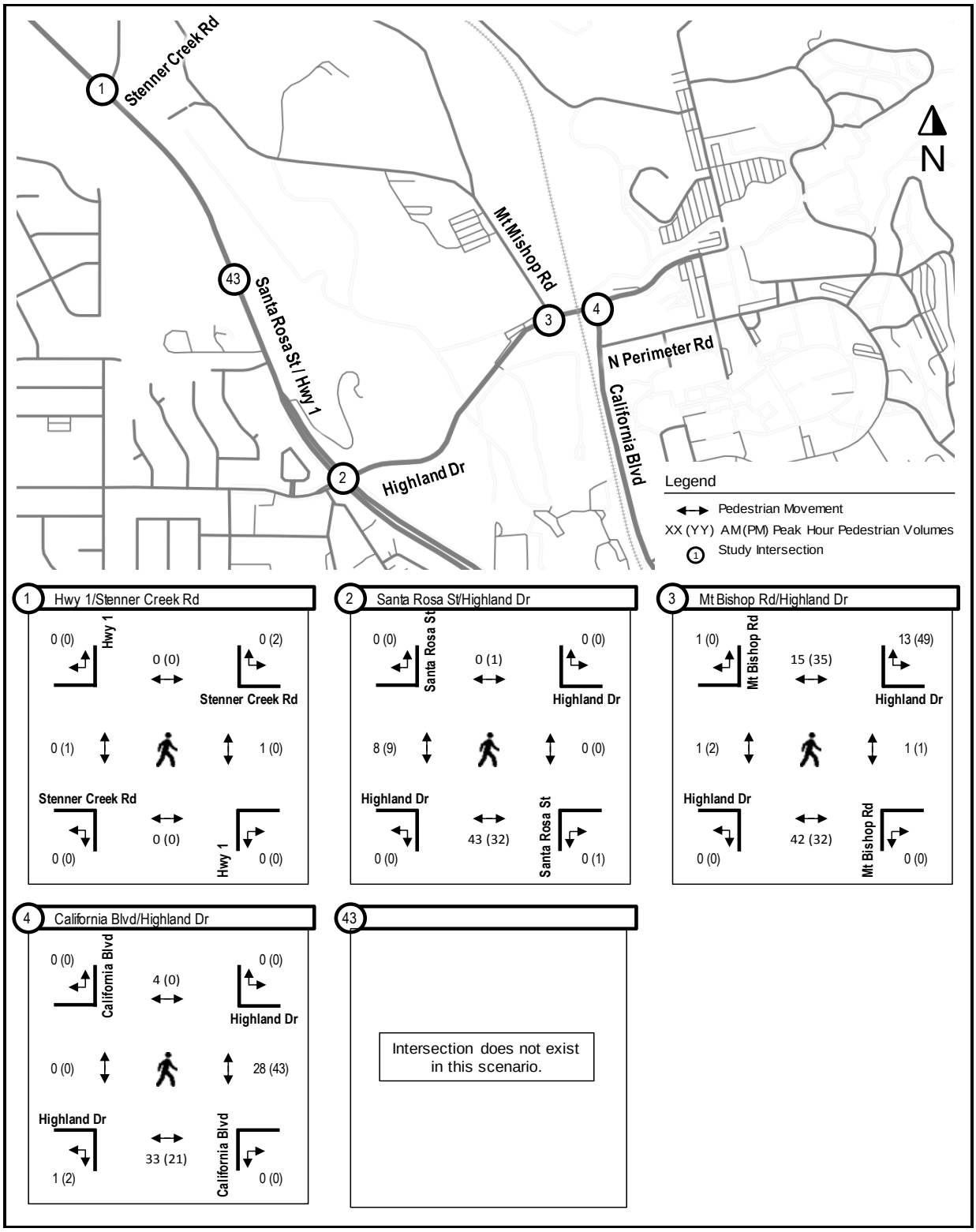


Exhibit 16: Existing Pedestrian Volumes

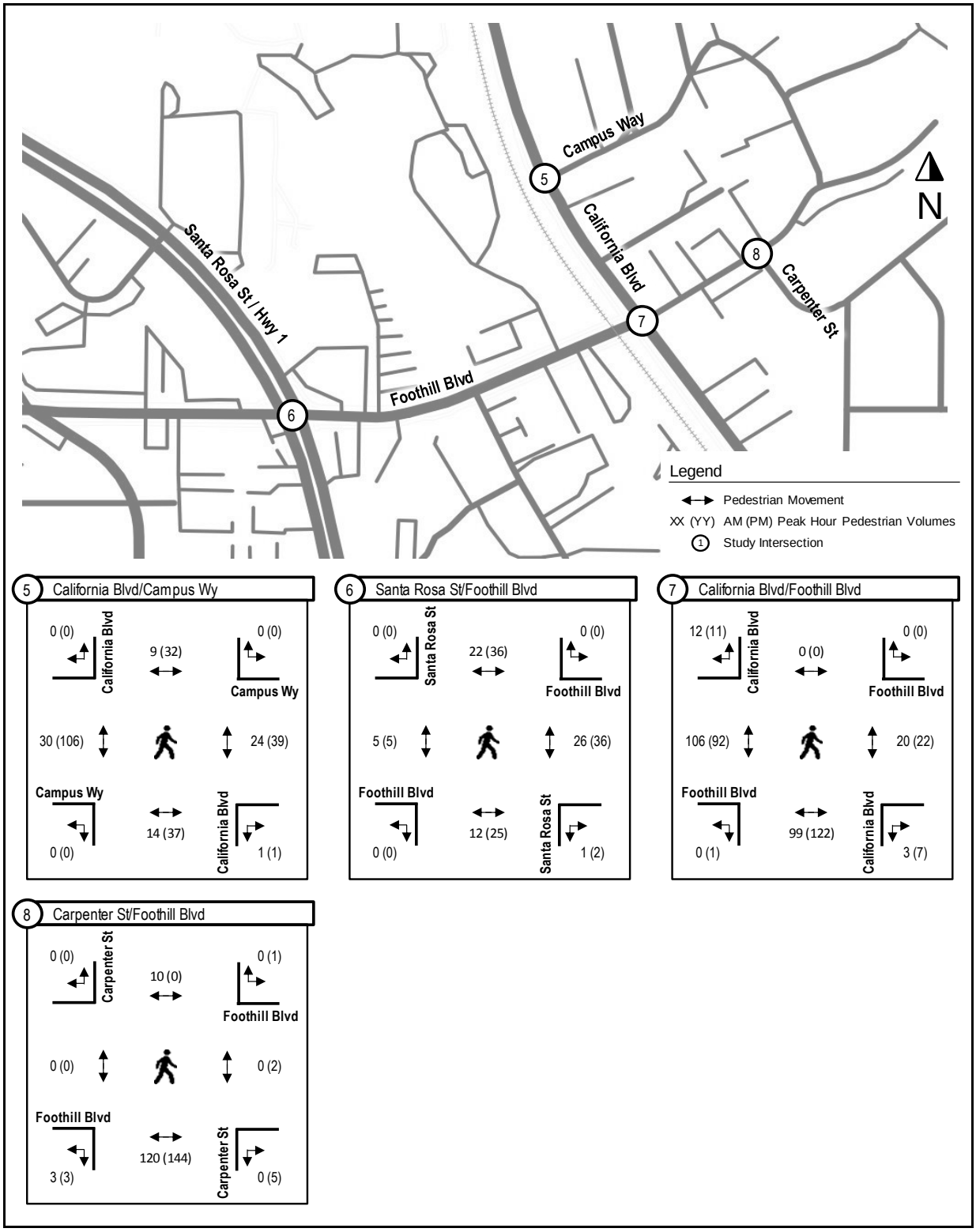


Exhibit 16: Existing Pedestrian Volumes (Map B)

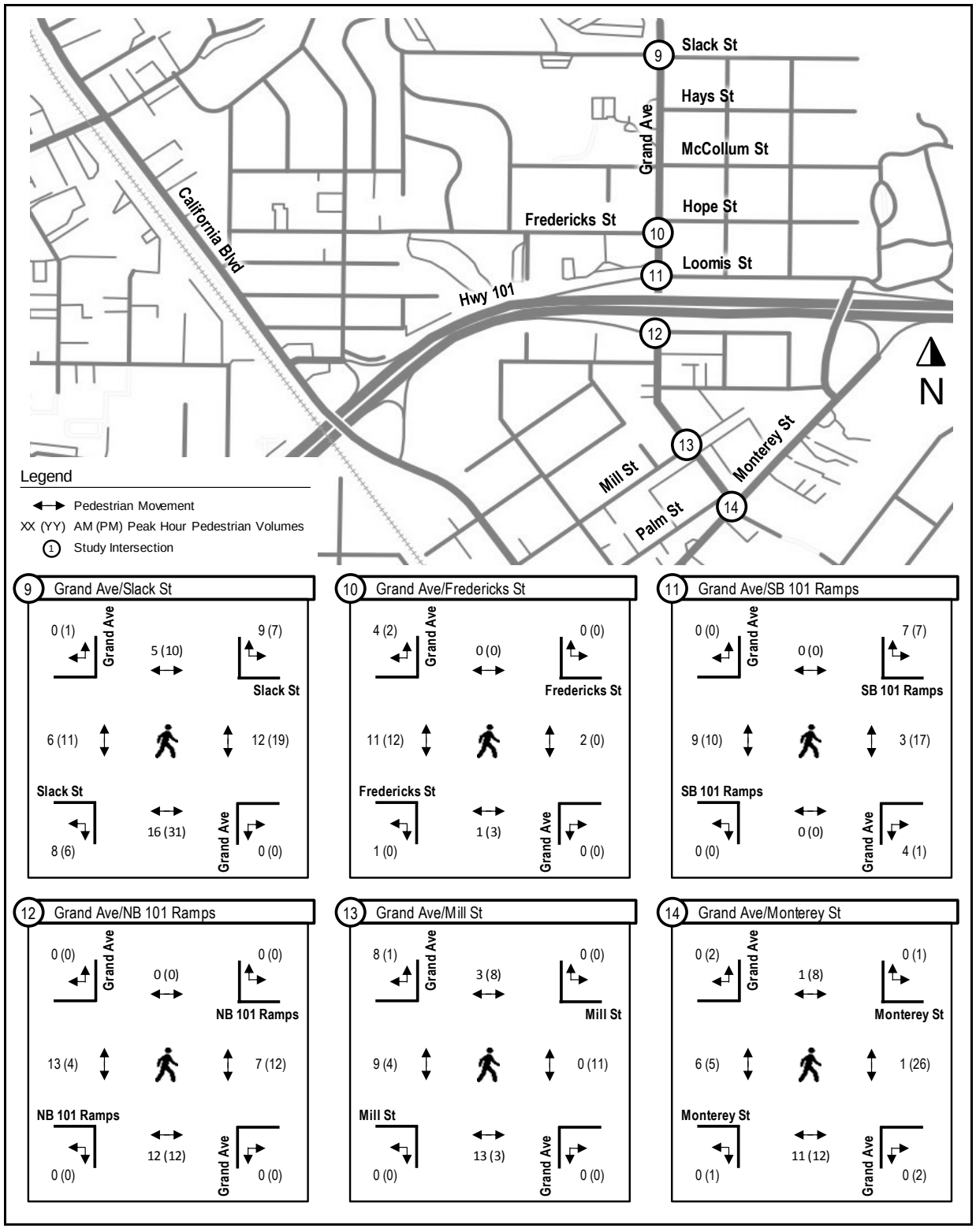


Exhibit 16: Existing Pedestrian Volumes (Map C)

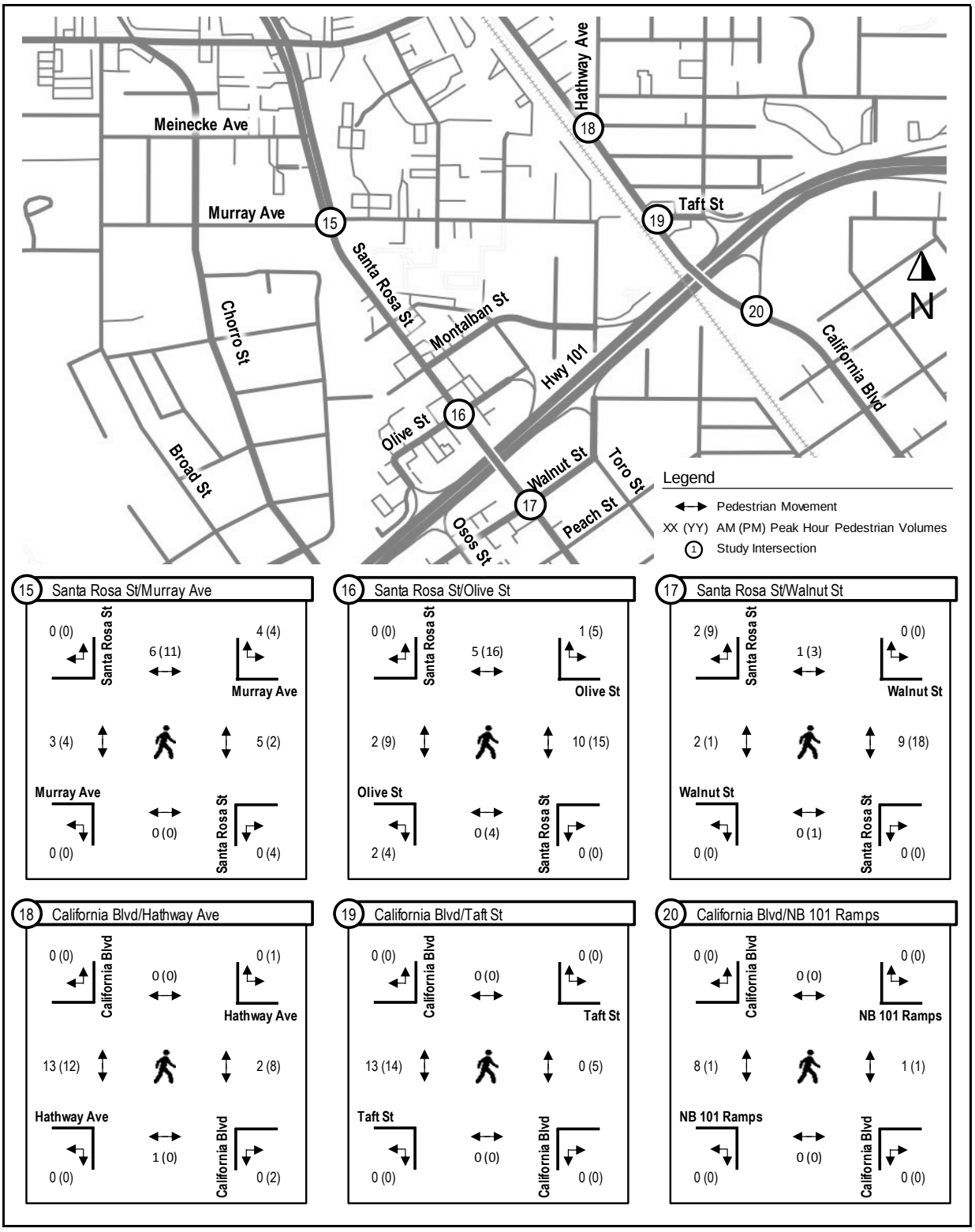


Exhibit 16: Existing Pedestrian Volumes (Map D)

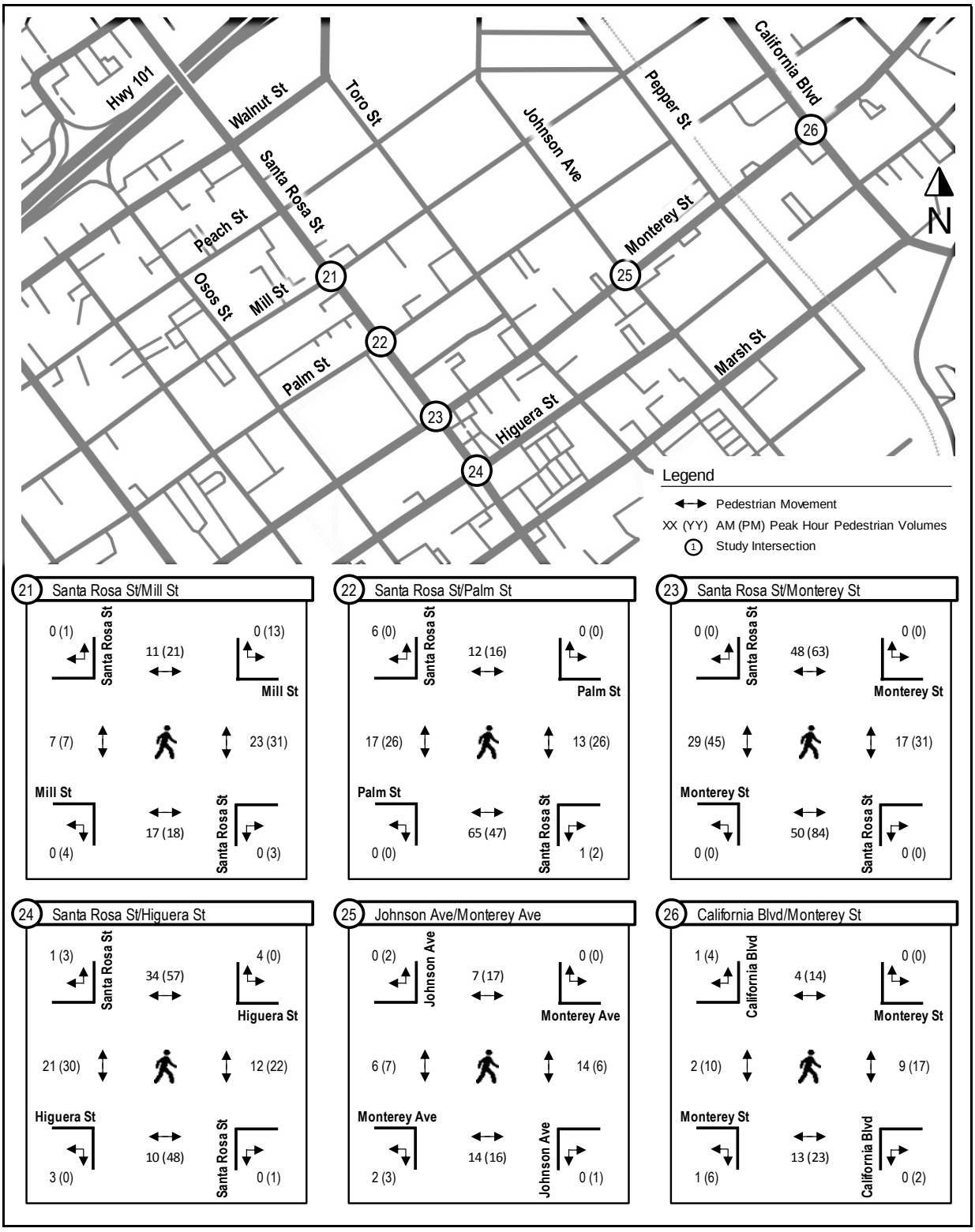


Exhibit 16: Existing Pedestrian Volumes (Map E)

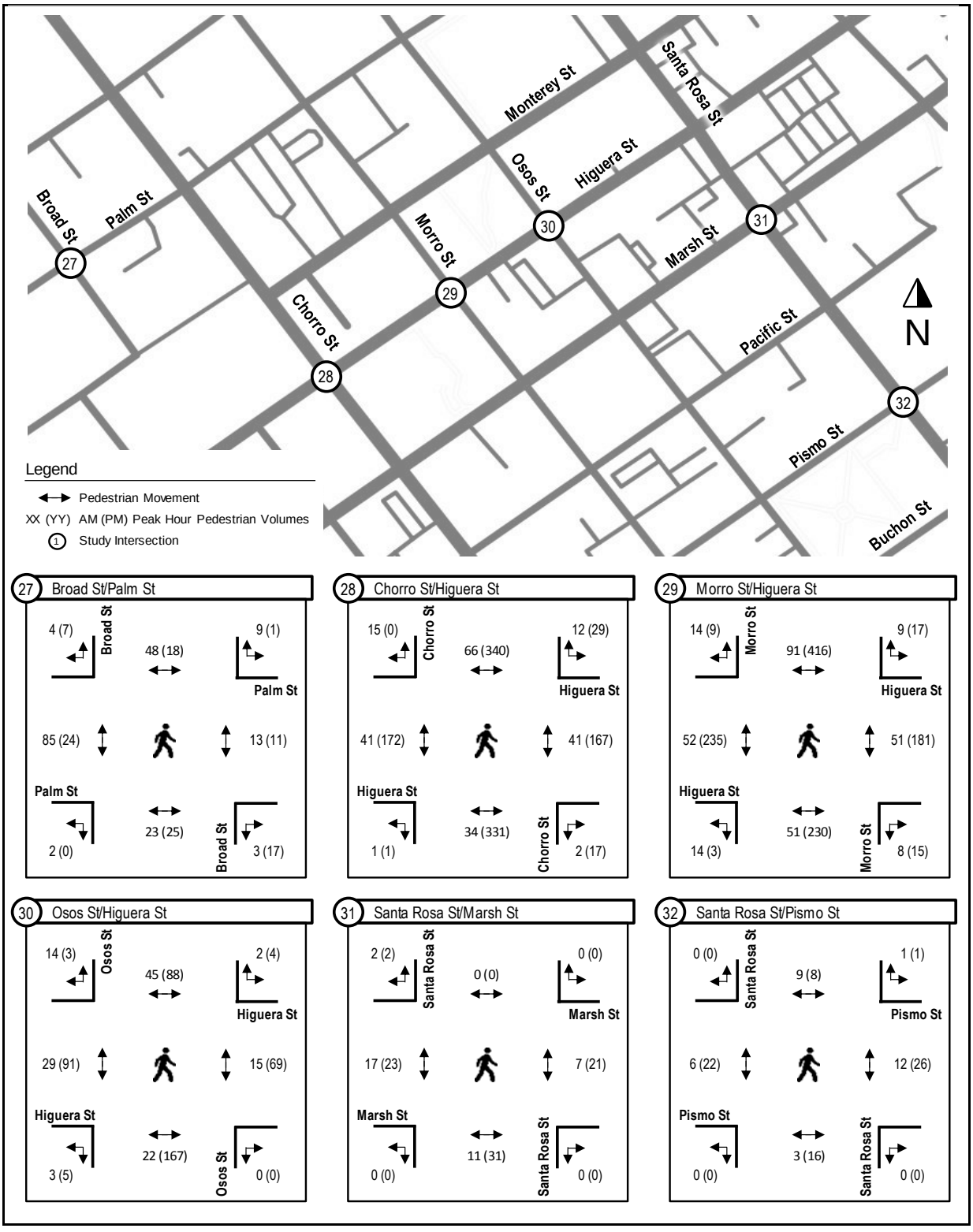


Exhibit 16: Existing Pedestrian Volumes (Map F)

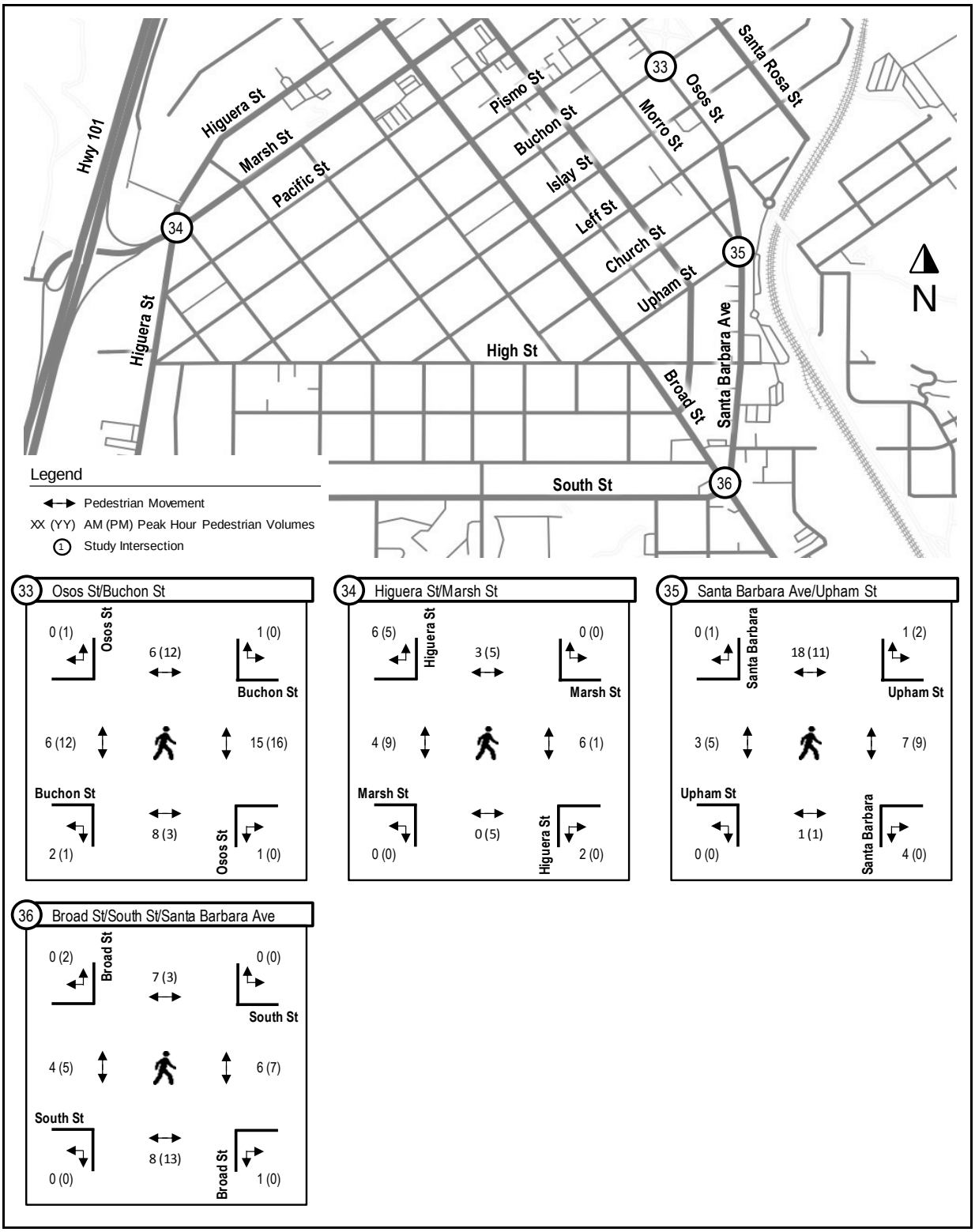


Exhibit 16: Existing Pedestrian Volumes (Map G)

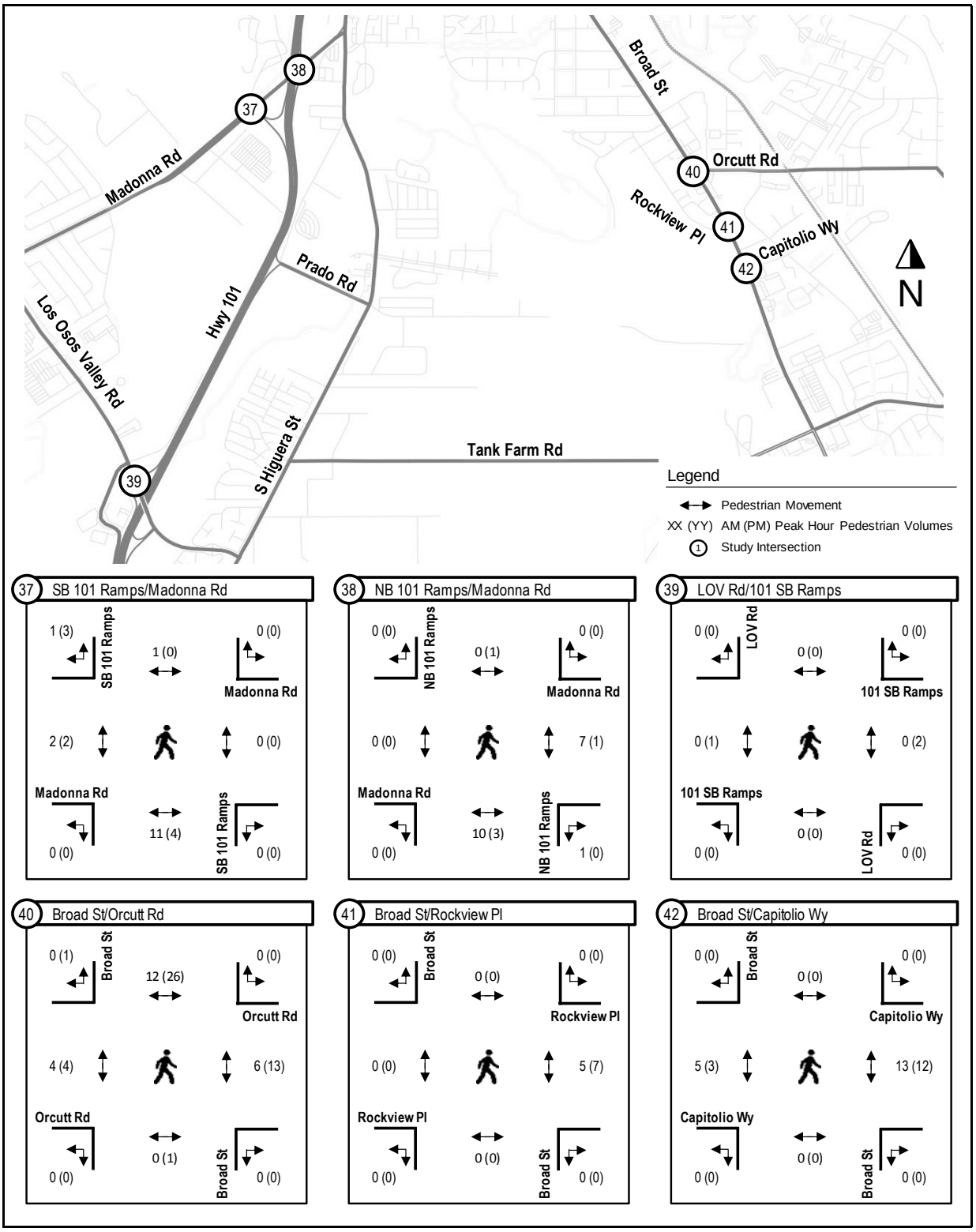


Exhibit 16: Existing Pedestrian Volumes (Map H)

Exhibit 17 shows the existing pedestrian LOS at study intersections. The scores reported in Exhibit 17 are the delays that a pedestrian would likely experience if they tried to cross the street at that point, assuming a conservative 10% yield rate[7].

The delays shown in Exhibit 17 may be considerably higher than pedestrians would actually encounter in the field. That is because a pedestrian walking down a street with a destination on the other side may have several crossing opportunities to choose from. In such a case, a pedestrian can, and often does, avoid delays by crossing at a signalized intersection.

[7] State law gives pedestrians in a crosswalk the right of way. However, compliance is spotty and many pedestrians prefer to wait for a sufficient gap in the traffic to enable them to cross the street without relying on drivers complying with the law.

ID	Intersection Name	Control Type	AM Peak Hour								PM Peak Hour							
			EB		WB		NB		SB		EB		WB		NB		SB	
			Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS
1	Hwy 1/Stenner Creek Rd	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		>180	F	>180	F
2	Santa Rosa St/Highland Dr	Signalized	2.38	B	2.5	B	3.01	C	2.98	C	2.36	B	2.53	B	3	C	2.97	C
3	Mt Bishop Rd/Highland Dr	TWSC	22	D	23.4	D	N/A		N/A		20.3	D	21.6	D	N/A		N/A	
6	Santa Rosa St/Foothill Blvd	Signalized	2.69	B	2.6	B	2.98	C	3	C	2.74	B	2.66	B	3	C	3.11	C
7	California Blvd/Foothill Blvd	Signalized	2.71	B	2.11	B	2.71	B	2.52	B	2.62	B	2.08	B	2.7	B	2.47	B
8	Carpenter St/Foothill Blvd	TWSC	2.1	A	2.1	A	N/A		N/A		3.2	A	3.2	A	N/A		N/A	
10	Grand Ave/Fredericks St	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		>180	F	>180	F
11	Grand Ave/Hwy 101 SB Ramps	TWSC	N/A		N/A		126.3	F	126.3	F	N/A		N/A		94.3	F	94.3	F
12	Grand Ave/Hwy 101 NB Ramps	Signalized	2.04	B	1.72	A	2.32	B	2.56	B	1.65	A	1.72	A	2.29	B	2.48	B
13	Grand Ave/Mill St	TWSC	N/A		N/A		76.2	F	10.3	C	N/A		N/A		74.6	F	10.4	C
14	Grand Ave/Monterey St	Signalized	2.6	B	2.34	B	1.74	A	2.32	B	2.52	B	2.38	B	1.74	A	2.47	B
15	Santa Rosa St/Murray Ave	Signalized	2.02	B	2.14	B	2.93	C	2.84	C	2.02	B	2.27	B	2.97	C	2.88	C
16	Santa Rosa St/Olive St	Signalized	2.27	B	1.82	A	2.88	C	2.93	C	2.28	B	1.9	A	2.99	C	3	C
17	Santa Rosa St/Walnut St	Signalized	1.95	A	2.22	B	2.64	B	2.82	C	1.98	A	2.17	B	2.7	B	2.85	C
18	California Blvd/Hathway Ave	TWSC	N/A		N/A		15.6	C	49.8	F	N/A		N/A		16.9	C	30.4	E
19	California Blvd/Taft St	TWSC	N/A		N/A		26.8	D	>180	F	N/A		N/A		23.4	D	>180	F
20	California Blvd/Hwy 101 NB Ramps	TWSC	N/A		N/A		67.1	F	67.1	F	N/A		N/A		102.4	F	102.4	F
21	Santa Rosa St/Mill St	Signalized	2	A	1.91	A	2.59	B	2.68	B	2.08	B	1.94	A	2.62	B	2.67	B
22	Santa Rosa St/Palm St	Signalized	2.28	B	1.98	A	2.55	B	2.61	B	2.31	B	2	A	2.6	B	2.59	B
23	Santa Rosa St/Monterey St	Signalized	2.21	B	2.52	B	2.56	B	2.7	B	2.25	B	2.57	B	2.6	B	2.75	B
24	Santa Rosa St/Higuera St	Signalized	2.18	B	2.09	B	2.41	B	2.46	B	2.21	B	2.14	B	2.47	B	2.6	B
25	Johnson Ave/Monterey Ave	Signalized	2.36	B	2.5	B	2.52	B	2.13	B	2.37	B	2.65	B	2.39	B	2.09	B
26	California Blvd/Monterey St	Signalized	2.38	B	2.41	B	2.28	B	2.17	B	2.39	B	2.43	B	2.32	B	2.24	B
28	Chorro St/Higuera St	Signalized	2.16	B	2.16	B	2.06	B	2.09	B	2.3	B	2.37	B	2.15	B	2.1	B
29	Morro St/Higuera St	Signalized	2.13	B	2.18	B	1.81	A	1.97	A	2.26	B	2.33	B	1.88	A	1.99	A
30	Osos St/Higuera St	Signalized	2.13	B	2.25	B	1.92	A	1.8	A	2.25	B	2.32	B	2.05	B	1.87	A
31	Santa Rosa St/Marsh St	Signalized	2.59	B	2.12	B	1.97	A	2.56	B	2.84	C	2.07	B	2.01	B	2.55	B
33	Osos St/Buchon St	Signalized	1.74	A	2.06	B	2.25	B	2.16	B	1.77	A	2.08	B	2.29	B	2.26	B
34	Higuera St/Marsh St	Signalized	2.52	B	2.19	B	2.29	B	2.08	B	2.54	B	2.17	B	2.33	B	2.38	B
35	Santa Barbara Ave/Upham St	Signalized	1.78	A	2	A	2.36	B	2.36	B	1.76	A	2.04	B	2.4	B	2.37	B
36	Broad St/South St/Santa Barbara Ave	Signalized	2.89	C	2.34	B	3.23	C	2.54	B	2.84	C	2.42	B	3.31	C	2.59	B
37	Hwy 101 SB Ramps/Madonna Rd	Signalized	3.02	C	3.06	C	2.52	B	2.16	B	3.19	C	3.09	C	2.52	B	2.18	B
38	Hwy 101 NB Ramps/Madonna Rd	Signalized	3.02	C	2.87	C	1.93	A	2.08	B	3.03	C	2.91	C	1.99	A	2.11	B
39	Los Osos Valley Rd/Hwy 101 SB Ramps	Signalized	1.83	A	2.15	B	2.77	C	2.8	C	2.14	B	2.17	B	2.87	C	3.04	C
40	Broad St/Orcutt Rd	Signalized	1.98	A	2.91	C	3.12	C	2.96	C	2.01	B	2.72	B	3.17	C	3.05	C
41	Broad St/Rockview Pl	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		>180	F	>180	F
42	Broad St/Capitolio Wy	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		>180	F	>180	F
43	Hwy 1/Project Driveway	N/A	Intersection Does Not Exist in this Scenario								Intersection Does Not Exist in this Scenario							

Note: The LOS for each direction is for pedestrian crossings in front of vehicles traveling in that direction. So "EB" is for pedestrians walking north or south across the eastbound approach of the inters

Exhibit 17: Existing Pedestrian Level of Service (LOS) at Study Intersections

Note: There is no methodology for calculating pedestrian LOS at all-way stop-controlled intersections or on the stop-controlled approaches of side-street stop-controlled intersections. The assumption is that the pedestrian would stop and then proceed without encountering a delay. Study intersections that are all-way stops are therefore not shown in Exhibit 17.

2.4 Existing and Planned Bicycle Facilities

The existing and planned bicycle facilities in the vicinity of Cal Poly are shown in Exhibit 18. The campus is connected to the city bike facility network via a class 1 separated bike path along California Boulevard and by class 2 bicycle paths along Grand Avenue and Highland Boulevard. Bicycles can also enter the campus from the neighborhood south of campus using a bike path along Via Carta, which is closed to motorized traffic.

Bicycle counts were performed at the forty-two study intersections on the same day as the vehicular traffic counts. The results of these counts are shown in Exhibit 19.

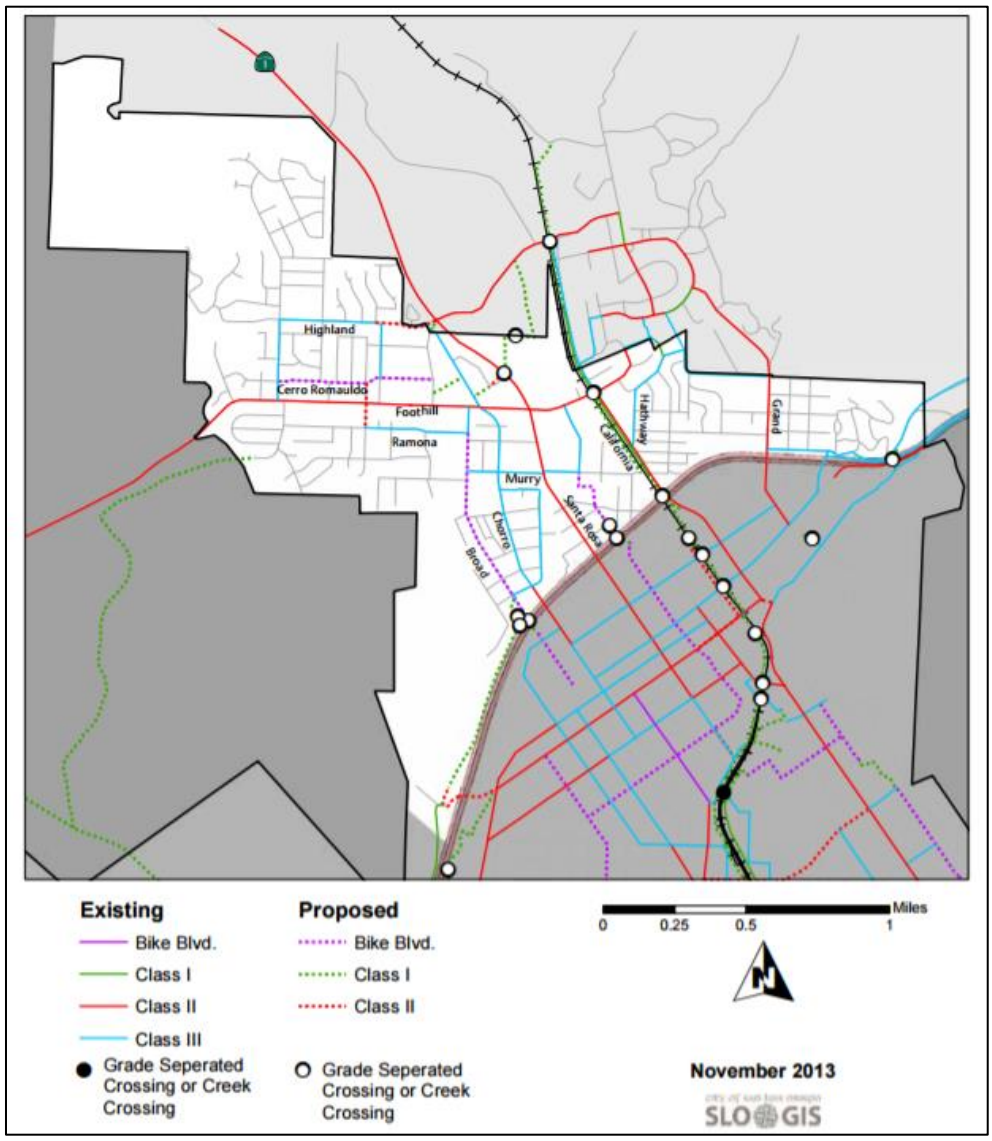


Exhibit 18: Existing and Planned Bicycle Facilities in and near Cal Poly
Source: City of San Luis Obispo Bicycle Transportation Plan, November 2013

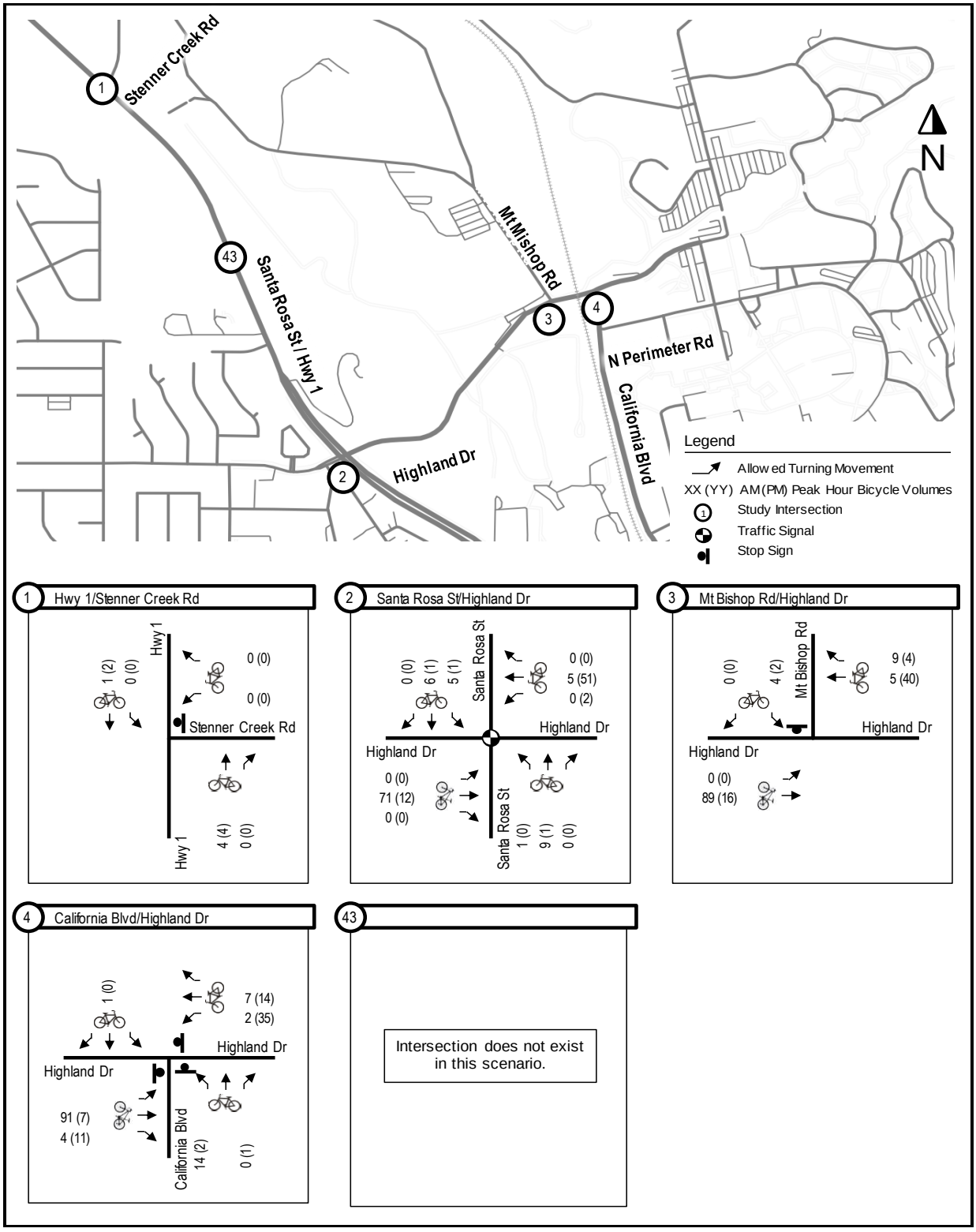


Exhibit 19: Existing Bicycle Volumes

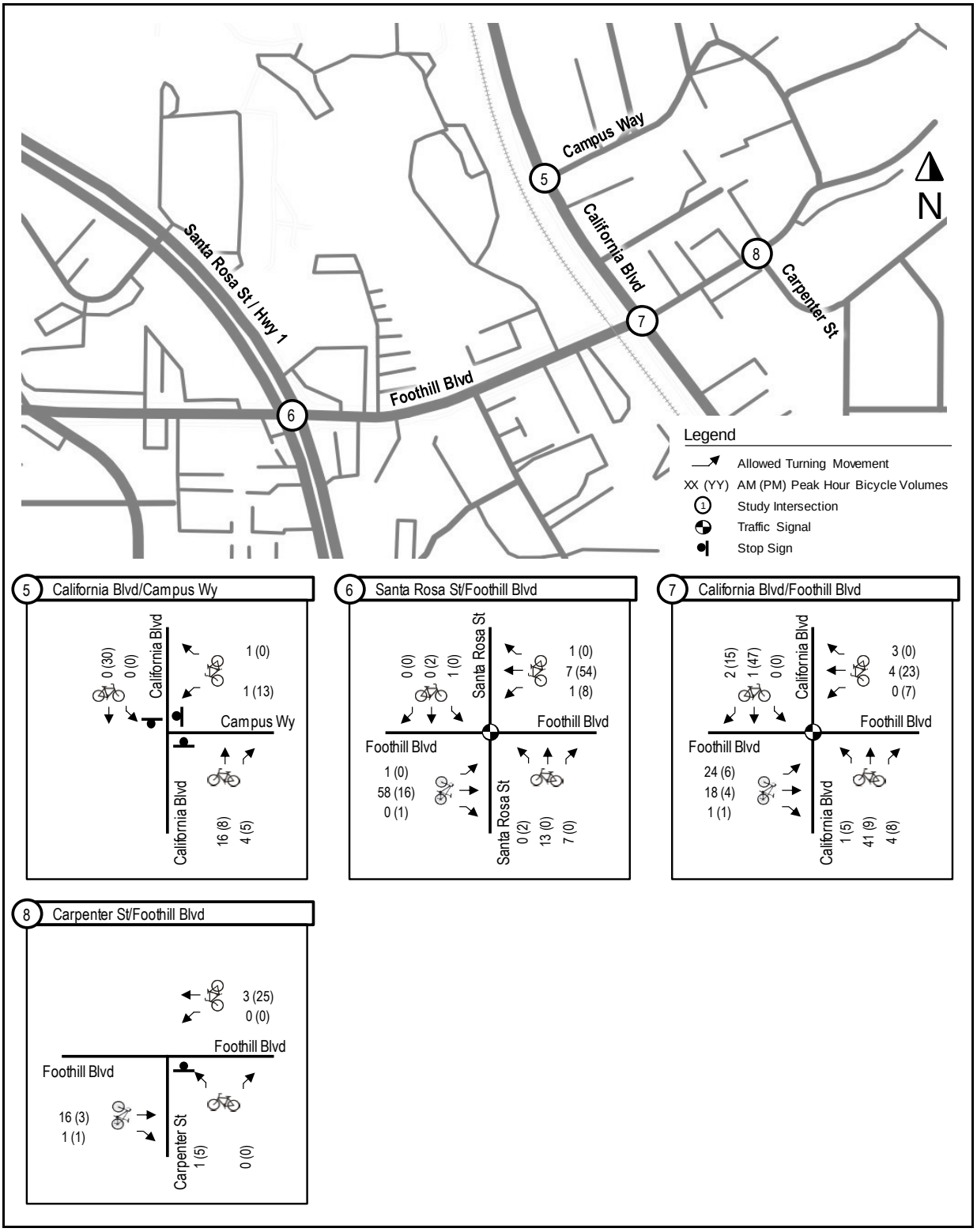


Exhibit 19: Existing Bicycle Volumes (Map B)

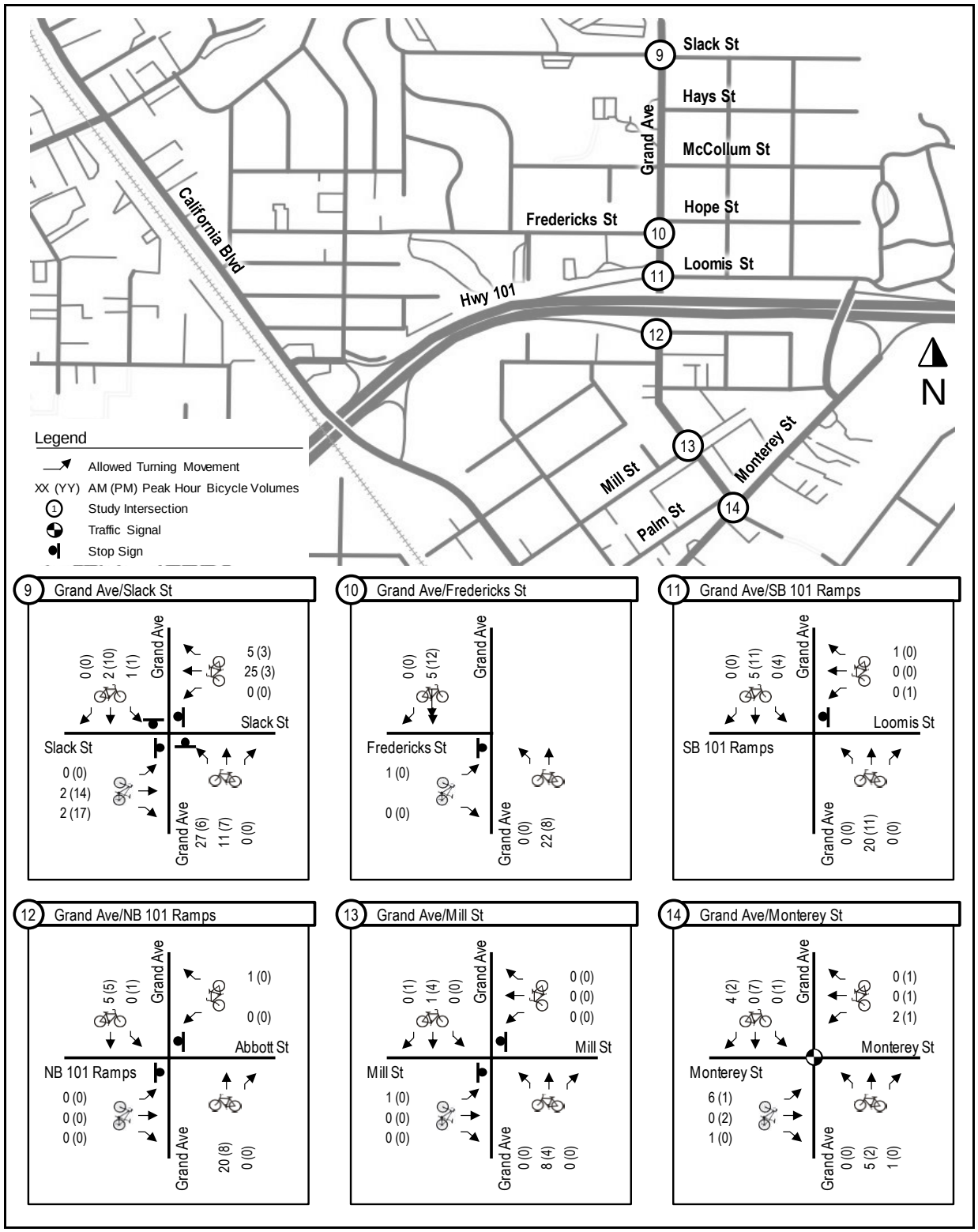


Exhibit 19: Existing Bicycle Volumes (Map C)

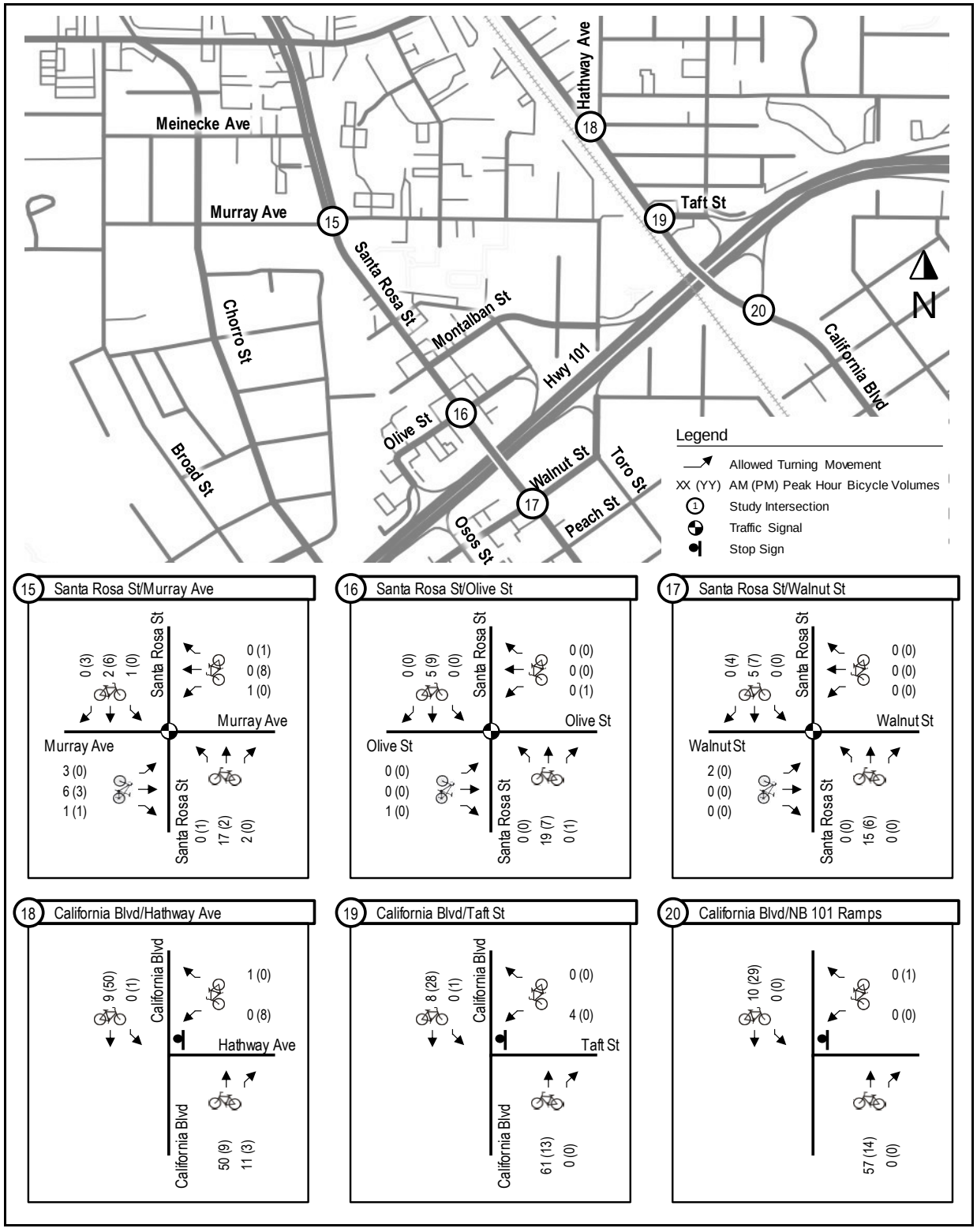


Exhibit 19: Existing Bicycle Volumes (Map D)

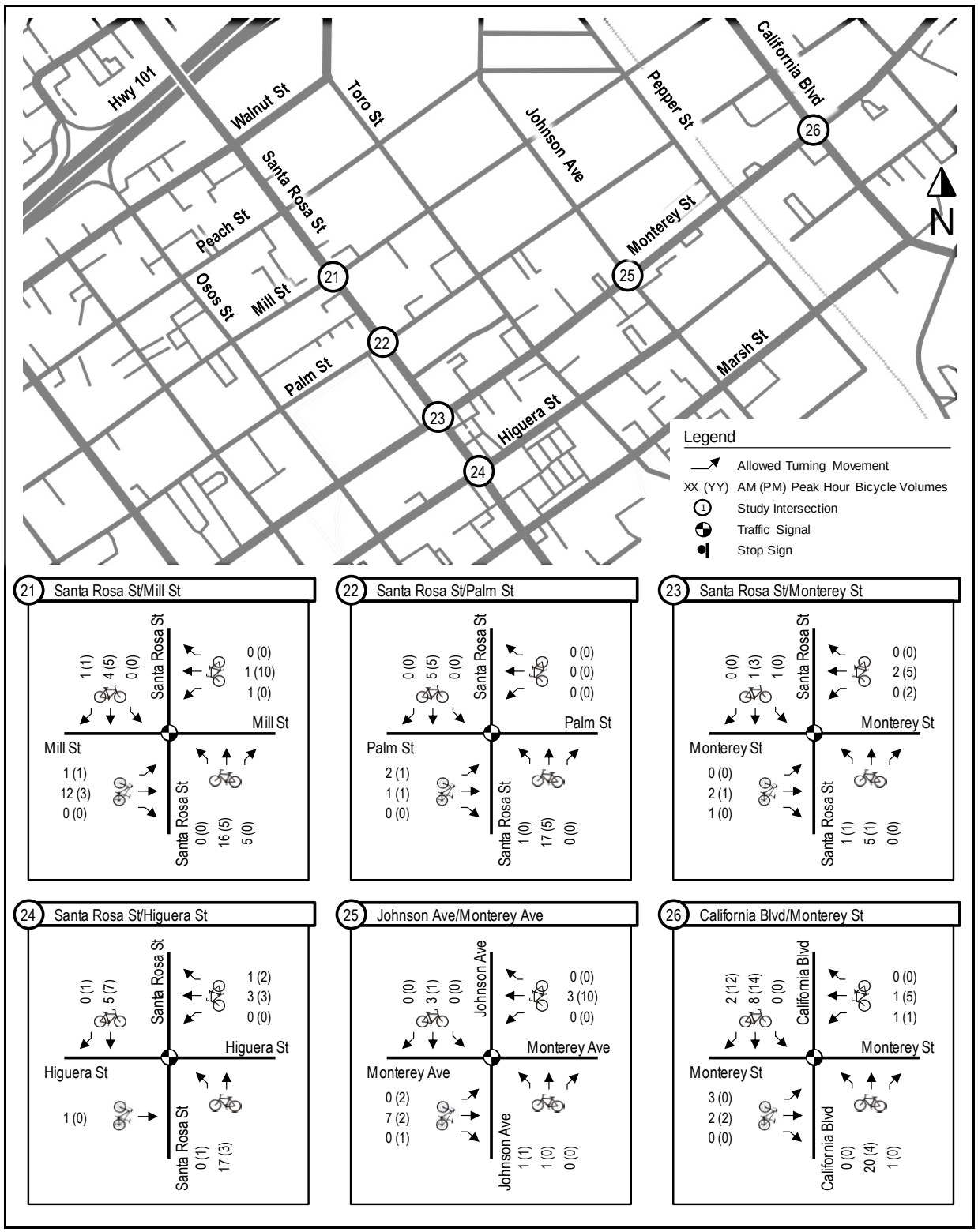


Exhibit 19: Existing Bicycle Volumes (Map E)

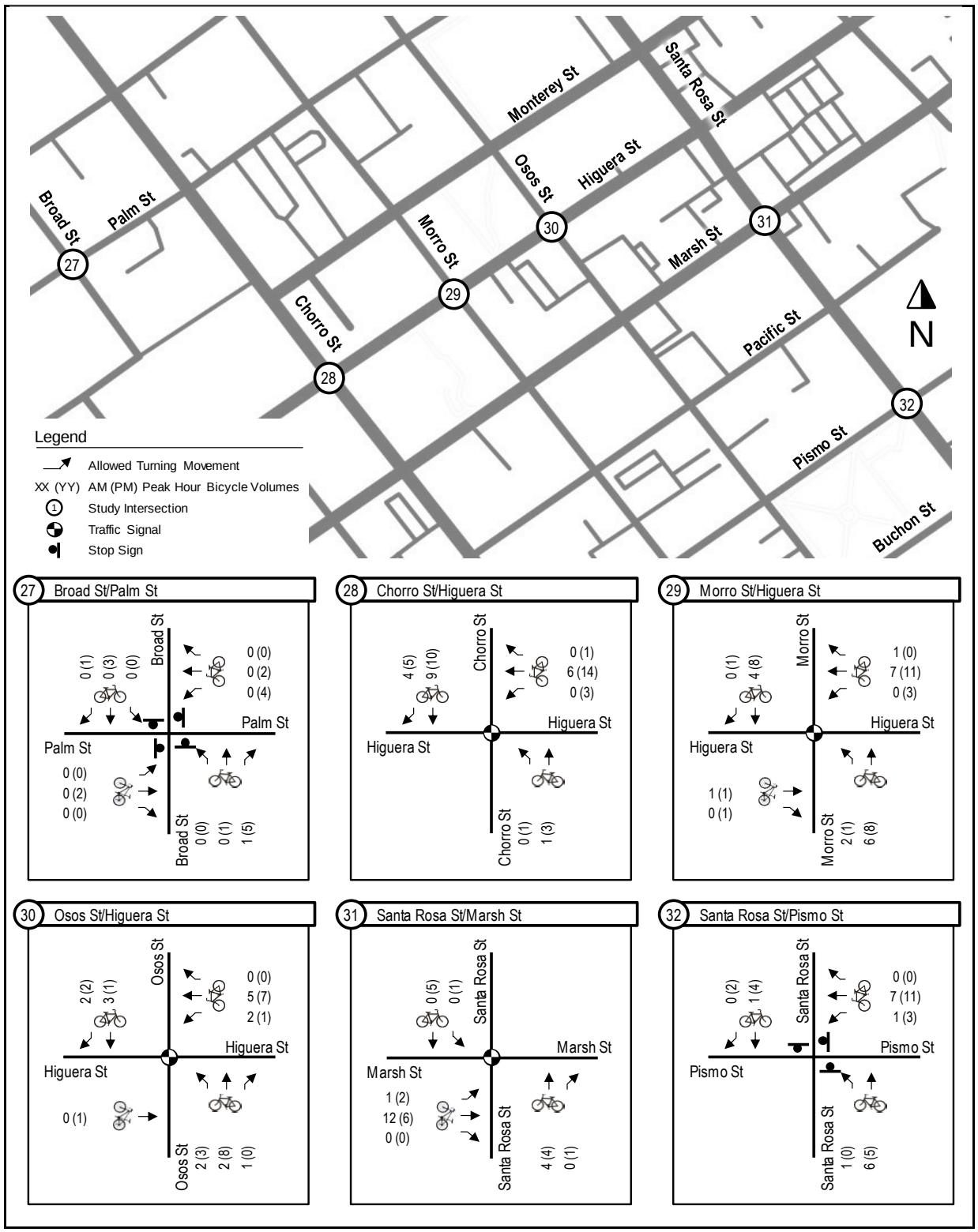


Exhibit 19: Existing Bicycle Volumes (Map F)

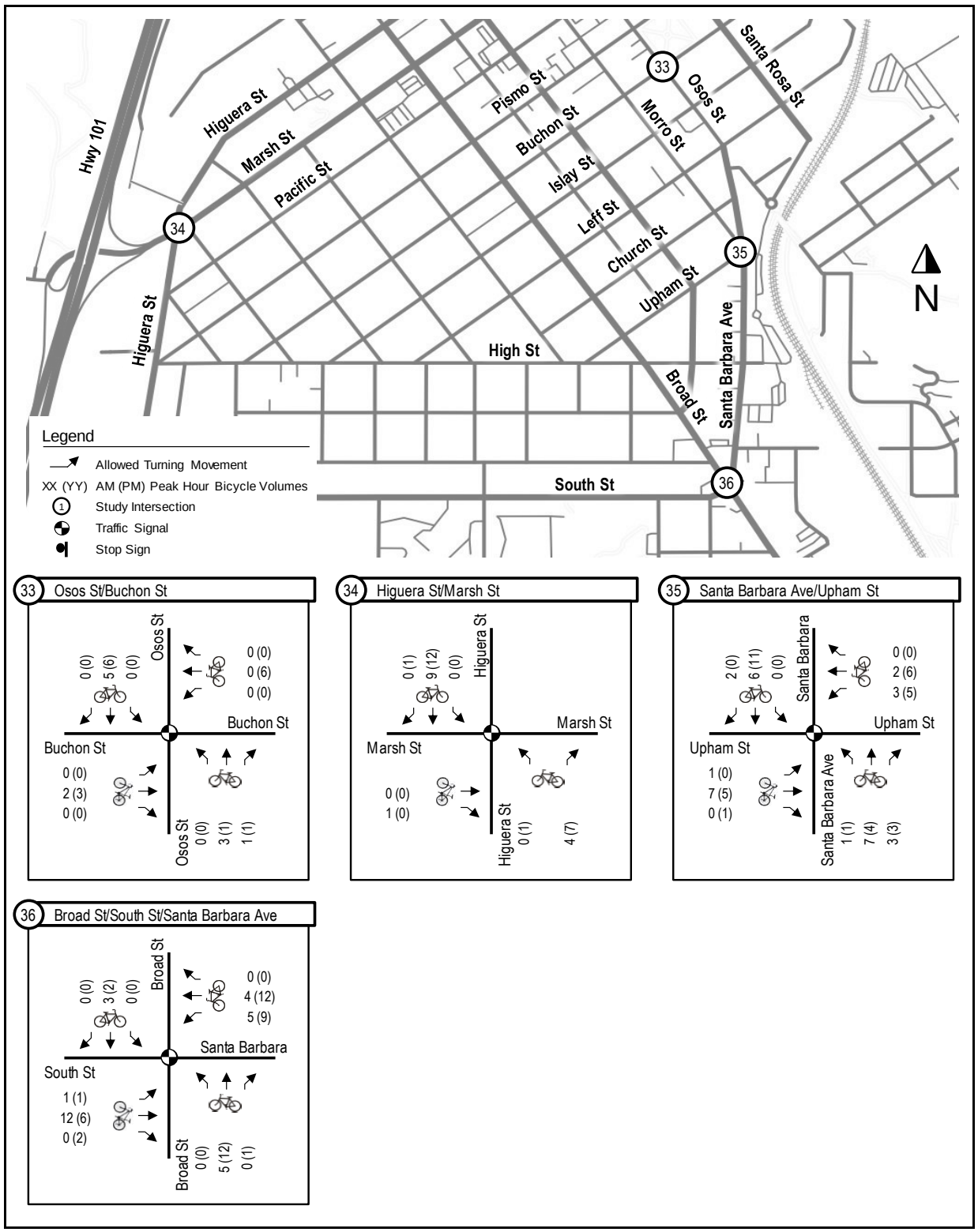


Exhibit 19: Existing Bicycle Volumes (Map G)

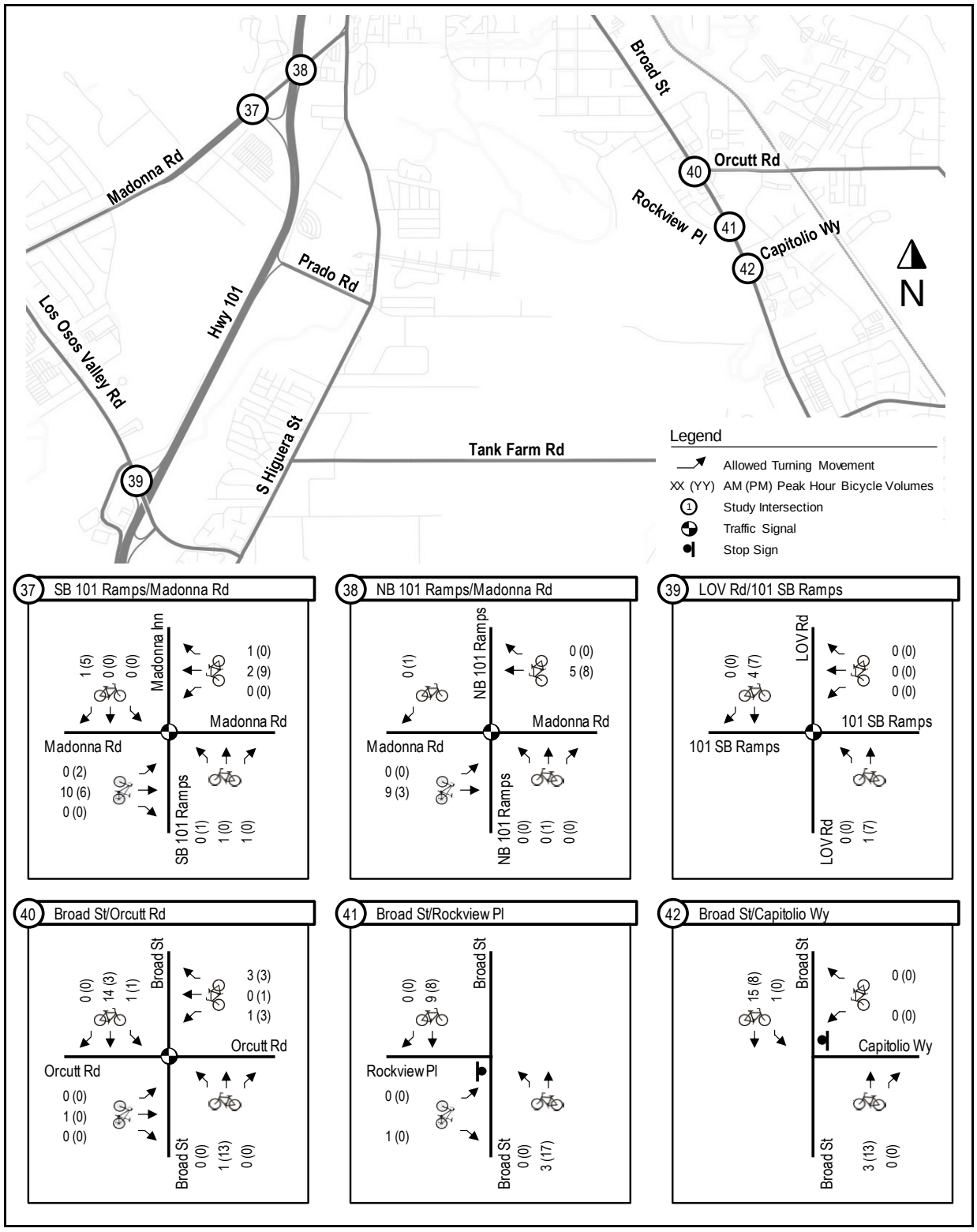


Exhibit 19: Existing Bicycle Volumes (Map H)

The Existing bicycle LOS is shown in Exhibit 20.

2.5 Existing and Planned Transit Facilities and Services

Cal Poly operates a transit center in front of the Kennedy Library. Public transit in the City of San Luis Obispo is primarily the responsibility of the San Luis Obispo Transit (SLO Transit). SLO Transit operates four fixed-route bus services in the vicinity of the campus (see Exhibit 21). The fixed-route public transit services currently serving the Cal Poly campus are[8]:

- Route 4 runs in a loop connecting the campus with residential areas along Foothill and Los Osos Valley Road and the shopping areas on Madonna Street and downtown San Luis Obispo. It enters the campus via Foothill and leaves via Grand Avenue. It runs every 30 minutes Monday-through Friday from 6:40 AM to 6:25 PM, then hourly until 10:44 PM. It also offers weekend service hourly from 8:10 AM to 6:05 PM.
- Route 6a runs in a loop between the campus and the residential neighborhoods west of Hwy 1. It enters the campus via Foothill Boulevard and California Avenue and exits via Highland Drive. It runs every 30 minutes Monday-through Friday from 7:00 AM to 8:00 PM, then hourly until 10:30 PM. It also offers Saturday service hourly from 9:10 AM to 5:10 PM.
- Route 6b runs in a loop between the campus and downtown San Luis Obispo. It enters the campus via California Boulevard and exits via Grand Avenue. It runs every 30 minutes Monday-through Friday from 7:00 AM to 8:00 PM, then hourly until 10:30 PM. It also offers Saturday service hourly from 8:45 AM to 6:00 PM.
- Kennedy Library Tripper connects the campus to Downtown and the Ramona Drive neighborhood. It is in service weekday mornings Monday – Friday and operates hourly from 7:25 AM until 8:25 AM.

Cal Poly provides an annual subsidy to SLO Transit so that Cal Poly students, faculty, and staff ride free on SLO Transit buses. Cal Poly riders took nearly 600,000 SLO transit trips in 2015 and constituted 58% of total ridership on SLO transit[9].

In September 2016 the City adopted a Short-Range Master Plan that will restructure the routes to enhance service quality in key corridors, provide new connections, and improve service efficiency. Overall, the route network will be reconfigured into a series of four bi-directional routes with A/B designations used to differentiate the direction of travel. The “A” routes will operate largely clockwise and the “B” routes largely counterclockwise. The new routes are shown in Exhibit 22. The 2035 scenarios in this study assume that the proposed changes are in place in 2035.

[8] Source: 2016-17 SLO Transit Map and Schedule. SLO Transit website, accessed December 30, 2016.

[9] Source: *San Luis Obispo Transit Short Range Transit Plan*, LSC Transportation Consultants, August 2016

ID	Intersection Name	Control Type	AM Peak Hour								PM Peak Hour							
			EB		WB		NB		SB		EB		WB		NB		SB	
			Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS
2	Santa Rosa St/Highland Dr	Signalized	3.34	C	1.84	A	4.16	D	3.44	C	3.12	C	2.59	B	3.75	D	3.62	D
6	Santa Rosa St/Foothill Blvd	Signalized	3.63	D	2.34	B	3.78	D	2.50	B	3.05	C	2.43	B	3.80	D	2.77	C
7	California Blvd/Foothill Blvd	Signalized	4.27	E	2.89	C	3.06	C	2.77	C	3.84	D	3.04	C	2.74	B	3.33	C
12	Grand Ave/Hwy 101 NB Ramps	Signalized	3.53	D	2.54	B	1.00	A	0.61	A	2.87	C	2.54	B	0.84	A	0.73	A
14	Grand Ave/Monterey St	Signalized	3.28	C	2.31	B	2.34	B	2.45	B	3.57	D	1.90	A	2.33	B	2.76	C
15	Santa Rosa St/Murray Ave	Signalized	2.77	C	2.86	C	2.17	B	1.95	A	2.76	C	3.10	C	2.13	B	2.08	B
16	Santa Rosa St/Olive St	Signalized	2.90	C	2.79	C	2.26	B	2.06	B	2.67	B	2.77	C	2.53	B	2.28	B
17	Santa Rosa St/Walnut St	Signalized	2.78	C	3.73	D	1.69	A	1.81	A	2.71	B	3.51	D	2.19	B	1.64	A
21	Santa Rosa St/Mill St	Signalized	2.60	B	2.81	C	1.60	A	1.96	A	2.75	C	2.95	C	1.91	A	1.72	A
22	Santa Rosa St/Palm St	Signalized	2.82	C	2.64	B	1.57	A	2.06	B	2.86	C	2.66	B	1.86	A	1.85	A
23	Santa Rosa St/Monterey St	Signalized	2.70	B	3.13	C	1.72	A	2.05	B	2.73	B	3.23	C	1.98	A	1.84	A
24	Santa Rosa St/Higuera St	Signalized	N/A		2.62	B	1.52	A	2.45	B	N/A		2.62	B	1.80	A	2.32	B
25	Johnson Ave/Monterey Ave	Signalized	2.63	B	3.11	C	2.42	B	2.72	B	2.75	C	2.97	C	2.09	B	2.62	B
26	California Blvd/Monterey St	Signalized	2.96	C	3.15	C	1.91	A	1.52	A	3.03	C	3.07	C	1.96	A	1.73	A
28	Chorro St/Higuera St	Signalized	N/A		2.52	B	2.40	B	2.60	B	N/A		2.67	B	2.57	B	2.68	B
29	Morro St/Higuera St	Signalized	N/A		2.35	B	2.27	B	2.25	B	N/A		2.48	B	2.35	B	2.32	B
30	Osos St/Higuera St	Signalized	N/A		2.18	B	2.37	B	2.33	B	N/A		2.26	B	2.65	B	2.40	B
31	Santa Rosa St/Marsh St	Signalized	1.51	A	N/A		1.45	A	1.98	A	1.48	A	0.00	0.00	1.69	A	1.82	A
33	Osos St/Buchon St	Signalized	1.84	A	2.11	B	2.53	B	2.10	B	1.86	A	2.01	B	2.58	B	2.25	B
34	Higuera St/Marsh St	Signalized	2.94	C	N/A		N/A		2.28	B	2.74	B	N/A		N/A		3.83	D
35	Santa Barbara Ave/Upham St	Signalized	1.40	A	1.16	A	2.16	B	3.04	C	1.37	A	1.22	A	2.27	B	3.02	C
36	Broad St/South St/Santa Barbara Ave	Signalized	4.06	D	3.57	D	1.94	A	1.98	A	3.97	D	3.83	D	2.48	B	1.99	A
37	Hwy 101 SB Ramps/Madonna Rd	Signalized	1.91	A	1.57	A	4.66	E	2.95	C	1.97	A	1.86	A	4.61	E	3.00	C
38	Hwy 101 NB Ramps/Madonna Rd	Signalized	2.68	B	1.57	A	3.50	D	N/A		2.20	B	2.03	B	2.30	B	N/A	
39	Los Osos Valley Rd/Hwy 101 SB Ramps	Signalized	N/A		3.87	D	1.80	A	1.78	A	N/A		3.71	D	2.27	B	2.12	B
40	Broad St/Orcutt Rd	Signalized	2.84	C	2.79	C	2.37	B	2.54	B	2.98	C	3.15	C	2.71	B	2.45	B

Exhibit 20: Existing Bicycle LOS at Study Intersections

Note: Exhibit 20 only lists the study intersections that are signalized because there is no methodology for calculating bicycle LOS at stop-controlled intersections. The assumption is that the bicycle would stop and then proceed without encountering a delay.

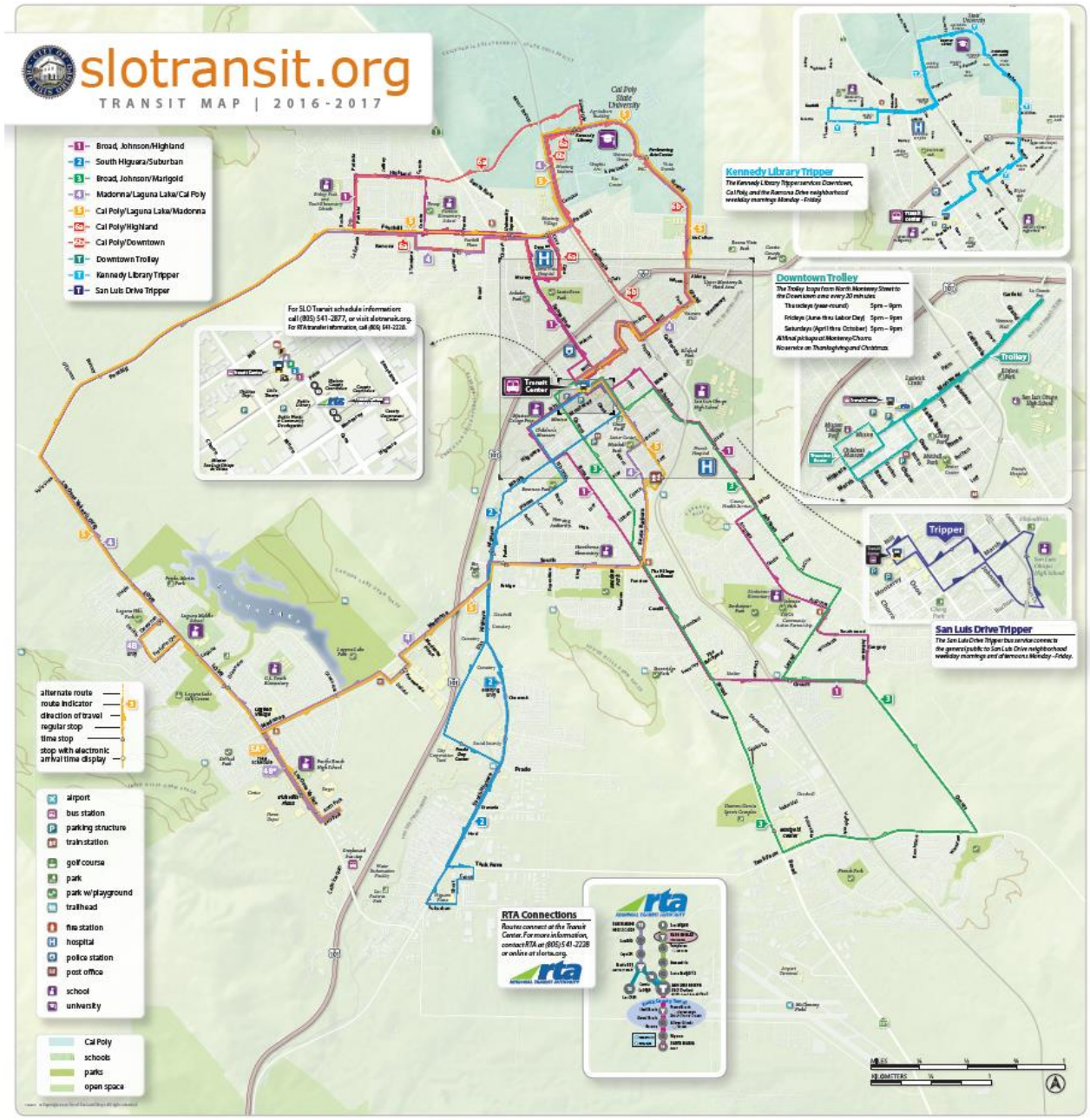


Exhibit 21: SLO Transit System Map

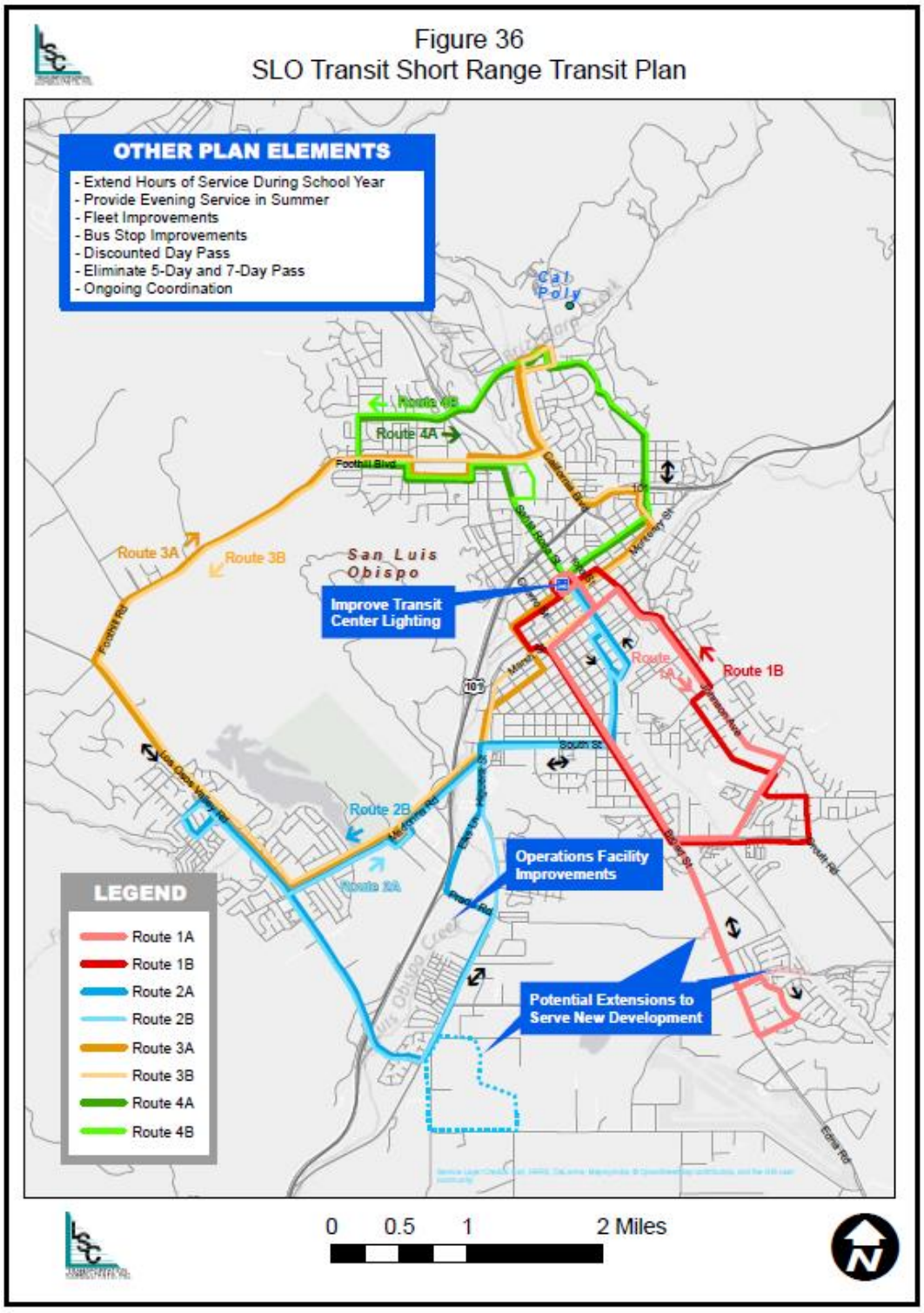


Exhibit 22: SLO Transit Short Range Transit Plan

In addition to SLO Transit, the campus is also served by San Luis Obispo Regional Transit Authority as follows[10]:

- Route 10 connects Cal Poly to Pismo Beach, Arroyo Grande, Nipomo, Santa Maria and Orcutt. Service to Cal Poly runs once a day, northbound arriving at 7:19 AM and southbound departing at 4:17 PM.
- Route 12 connects the cities of Los Osos and Morro Bay to Cuesta College and downtown San Luis Obispo, with a once-a-day side trip to the Cal Poly transit center. The side trip arrives at Cal Poly at 7:35 AM and departs for the return trip at 5:20 PM.

[10] Source: SLO Regional Transit Authority website, Schedules and Fares, accessed December 30, 2016.

3 PROPOSED PROJECT

3.1 Project Description

The purpose of the *California Polytechnic State University San Luis Obispo Campus Master Plan 2035* ("the Project") is to support and advance the University's educational mission by providing a guide to the development of the physical campus and its facilities over the next twenty years. The Master Plan report describes in detail the vision and goals for campus development to accommodate an enrollment of 22,500 full-time equivalent students (FTEs) or 25,000 headcount students[11]. The Master Plan addresses the natural and built environments by identifying the requirements for maintaining and enhancing the physical aspects of the campus to meet the needs for growth and change in a higher education environment. The Master Plan anticipates these changes by focusing on the facilities needed by the academic program; by campus life programs including housing, recreation, athletics and facilities maintenance; and by the requirements of campus infrastructure including roadways, parking and utilities.

The Master Plan describes in detail the physical, operational/functional aspects of the project. This TIS focuses on evaluating the change in off-site traffic conditions resulting from the increase in campus student enrollment from the current headcount of 20,944 students to 25,000 by year 2035 accommodated by the Master Plan. Exhibit 24 show the key components of the Master Plan land uses while Exhibit 25 shows the parking and circulation plan.

Exhibit 23 shows how the number of on- and off-campus students and faculty and staff would change with the Master Plan. In the exhibit the term "Restricted" refers to freshmen and sophomore students who will be prohibited from having cars on campus except with special permission. "Unrestricted" refers to upper division students in Poly Canyon Village who will be provided parking spaces at the ratio of 0.7 spaces per bed, with parking fees being used to regulate demand (this is a continuation of the current practice).

	Existing	CMP Build-Out	Change (persons)
Students			
Restricted* On-Campus Students	4,488	12,300	7,812
Unrestricted On-Campus Students	2,700	2,700	0
Off-Campus Students	13,756	10,000	-3,756
Total Students	20,944	25,000	4,056
Non-Student			
Faculty/Staff	3,172	3,905	733
Non-Student Campus Residents	0	3,308	3,308
Total Non-Students			4,041

Exhibit 23: CMP Build-Out On- and Off-Campus Student and Faculty/Staff Population

"Non-Student Campus Residents" refer to residents of the five proposed residential apartment neighborhoods in the Master Plan[12]. The University expects to give first priority for the units in these neighborhoods to people affiliated with the University. However, since it is not possible to determine at this time how many of the residents will be affiliated with the University, all of the units in these neighborhoods were treated as conventional market-rate apartments. This is a conservative assumption since it underestimates the number of residents that will work on campus and walk or bike there.

[11] The headcount includes full-time and part-time students.

[12] The number of residents was estimated from the number of units multiplied by the average household size for rental units in the City of San Luis Obispo (2.25 persons).

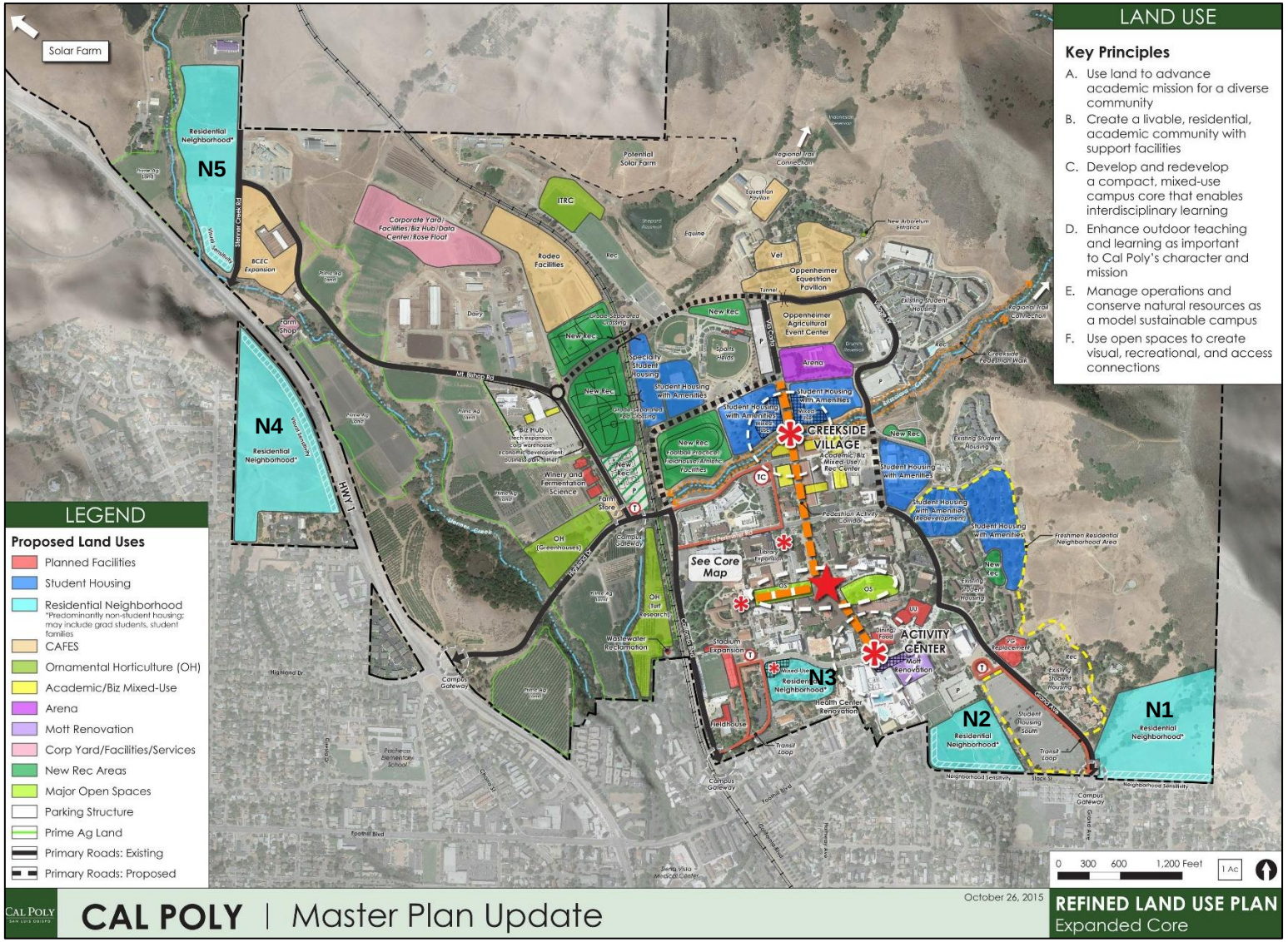


Exhibit 24: Campus Master Plan Land Uses

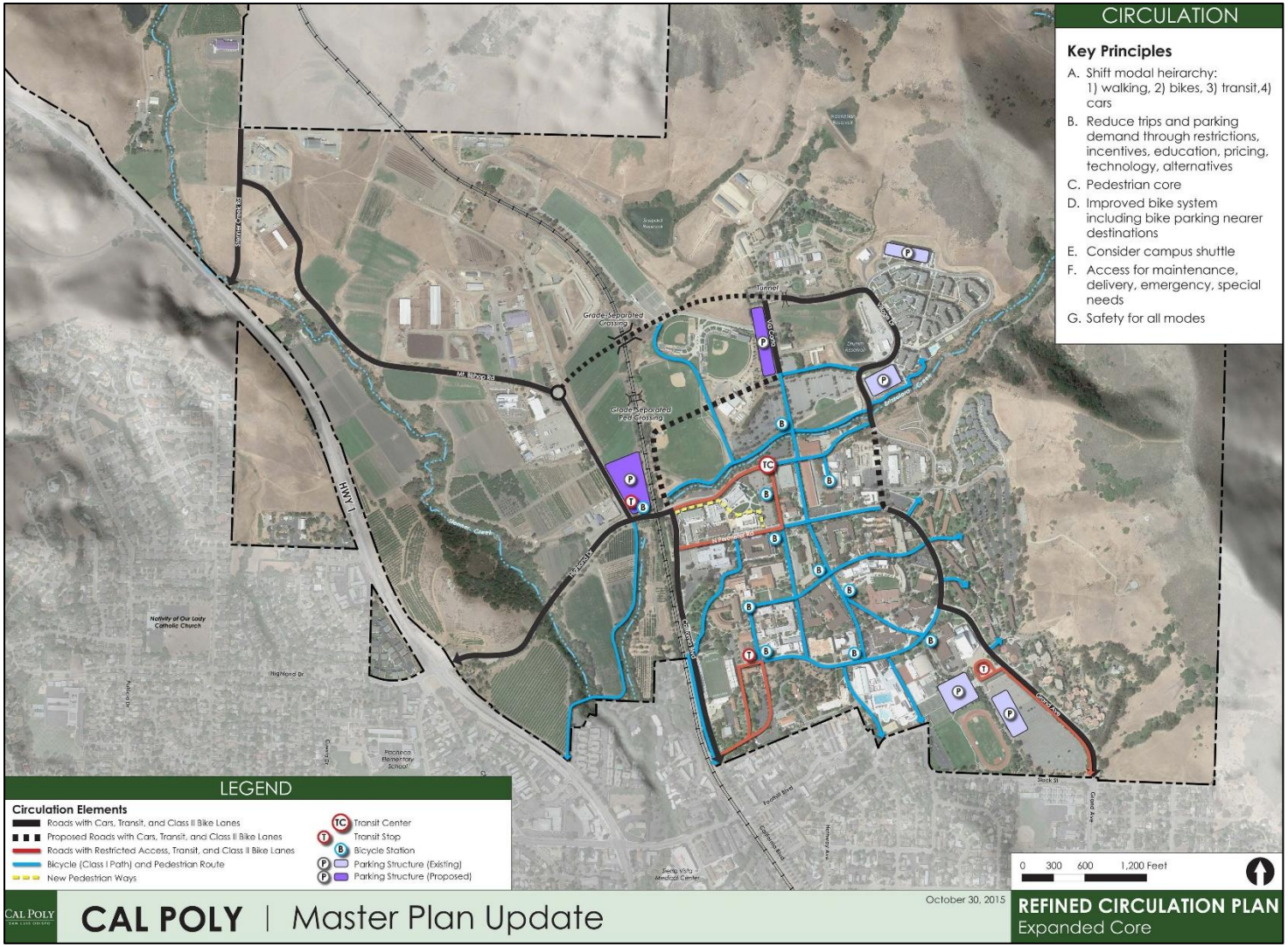


Exhibit 25: Campus Master Plan Parking and Circulation

Exhibit 26 provides a summary of existing and Master Plan parking spaces, excluding those associated with the five residential neighborhoods[13]. The reduction in the number of off-campus students will enable the University to increase enrollment while maintaining the current parking ratios for faculty and staff, unrestricted on-campus students, and off-campus students without any net increase in on-campus parking. Only a minor reduction in the parking ratio for restricted on-campus students will be required.

Person Type	Existing			Master Plan Build Out			Change in Number of Spaces
	People	Spaces	Spaces/ person	People	Spaces	Spaces/ person	
	(A)	(B)	(C)=(B)/(A)	(D)	(E)	(F)=(E)/(D)	(G)=(E)-(B)
Faculty/Staff	3,172	1,597	0.503	3,905	1,966	0.503	369
Unrestricted On-Campus Students	2,700	1,929	0.714	2,700	1,929	0.714	0
Restricted On-Campus Students	4,488	368	0.082	12,300	907	0.074	539
Off-Campus Students	13,756	3,324	0.242	10,000	2,416	0.242	-908
State Use (mainly for internal trips)		209			209		0
Total		7,427			7,427		0

Exhibit 26: Existing and Future Parking Spaces and Ratios

3.2 Project Vehicle Trip Generation

The number of vehicle trips generated by the academic community (students, faculty, and staff) under the proposed Campus Master Plan were estimated using traffic counts taken at the parking lots for the Poly Canyon Village and at the external gateways to the University campus. Exhibit 27 shows how the traffic counts for Poly Canyon Village (Item A in the exhibit) were divided by the number of spaces (B in the exhibit) to estimate the trips per residential space (C). This was multiplied by the total number of residential parking spaces (D) to obtain the total number of trips associated with the residential parking spaces.

Exising Conditions	Formula	Daily	AM Peak Hour		PM Peak Hour	
			Inbound	Outbound	Inbound	Outbound
Trips to/from Poly Canyon Village	(A)	2,924	25	37	92	104
Parking Spaces in Poly Canyon Village	(B)	1,929	1,929	1,929	1,929	1,929
Trips per Residential Parking Space	(C)=(A)/(B)	**1.52**	**0.013**	**0.019**	**0.048**	**0.054**
Total Residential Spaces on Campus	(D)	2,297	368	368	368	368
Total Trips from Residential Spaces	(E)=(C)*(D)	3,482	5	7	18	20
Total Trips at All Campus Gatesways	(F)	28,692	1,921	337	837	1,592
Trips from Other (not residential) Spaces	(G)=(F)-(E)	25,210	1,916	330	819	1,572
Number of Other (not residential) Spaces	(H)	4,921	4,921	4,921	4,921	4,921
Trips per Other (not residential) Parking Space	(I)=(G)/(H)	**5.12**	**0.389**	**0.067**	**0.167**	**0.319**
Total Trips	(J)=(E)+(G)	28,692	1,921	337	837	1,592

Exhibit 27: Computation of Trip Generation Rates for Residential and Other Parking Spaces

The trips from the residential spaces (E) were then subtracted from all trips to and from the campus (F) to arrive at the number of trips associated with non-residential parking spaces (G). This was divided by the number of non-residential spaces (H) to arrive at the trip-generate rate for non-residential parking spaces.

[13] The neighborhoods will have their own parking similar to other apartment complexes in San Luis Obispo. Parking in the neighborhoods will be by permit restricted to residents; it will not serve as spill-over parking for off-campus students or visitors.

The future trips that will be generated by the academic community upon build-out of the Campus Master Plan were then forecast using the trip generation rates from Exhibit 27 and the number of future parking spaces from Exhibit 26. This computation is shown in Exhibit 28.

Future Conditions	Formula	Daily	AM Peak Hour		PM Peak Hour	
			Inbound	Outbound	Inbound	Outbound
Number of Residential Spaces on Campus	(K)	2,836	2,836	2,836	2,836	2,836
Total Trips from Residential Spaces	(L)=(C)*(K)	4,299	37	54	135	153
Number of Other (not residential) Spaces	(M)	4,382	4,382	4,382	4,382	4,382
Trips from Other (not residential) Spaces	(N)=(I)*(M)	22,451	1,707	294	730	1,400
Total Trips	(O)=(L)+(N)	26,750	1,743	348	865	1,553
Change in Trips	(P)=(O)-(J)	-1,942	-178	11	28	-39
Percent Change from Existing	(Q)=(P)/(J)	-7%	-8%		0%	

Exhibit 28: Computation of Future Trips by the Academic Community for Full CMP Build-Out

As can be seen in Exhibit 28, the increase in on-campus student housing in the Campus Master Plan and the consequent reduction in commuting by off-campus students would result in a net decrease in auto trips to and from campus, even though overall enrollment would increase. This conclusion is also supported by past experience of providing additional student housing on campus. Exhibit 29, which comes from Caltrans' Corridor Data Sheet for Hwy 1, shows that the portions of Hwy 1 between Highland Drive and Foothill Boulevard (the light blue line in the exhibit) and the portion between Foothill Boulevard and US 101 (purple line), in other words the parts most affected by Cal Poly commute trips showed significant reductions in traffic when the Cerro Vista and Poly Canyon Villages became available to students. The fact that volumes on the other parts of Hwy 1 held steady during the same period shows that the reductions were due to the on-campus student residence halls and not background factors (the general economy, gasoline prices, population growth, etc.).

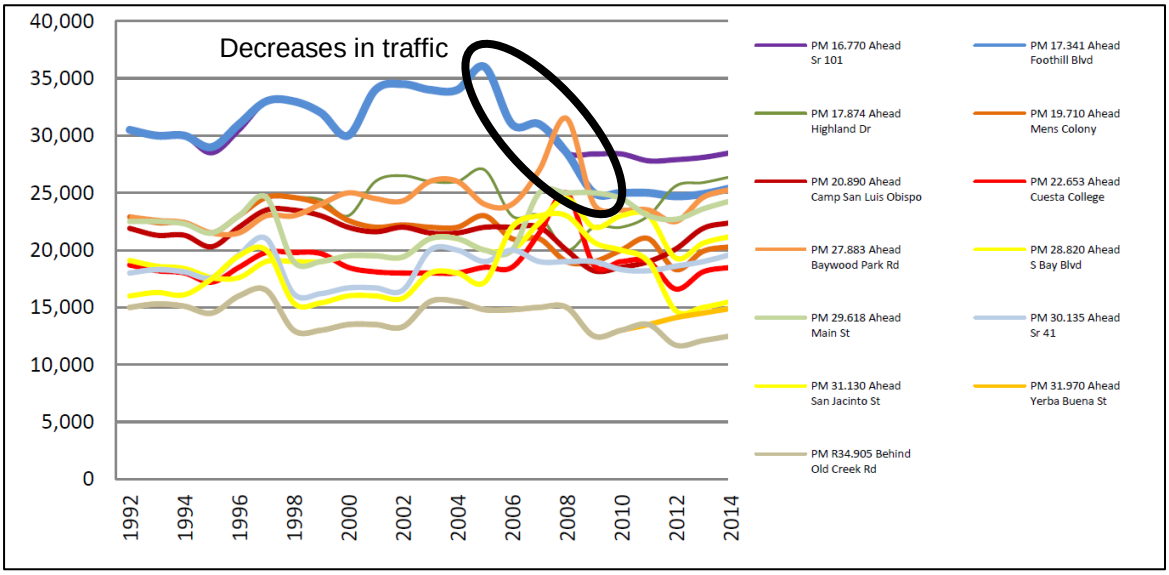


Exhibit 29: Traffic Volumes on Hwy 1 by Year and Section

The number of trips generated by the five proposed residential neighborhoods were forecast using the trip generation rates established by the City of San Luis Obispo for their travel demand model (see Exhibit 30). These rates assumed that the average household size would be 2.25 persons and that the median

household income would be $40,440, based on U.S. Census Bureau data for rental units in the City of San Luis Obispo for 2015.

Land Use Type	Daily Trips	AM Peak Hour		PM Peak Hour	
		Inbound	Outbound	Inbound	Outbound
Apartments (per DU)	9.42	0.14	0.66	0.36	0.31
Medium Retail (per TSF)	45.96	1.81	0.88	1.88	1.73

Exhibit 30: Trip Generation Rates from the City Travel Demand Model

The total number of trips generated by each of the five neighborhoods is shown in Exhibit 31. The neighborhoods are shown individually because their traffic loads onto the city streets in different parts of the network.

Proposed Neighborhood	Number of Units	Daily Trips	AM Peak Hour		PM Peak Hour	
			Inbound	Outbound	Inbound	Outbound
N1 - Slack/Grand						
Apartments (DUs)	420	3,958	57	276	151	128
Medium Retail (TSF)	8.5	391	15	8	16	15
N2 - Practice Track						
Apartments (DUs)	300	2,827	41	197	108	92
N3 - S. Perimeter Way						
Apartments (DUs)	150	1,414	20	99	54	46
Medium Retail (TSF)	2.8	130	5	3	5	5
N4 - Hwy 1 near Cal Fire						
Apartments (DUs)	400	3,770	54	263	144	122
N5 - Stenner Creek						
Apartments (DUs)	200	1,885	27	131	72	61
Total for All Neighborhoods						
Apartments (DUs)	1,470	13,854	199	965	528	449
Medium Retail (TSF)	11	522	21	10	21	20

Exhibit 31: Computation of Future Trips by the Proposed Residential Neighborhoods

The trips shown in Exhibit 31 would not be entirely additive to the traffic in San Luis Obispo. In particular, commute trips from the five neighborhoods are likely to substitute for commute trips that would otherwise have been taken by people living in a different city and commuting to work in San Luis Obispo.

The Project also includes a small (25,000 sq. ft.) technology park on Mount Bishop Road that will operate with staff not already accounted for in the University faculty/staff positions shown in Exhibit 26 and Exhibit 27. Trip generation for this facility was forecast using the “office” land use category in the SLO traffic model. This is shown in Exhibit 32[14].

[14] The rates shown in Exhibit 32 are the actual rates arising from model runs. These are somewhat different from the rates shown in the model documentation due to trip balancing during the model run.

Trip Generation Rate	ITE Code	Daily Trips	AM Peak Hour		PM Peak Hour	
			Inbound	Outbound	Inbound	Outbound
General Office (per KSF)	710	10.64	0.76	0.12	0.16	0.68

Trips Generated	Number of Units	Daily Trips	AM Peak Hour		PM Peak Hour	
			Inbound	Outbound	Inbound	Outbound
Technology Park Facility Office (KSF)	25	266	19	3	4	17

Exhibit 32: Trip Generation from Technology Park

3.3 Project Vehicle Trip Distribution

The City travel demand model was used to forecast the distribution of Project trips to various parts of the City of San Luis Obispo and to/from places outside the city. Exhibit 33 shows the distribution of Project traffic through the local and regional roadway system. The model forecasts that approximately 14% of the trips from the proposed residential neighborhoods would be internalized within the Project. Those include interactions between the residents and the on-site retail as well as work and other trips to the campus. This is likely to under-estimate the percentage of internalized trips since it does not take into account the University's intention to give priority to faculty, staff, and graduate students for the apartments in these neighborhoods.

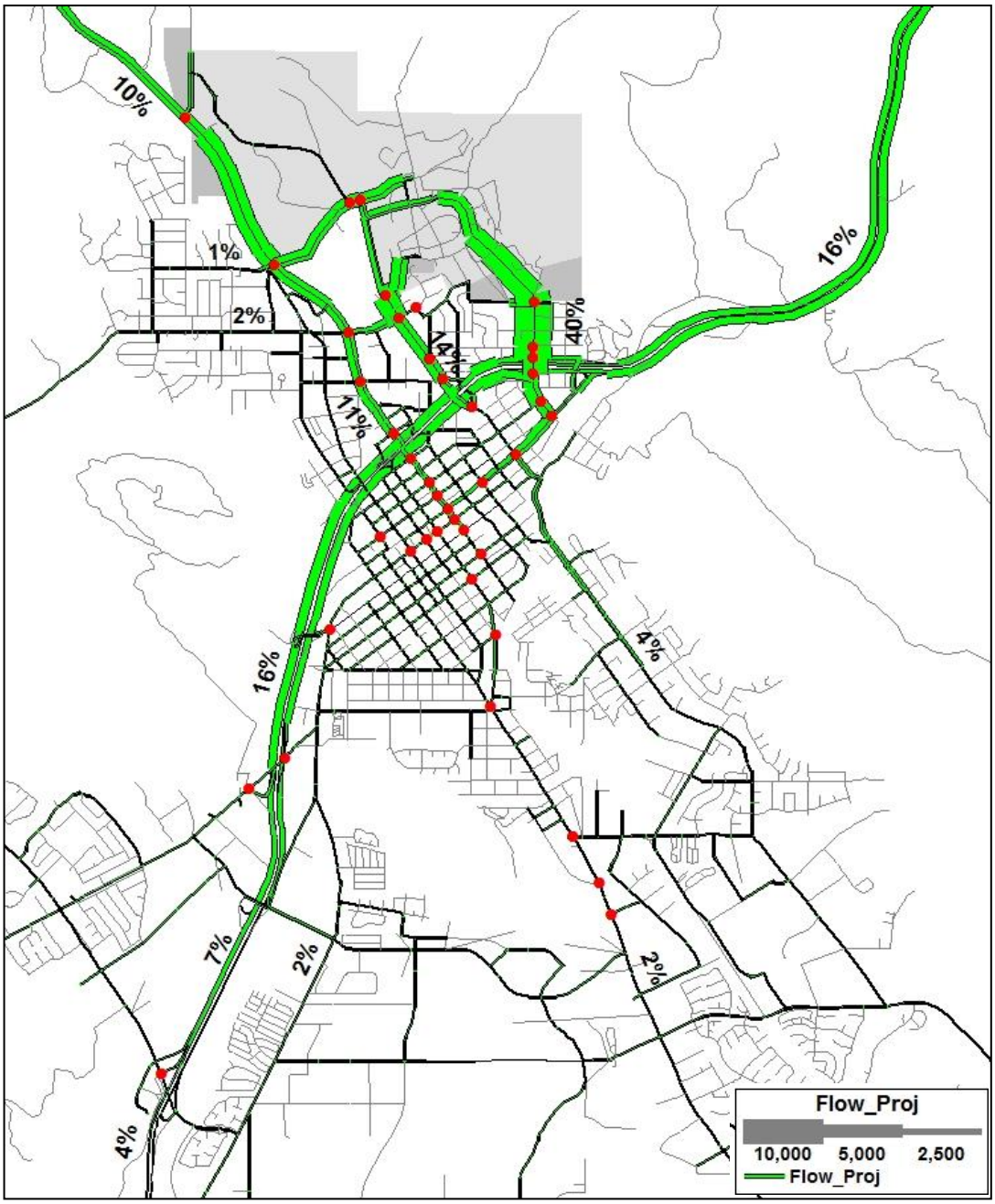


Exhibit 33: Project Auto Trip Distribution

3.4 Project Bicycle Trip Generation and Distribution

The City travel demand model was used to forecast the number of bicycle trips that would be generated by the Project over the course of a typical school day (see Exhibit 34[15]). The model does not provide information on the path that these trips would take or the time of day in which they would occur. If the time-of-departure assumptions that the model has for car trips is applied to the bike trips shown in Exhibit 34, then it is expected that the Project to generate about 117 trips in the AM peak hour and 90 trips in the PM peak hour, with the remaining trips taking place during off-peak hours.

Trip Destination > Trip Origin	Cal Poly Academic Core	Foothill Blvd Retail Area	Down-town SLO	Residential Area South of Campus	Residential Are West of Hwy 1	Rest of City	Total
Stenner Creek Neighborhood	27	8	30	4	5	67	142
Hwy 1 near Cal Fire Neighborhood	79	18	64	9	11	138	319
S. Perimeter Way Neigborhood	97	7	27	4	4	55	193
Practice Track Neighborhood	185	10	62	10	6	115	387
Slack/Grand Neighborhood	190	12	88	14	8	162	474
Academic Core	0	3	25	2	2	57	89
Total	578	57	297	43	35	595	1,605

Exhibit 34: Bicycle Trips Generated by the Project (Daily)

The route used by future bicyclists is difficult to predict because of personal preferences, environmental factors (shade, noise, slopes, etc.), and safety concerns. Where possible bicyclists tend to favor less-busy streets where capacity is not an issue. The only non-speculative routing that could be identified for Project bicycle trips were the trips from the Project neighborhoods to the Cal Poly academic core. The trips between the academic core and the South Perimeter Way neighborhood, the Practice Track neighborhood, and the Slack/Grand neighborhood would all be internal to the campus, leaving only the trips from the Stenner Creek neighborhood and the Hwy 1 neighborhood. Bike trips from the Stenner Creek neighborhood were assumed to travel along Mt. Bishop Road. Bike trips from the Hwy 1 neighborhood were assumed to travel south on Hwy 1 to Highland Drive for the trip to campus and to use a new route through the neighborhood west of Hwy 1 for the return route. The resulting change in peak-hour bicycle flows are shown in Exhibit 35.

3.5 Project Pedestrian Trip Generation and Distribution

A process similar to the one described for bicycle trips was used to forecast Project pedestrian trips. This resulted in a forecast for a small increase in peak-hour pedestrian traffic at the study intersections shown in Exhibit 36.

[15] The exhibit shows trips from the Project to other places. There would be an equal number of return trips.

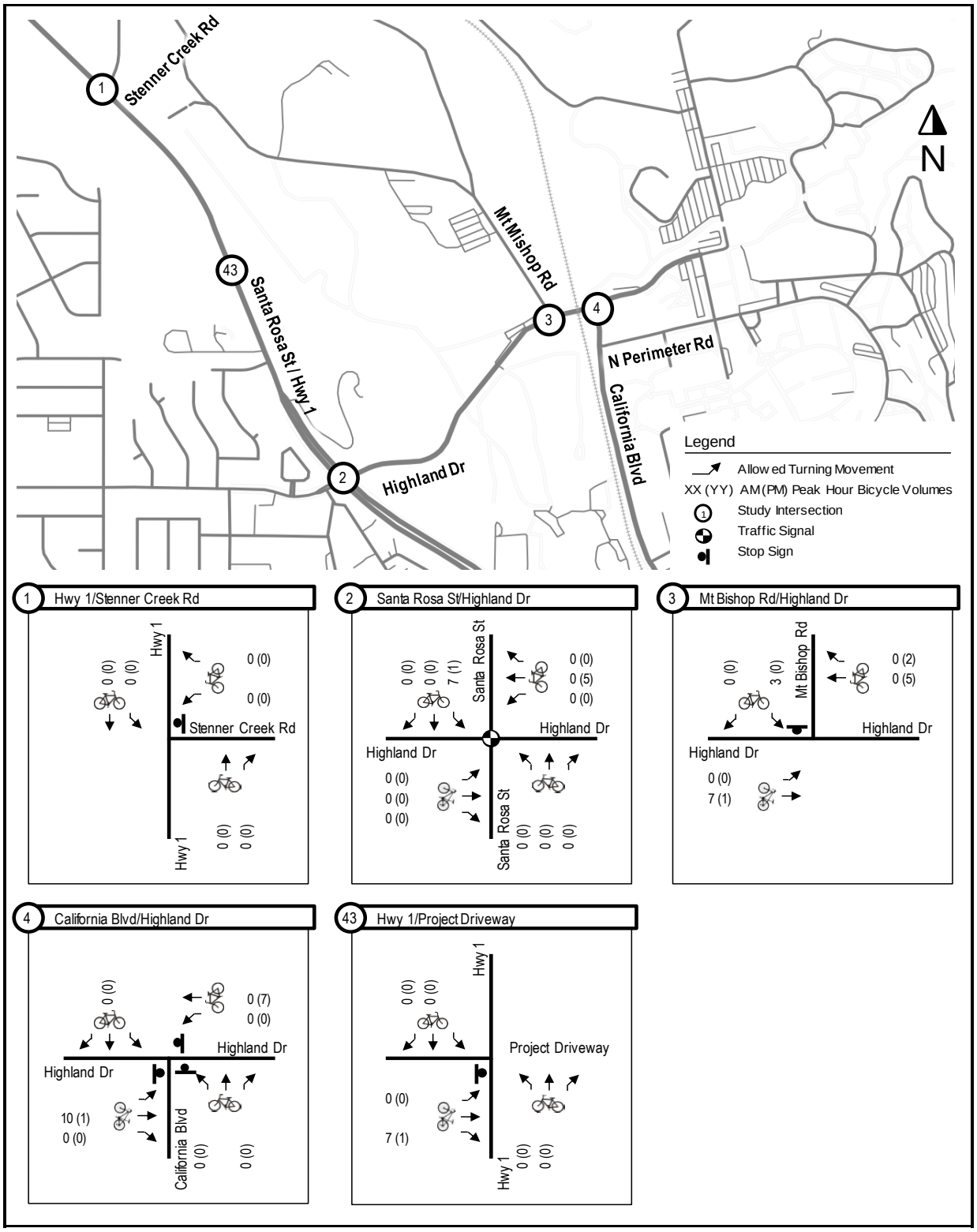


Exhibit 35: Peak Hour Project Bicycle Trips

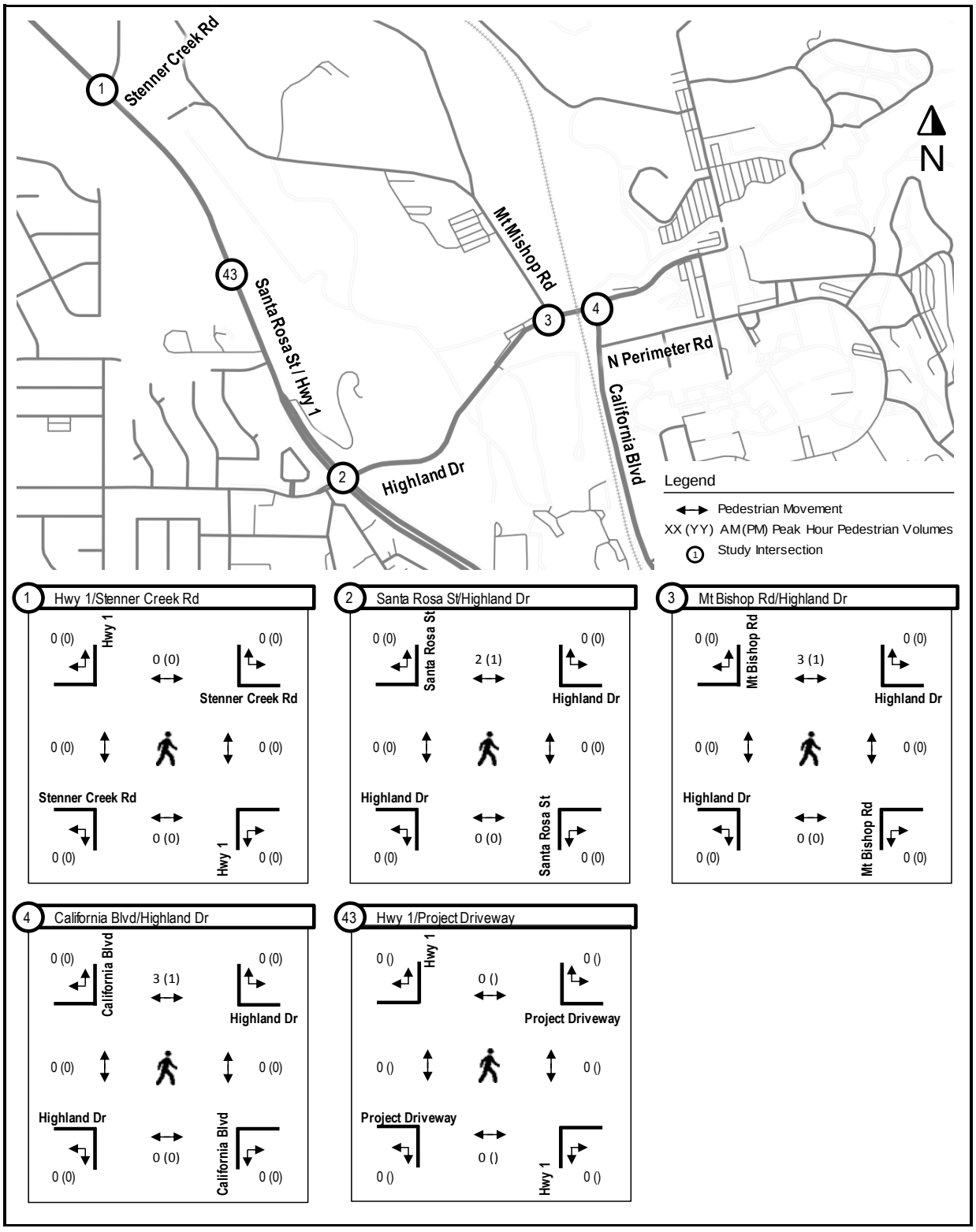


Exhibit 36: Peak Hour Project Pedestrian Trips

3.6 2021 Near-Term Project

The Near-Term Plus Project scenario represents the portion of CMP build-out that may occur within the next five years (i.e. the period 2016-to-2021). The components of the Near-Term Project are:

- **Slack and Grand Residential Neighborhood**, consisting of 420 units in three to four-story apartment buildings plus 8,500 sq. ft. of neighborhood retail space.
- **New student housing for freshmen students**, providing up to 1,000 beds for the freshmen students in dormitory-style housing. This new student housing facility will be located on the site of the existing R1 and K-1 parking lots.
- **New student housing for sophomore students**, providing up to 1,500 beds for the sophomore students in dormitory-style housing. The new student housing will be located in the North Campus.
- **An increase in overall enrollment** by 1,067 students, estimated through straight-line interpolation of the student headcount in the Existing and Project Build-Out conditions. See Exhibit 38.
- **A decrease in off-campus students** by 2,908 students. The near-term number of off-campus students was estimated by subtracting the near-term total number of on-campus students[16] from the near-term student headcount.
- **An increase in faculty and staff employment** by 193 persons, estimated through straight-line interpolation of the student headcount in the Existing and Project Build-Out conditions.
- **A Technology Park Facility**, an approximately 25,000 square-foot new facility that will be located adjacent to the existing Technology Park facility of similar size and function. It will provide customized research and office space.

The trips that will be generated by the near-term academic projects are shown in Exhibit 37. The trips that the Grand/Slack neighborhood will generate was presented earlier in Exhibit 31, and the trips that will be generated by the Technology Park were presented earlier in Exhibit 32.

Near Term Conditions	Formula*	Daily	AM Peak Hour		PM Peak Hour	
			Inbound	Outbound	Inbound	Outbound
Number of Residential Spaces on Campus	(K)	2,903	2,903	2,903	2,903	2,903
Total Trips from Residential Spaces	(L)=(C)*(K)	4,400	38	56	138	156
Number of Other (not residential) Spaces	(M)	4,315	4,315	4,315	4,315	4,315
Trips from Other (not residential) Spaces	(N)=(I)*(M)	22,108	1,680	289	719	1,379
Total Trips	(O)=(L)+(N)	26,508	1,718	345	857	1,535
Change in Trips	(P)=(O)-(J)	-2,184	-203	8	20	-57
Percent Change from Existing	(Q)=(P)/(J)	-8%	-9%		-2%	

Exhibit 37: Computation of Future Trips by the Academic Community for Near-Term Projects
(* Items A through J in the formula field are shown in Exhibit 27)

[16] The near-term number of on-campus students includes those residing in existing residence halls, those who will reside the in dorms that are part of the Near-Term Project, and those that will reside in Student Housing South, which is currently under construction. Student Housing South was the subject of an earlier EIR and so is not a component of the CMP projects currently under study.

Person Type	Existing			Master Plan Build Out			Master Plan Near Term				
	People	Spaces	Spaces/ person	People	Spaces	Spaces/ person	People	Change in People	Spaces	Change in Spaces	Spaces/ person
	(A)	(B)	(C)=(B)/(A)	(D)	(E)	(F)=(E)/(D)	(G)=(D)-(A)/(5/(2035-2016))	(H)=(G)-(A)	(I)=(C)*(G)	(J)=(I)-(B)	(K)=(I)/(G)
Faculty/Staff	3,172	1,597	0.503	3,905	1,966	0.503	3,365	193	1,694	-272	0.503
Unrestricted On-Campus Students	2,700	1,929	0.714	2,700	1,929	0.714	2,700	0	1,929	0	0.714
Restricted On-Campus Students	4,488	368	0.082	12,300	907	0.074	8,463	3,975	974	67	0.115
Off-Campus Students	13,756	3,324	0.242	10,000	2,416	0.242	10,848	-2,908	2,621	205	0.242
State Use (mainly for internal trips)		209			209				209	0	
Total		7,427			7,427				7,427	0	

Exhibit 38: Near-Term students, Faculty/Staff, and Parking Spaces

4 2021 NEAR-TERM NO PROJECT CONDITIONS

The Near-Term No Project scenario was based on interpolating the Existing and 2035 No Project scenarios. Transportation conditions under this scenario are described below.

4.1 Intersection LOS

The Near-Term No Project intersection turning movement volumes are shown in Exhibit 39, and the corresponding LOS is shown in Exhibit 40. The target LOS would not be met at the following 8 locations:

- Intersection #6, Santa Rosa St/Foothill Blvd, during the AM and PM peak hours
- Intersection #9, Grand Ave/Slack St, during the AM peak hour
- Intersection #17, Santa Rosa St/Walnut St, during the PM peak hour
- Intersection #19, California Blvd/Taft St, during the PM peak hour
- Intersection #20, California Blvd/Hwy 101 NB Ramps, during the PM peak hour
- Intersection #37, US 101 SB Ramps/Madonna Rd, during the AM peak hour
- Intersection #41, Broad St/Rockview Pl, during the AM and PM peak hours
- Intersection #42, Broad St/Capitolio Wy, during the PM peak hour

Four of the intersections listed above do not meet the target LOS under existing conditions. Intersections #6, #9, #20, and #42 would be new deficiencies.

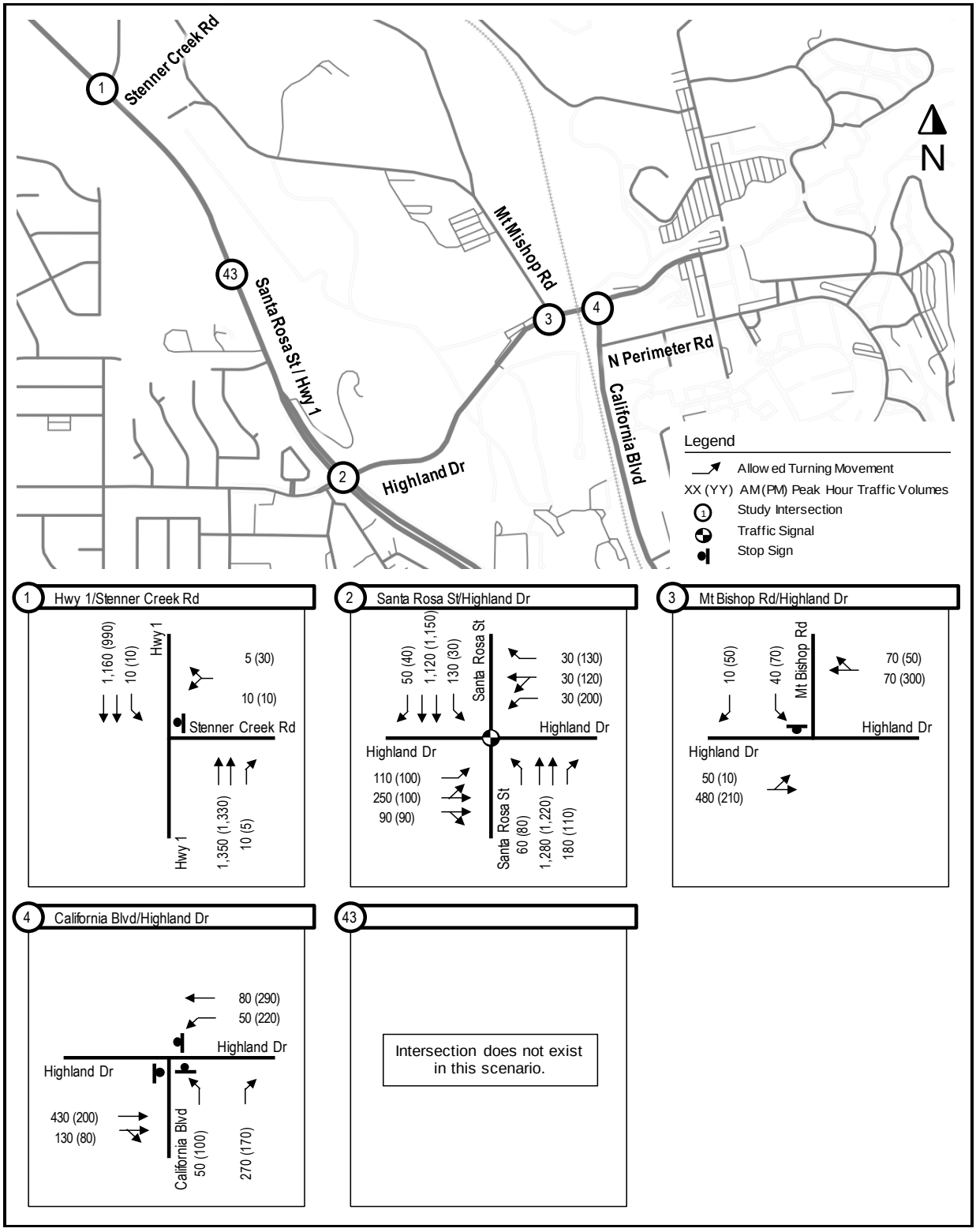


Exhibit 39: Near-Term No Project Traffic Volumes and Lane Configurations

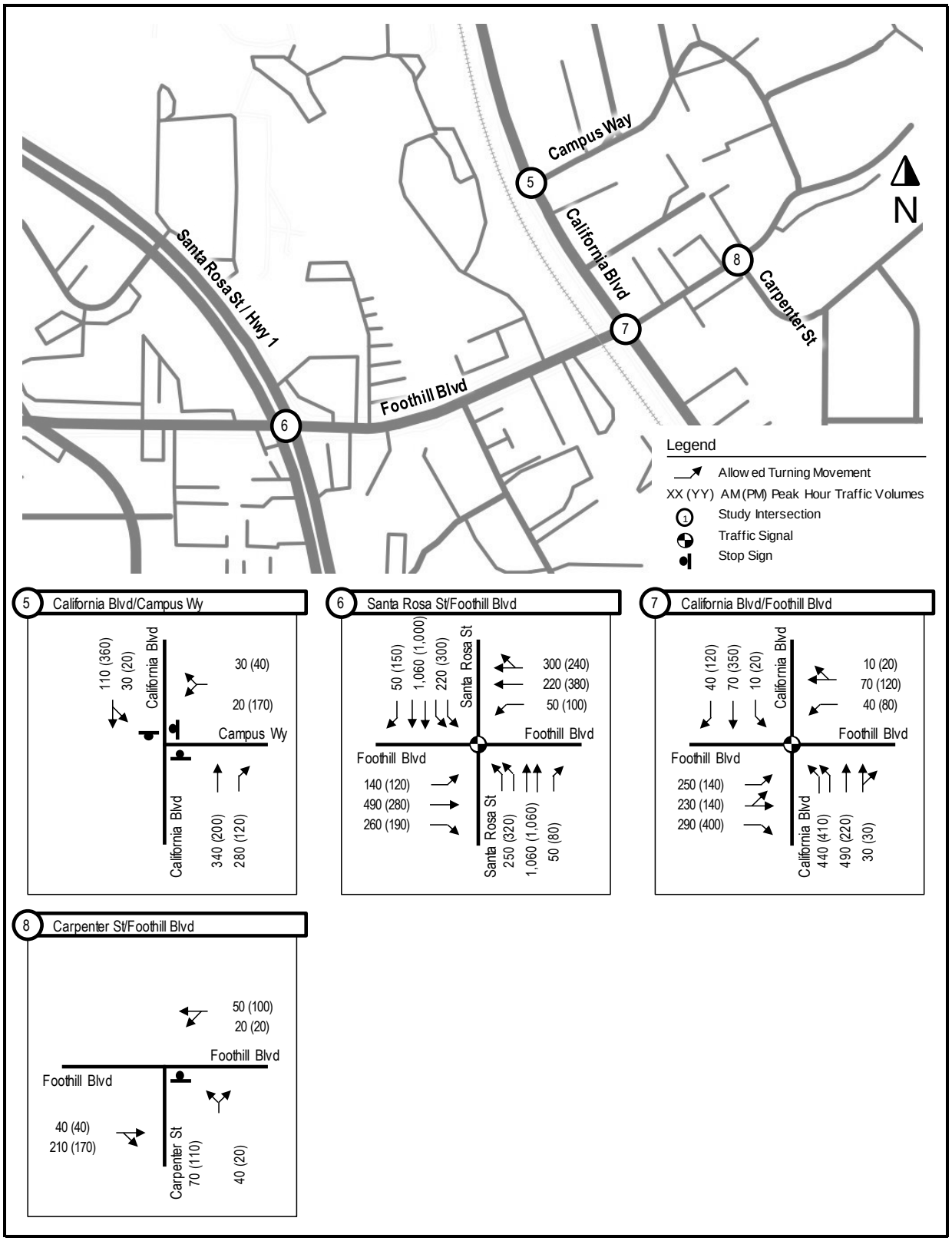


Exhibit 39: Near-Term No Project Traffic Volumes and Lane Configurations (Map B)

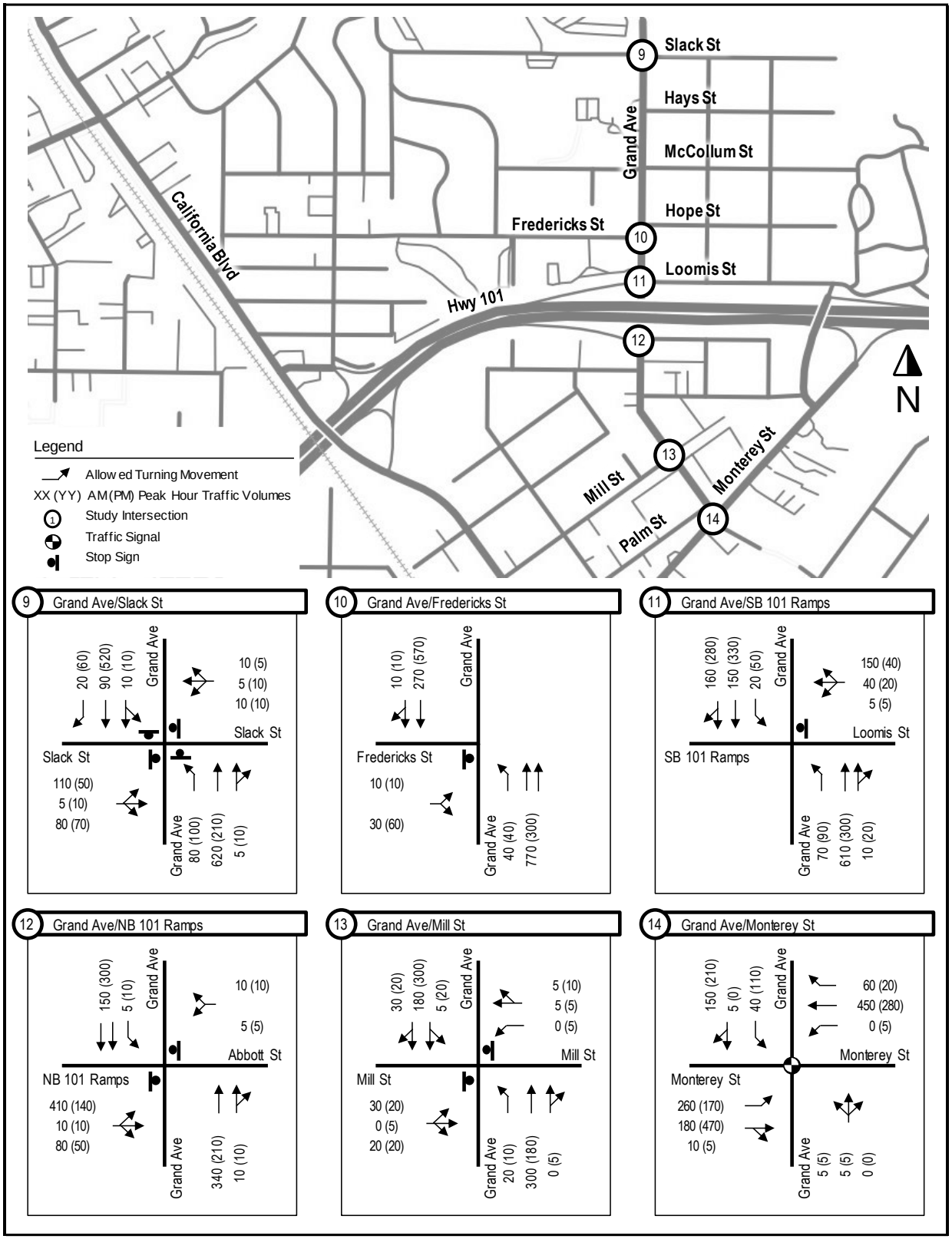


Exhibit 39: Near-Term No Project Traffic Volumes and Lane Configurations (Map C)

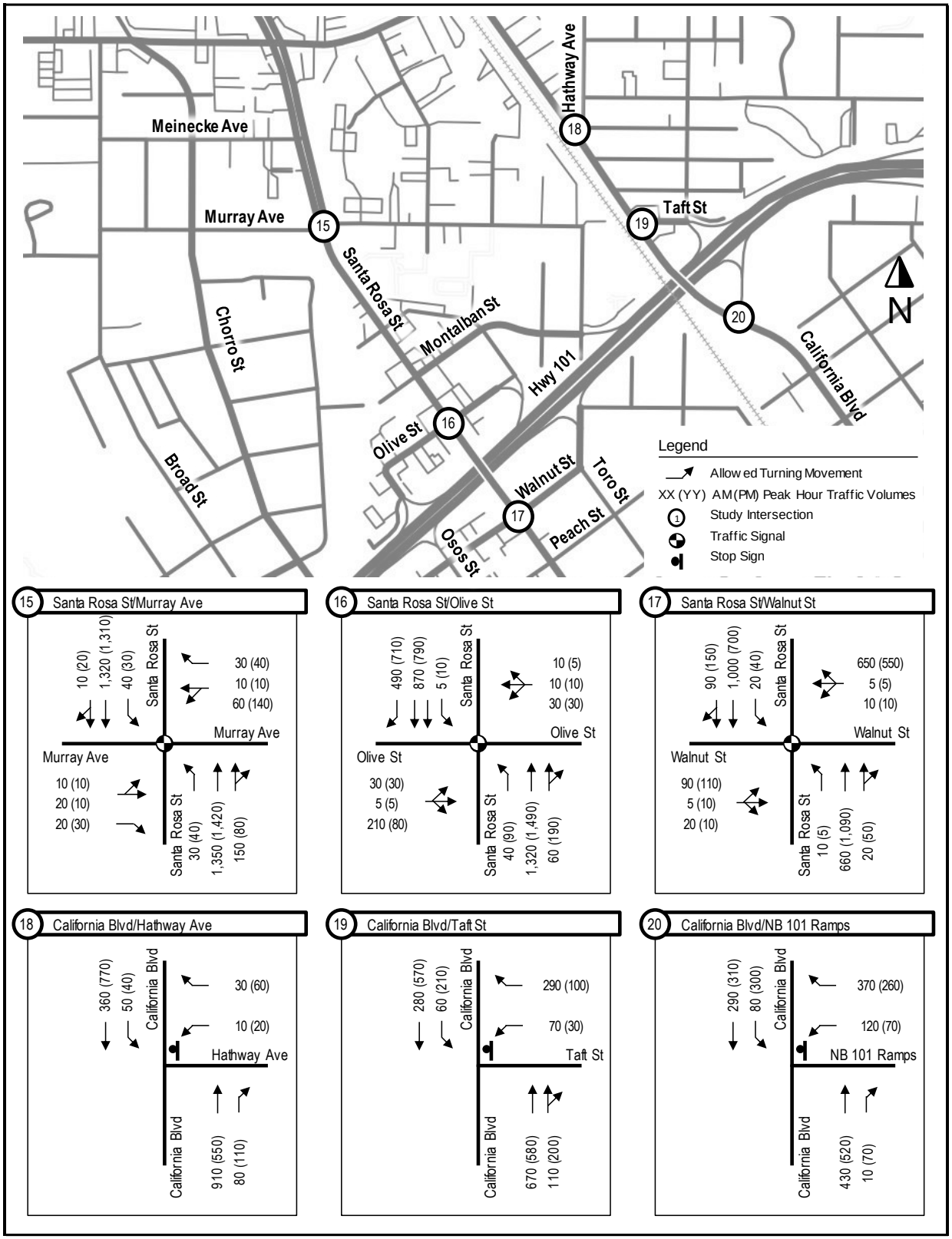


Exhibit 39: Near-Term No Project Traffic Volumes and Lane Configurations (Map D)

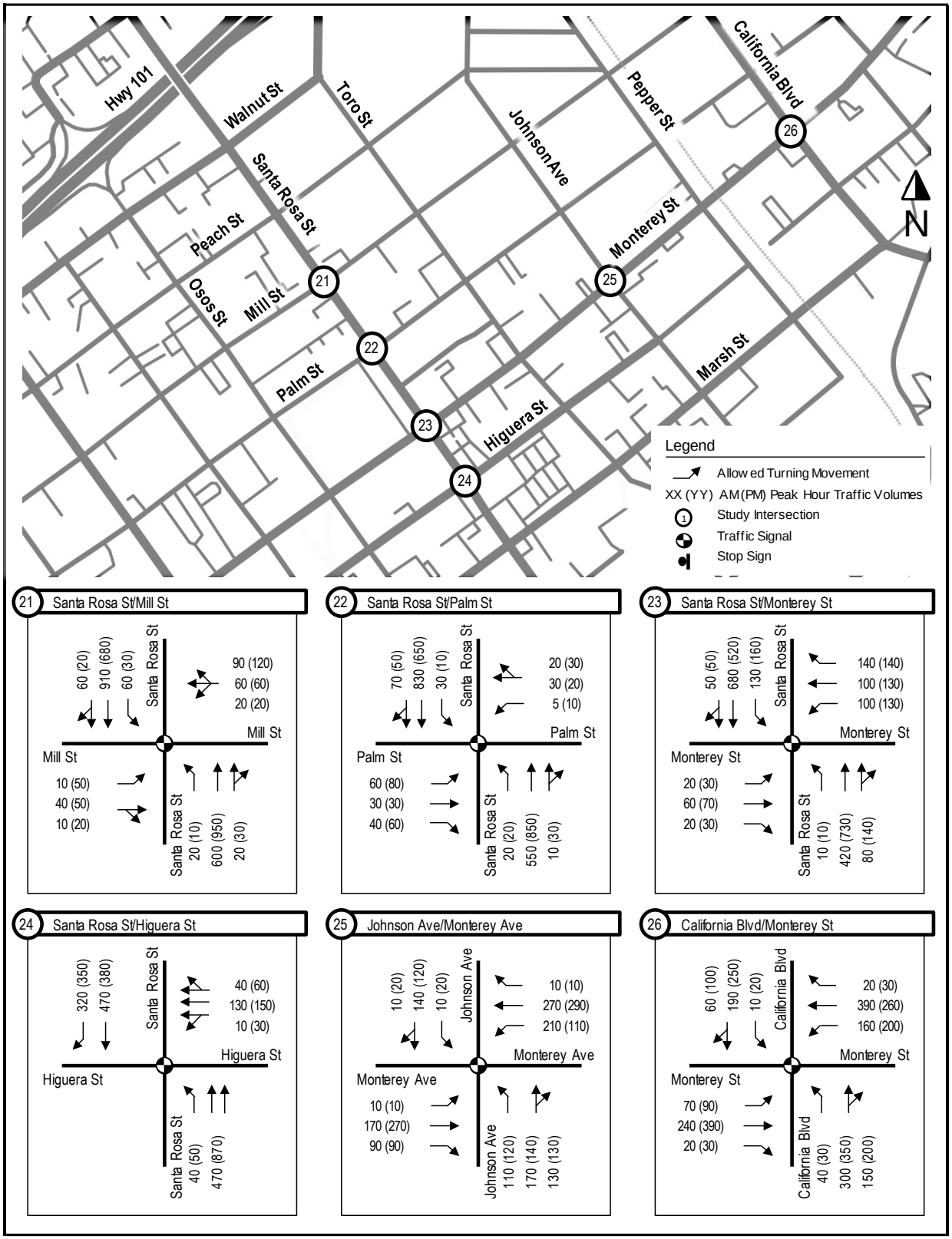


Exhibit 39: Near-Term No Project Traffic Volumes and Lane Configurations (Map E)

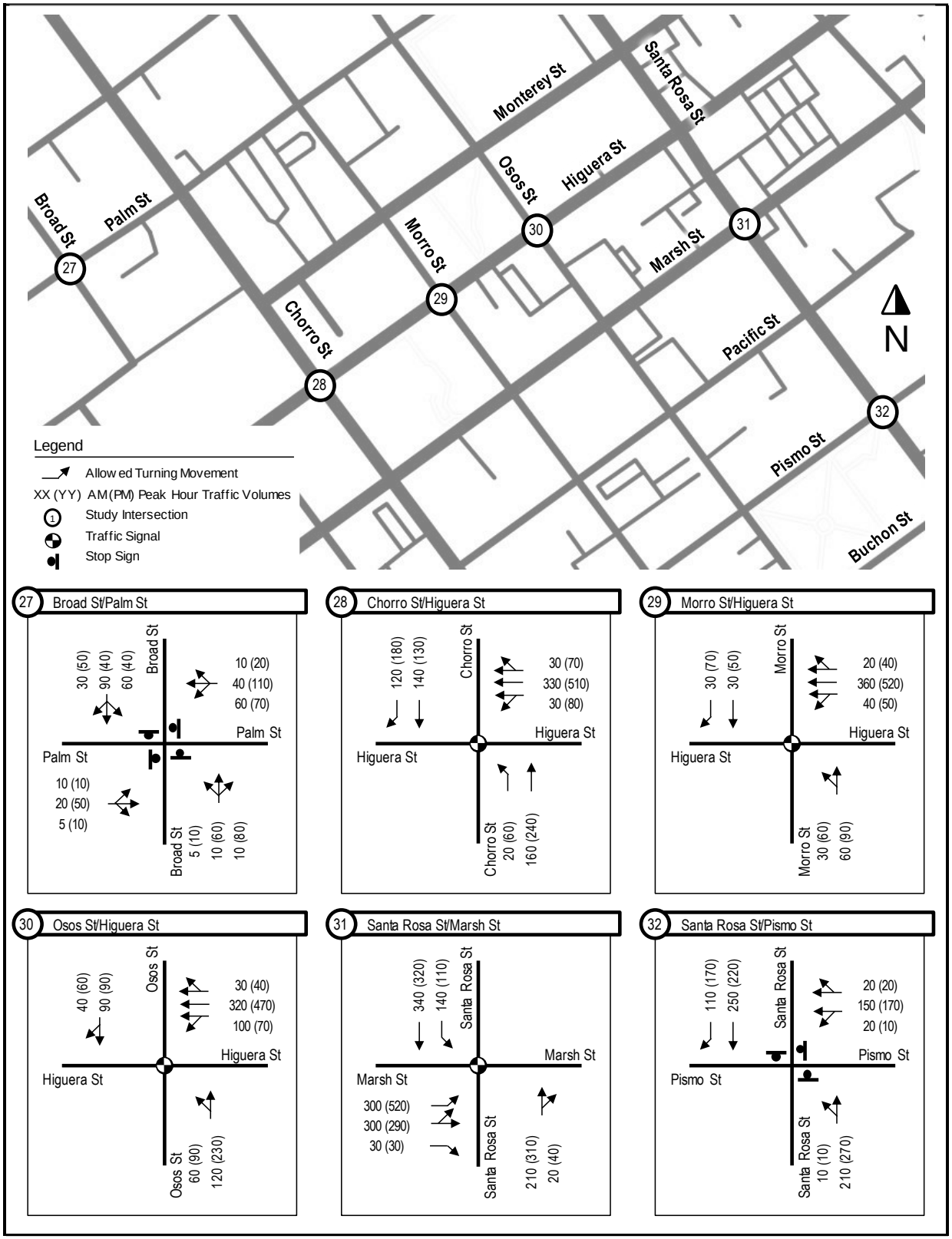


Exhibit 39: Near-Term No Project Traffic Volumes and Lane Configurations (Map F)

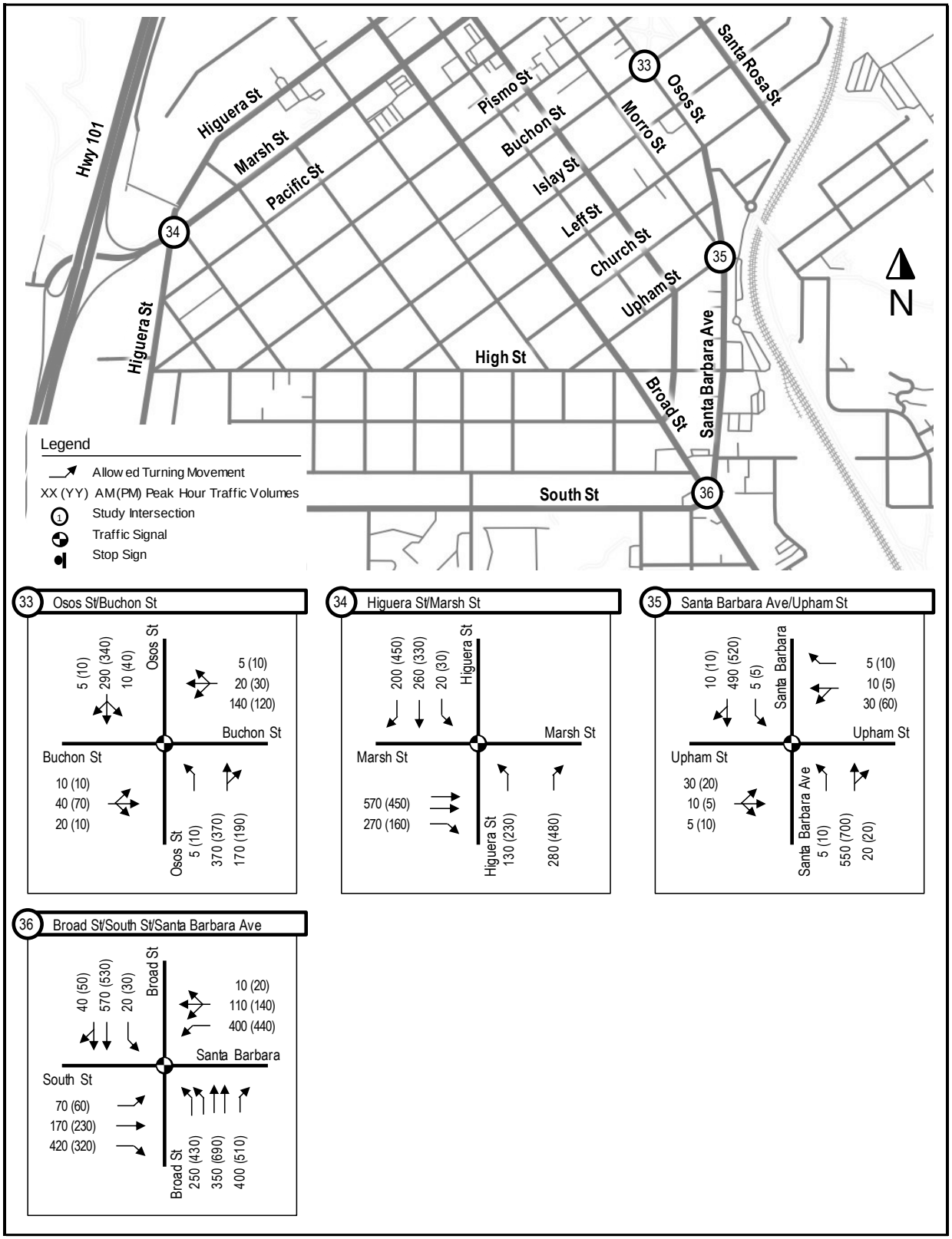


Exhibit 39: Near-Term No Project Traffic Volumes and Lane Configurations (Map G)

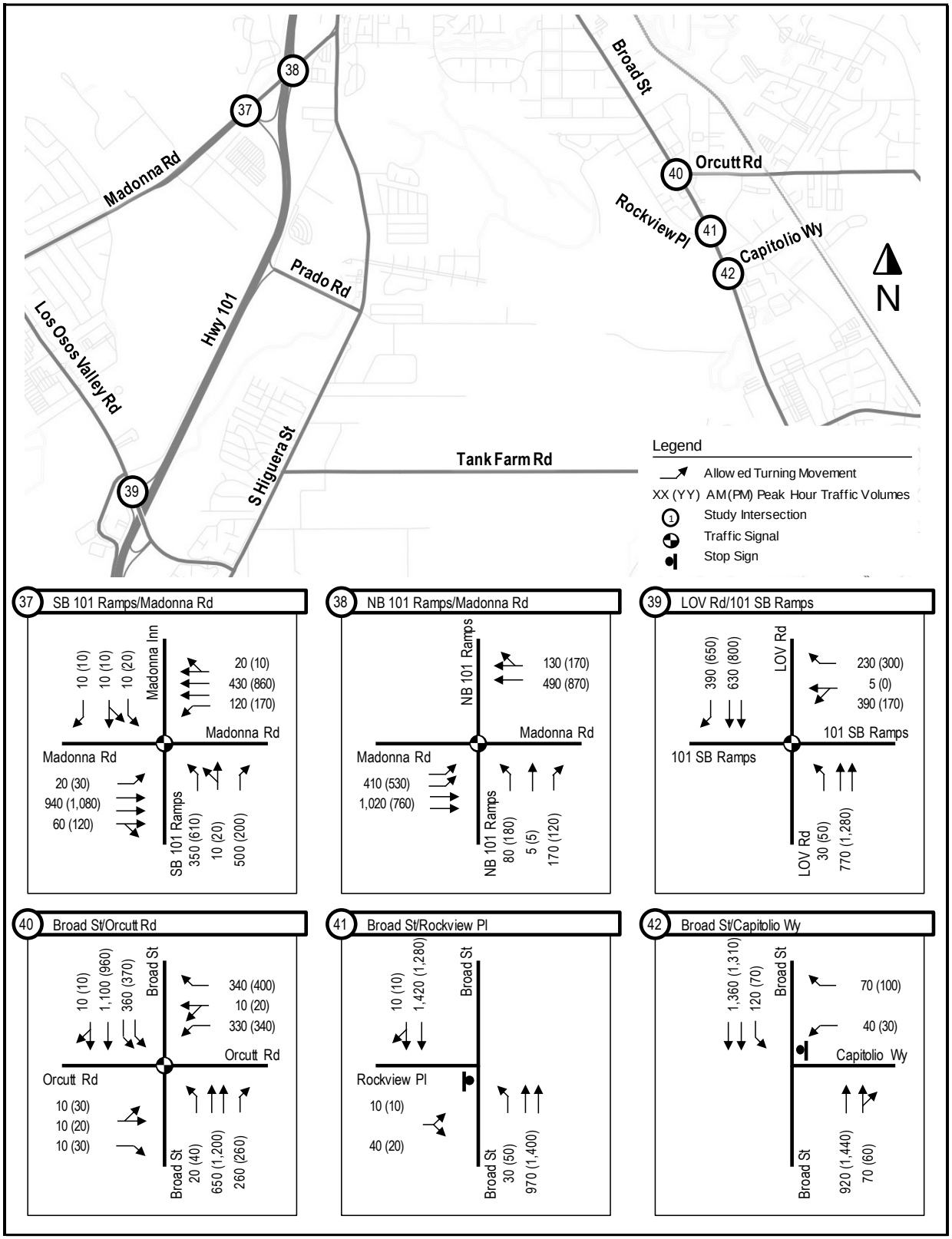


Exhibit 39: Near-Term No Project Traffic Volumes and Lane Configurations (Map H)

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			Average Delay	HCM LOS	Average Delay	HCM LOS
1	Hwy 1/Stenner Creek Rd	TWSC	30.9	D	23.2	C
2	Santa Rosa St/Highland Dr	Signalized	35.7	D	37.2	D
3	Mt Bishop Rd/Highland Dr	TWSC	21.7	C	16.2	C
4	California Blvd/Highland Dr	AWSC	15.3	C	14.2	B
5	California Blvd/Campus Wy	AWSC	10.5	B	15.2	C
6	Santa Rosa St/Foothill Blvd	Signalized	57.7	**E**	55.8	**E**
7	California Blvd/Foothill Blvd	Signalized	29.7	C	22.5	C
8	Carpenter St/Foothill Blvd	TWSC	14.2	B	17.0	C
9	Grand Ave/Slack St	AWSC	35.2	**E**	13.0	B
10	Grand Ave/Fredericks St	TWSC	11.4	B	12.7	B
11	Grand Ave/US-101 SB Ramps	TWSC	16.1	C	11.6	B
12	Grand Ave/US-101 NB Ramps	Signalized	20.3	C	9.0	A
13	Grand Ave/Mill St	TWSC	12.9	B	14.0	B
14	Grand Ave/Monterey St	Signalized	7.7	A	8.2	A
15	Santa Rosa St/Murray Ave	Signalized	26.5	C	53.4	D
16	Santa Rosa St/Olive St	Signalized	7.3	A	9.0	A
17	Santa Rosa St/Walnut St	Signalized	30.7	C	74.4	**E**
18	California Blvd/Hathway Ave	TWSC	30.1	D	21.2	C
19	California Blvd/Taft St	TWSC	30.1	D	52.4	**F**
20	California Blvd/US-101 NB Ramps	TWSC	21.7	C	46.2	**E**
21	Santa Rosa St/Mill St	Signalized	5.5	A	6.4	A
22	Santa Rosa St/Palm St	Signalized	5.8	A	3.7	A
23	Santa Rosa St/Monterey St	Signalized	5.7	A	6.9	A
24	Santa Rosa St/Higuera St	Signalized	4.8	A	5.7	A
25	Johnson Ave/Monterey Ave	Signalized	11.8	B	10.4	B
26	California Blvd/Monterey St	Signalized	24.0	C	41.7	D
27	Broad St/Palm St	AWSC	9.4	A	9.5	A
28	Chorro St/Higuera St	Signalized	11.7	B	11.8	B
29	Morro St/Higuera St	Signalized	17.4	B	18.0	B
30	Osos St/Higuera St	Signalized	11.8	B	12.7	B
31	Santa Rosa St/Marsh St	Signalized	14.1	B	13.2	B
32	Santa Rosa St/Pismo St	AWSC	11.4	B	12.8	B
33	Osos St/Buchon St	Signalized	15.3	B	8.8	A
34	Higuera St/Marsh St	Signalized*	18.1	B	14.9	B
35	Santa Barbara Ave/Upham St	Signalized	8.8	A	9.4	A
36	Broad St/South St/Santa Barbara Ave	Signalized	46.5	D	40.4	D
37	US-101 SB Ramps/Madonna Rd	Signalized	68.9	**E**	38.7	D
38	US-101 NB Ramps/Madonna Rd	Signalized	16.6	B	21.4	C
39	Los Osos Valley Rd/US-101 SB Ramps	Signalized	28.7	C	41.0	D
40	Broad St/Orcutt Rd	Signalized	29.2	C	40.6	D
41	Broad St/Rockview Pl	TWSC	85.6	**F**	174.2	**F**
42	Broad St/Capitolio Wy	TWSC	25.2	D	35.0	**E**
43	Hwy 1/Project Driveway	N/A	Does not exist in this scenario			

*Intersection LOS was calculated using HCM 2000 Method, because of non-standard lane groups or phasing that do not conform to the HCM 2010 computational engine.
TWSC Intersection LOS is based on maximum approach delay.

Exhibit 40: Near-Term No Project Intersection LOS

4.2 Freeway LOS

The LOS for the study freeway segments under 2021 Near-Term No Project conditions are shown in Exhibit 41. For the PM peak hour the northbound segment between Marsh Street and Broad Street changed from LOS "D" under existing conditions to LOS "E" under Near-Term No Project conditions. In other words, traffic conditions on this segment of US 101 are already approaching the threshold of undesirable congestion and will pass that threshold in the near-term future whether the Campus Master Plan is implemented or not.

	ID	Freeway Segment	Analysis Type	# of Lanes	AM Peak Hour			PM Peak Hour		
					Volume	Density	LOS	Volume	Density	LOS
US-101 NB	1	Marsh St to Broad St	Basic	2	2,990	25.6	C	3,800	35.9	**E**
	2	Broad St to Osos St	Weaving	2+Aux	2,870	19.8	B	3,730	26.1	C
	3	Osos St to Toro St	Weaving	2+Aux	2,320	15.4	B	3,420	23.5	C
	4	Toro St to California Blvd	Weaving	2+Aux	2,050	13.5	B	3,120	20.5	C
	5	California Blvd to Grand Ave	Weaving	2+Aux	1,670	10.7	B	3,170	21.1	C
US-101 SB	6	Grand Ave to Taft St	Weaving	2+Aux	2,760	18.4	B	1,600	10.1	B
	7	Taft St to Montalban St	Weaving	2+Aux	2,550	16.4	B	2,270	15.8	B
	8	Lemon St to Olive St	Weaving	2+Aux	2,670	17.6	B	2,860	19.8	B
	9	Olive St to Broad St	Weaving	2+Aux	2,880	19.6	B	3,370	23.8	C
	10	Broad St to Marsh St	Basic	2	2,950	25.2	C	3,470	31.1	D

Exhibit 41: Near-Term No Project LOS on Study Freeways

4.3 Pedestrian Conditions

The SLO travel demand model provides a generalized estimate of the growth of bicycle and pedestrian trip making. In accordance with City guidelines, peak hour intersection pedestrian volumes were estimated by applying the forecasted citywide percentage increase in pedestrian trips to the existing bicycle and pedestrian intersection movement counts. Using this methodology we forecast a 5% increase in pedestrian volumes from the existing volumes shown in Exhibit 16. Since the volumes in Exhibit 16 are small to begin with a 5% increase is less than one person per hour in nearly every case. No difference was found in the pedestrian LOS under Near-Term No Project conditions from those reported in Exhibit 17 for existing conditions.

4.4 Bicycle Conditions

As with the pedestrian forecasts and in accordance with City guidelines, peak hour bicycle volumes were estimated by applying the forecasted citywide percentage increase in bicycle trips to the existing bicycle intersection movement counts. Using this methodology we forecast a 7% increase in bicycle volumes from the existing volumes shown in Exhibit 19. The 2021 Near-Term No Project bicycle LOS is shown in Exhibit 42.

ID	Intersection Name	Control Type	AM Peak Hour								PM Peak Hour							
			EB		WB		NB		SB		EB		WB		NB		SB	
			Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS
2	Santa Rosa St/Highland Dr	Signalized	3.28	C	1.81	A	4.19	D	3.60	D	3.14	C	2.57	B	3.87	D	3.72	D
6	Santa Rosa St/Foothill Blvd	Signalized	3.58	D	2.32	B	3.83	D	2.61	B	3.00	C	2.43	B	3.89	D	2.82	C
7	California Blvd/Foothill Blvd	Signalized	4.22	D	2.87	C	3.07	C	2.79	C	3.83	D	3.05	C	2.76	C	3.33	C
12	Grand Ave/Hwy 101 NB Ramps	Signalized	3.54	D	2.56	B	1.01	A	0.63	A	2.87	C	2.55	B	0.84	A	0.75	A
14	Grand Ave/Monterey St	Signalized	3.32	C	2.35	B	2.37	B	2.49	B	3.61	D	1.97	A	2.34	B	2.81	C
15	Santa Rosa St/Murray Ave	Signalized	2.77	C	2.88	C	2.23	B	2.05	B	2.78	C	3.10	C	2.22	B	2.13	B
16	Santa Rosa St/Olive St	Signalized	3.02	C	2.81	C	2.28	B	2.11	B	2.70	B	2.78	C	2.63	B	2.30	B
17	Santa Rosa St/Walnut St	Signalized	2.79	C	3.80	D	1.68	A	1.91	A	2.73	B	3.62	D	2.22	B	1.66	A
21	Santa Rosa St/Mill St	Signalized	2.59	B	2.82	C	1.60	A	2.04	B	2.80	C	2.96	C	1.96	A	1.73	A
22	Santa Rosa St/Palm St	Signalized	2.81	C	2.65	B	1.56	A	2.12	B	2.88	C	2.65	B	1.93	A	1.87	A
23	Santa Rosa St/Monterey St	Signalized	2.70	B	3.12	C	1.72	A	2.11	B	2.75	C	3.22	C	2.05	B	1.87	A
24	Santa Rosa St/Higuera St	Signalized	N/A		2.62	B	1.52	A	2.57	B	N/A		2.63	B	1.86	A	2.34	B
25	Johnson Ave/Monterey Ave	Signalized	2.63	B	3.14	C	2.39	B	2.70	B	2.75	C	2.94	C	2.11	B	2.63	B
26	California Blvd/Monterey St	Signalized	2.95	C	3.14	C	1.92	A	1.53	A	3.04	C	3.10	C	2.06	B	1.68	A
28	Chorro St/Higuera St	Signalized	N/A		2.55	B	2.45	B	2.63	B	N/A		2.67	B	2.72	B	2.69	B
29	Morro St/Higuera St	Signalized	N/A		2.37	B	2.31	B	2.29	B	N/A		2.47	B	2.42	B	2.37	B
30	Osos St/Higuera St	Signalized	N/A		2.22	B	2.43	B	2.36	B	N/A		2.26	B	2.72	B	2.43	B
31	Santa Rosa St/Marsh St	Signalized	1.49	A	N/A		1.47	A	2.02	B	1.53	A	N/A	0.00	1.78	A	1.84	A
33	Osos St/Buchon St	Signalized	1.86	A	2.13	B	2.59	B	2.14	B	1.88	A	2.01	B	2.65	B	2.28	B
34	Higuera St/Marsh St	Signalized	2.97	C	N/A		N/A		2.37	B	2.67	B	N/A		N/A		2.95	C
35	Santa Barbara Ave/Upham St	Signalized	1.41	A	1.18	A	2.23	B	3.17	C	1.38	A	1.24	A	2.43	B	3.08	C
36	Broad St/South St/Santa Barbara Ave	Signalized	4.07	D	3.66	D	1.98	A	2.04	B	3.97	D	3.88	D	2.60	B	2.04	B
37	Hwy 101 SB Ramps/Madonna Rd	Signalized	1.84	A	1.58	A	4.70	E	2.96	C	1.95	A	1.84	A	4.51	E	2.98	C
38	Hwy 101 NB Ramps/Madonna Rd	Signalized	2.57	B	1.61	A	3.46	C	N/A		2.18	B	2.01	B	2.24	B	N/A	
39	Los Osos Valley Rd/Hwy 101 SB Ramps	Signalized	N/A		3.95	D	1.86	A	1.86	A	0.00		3.61	D	2.38	B	2.21	B
40	Broad St/Orcutt Rd	Signalized	2.88	C	2.95	C	2.37	B	2.72	B	3.00	C	3.27	C	2.91	C	2.53	B

Exhibit 42: Near-Term No Project Bicycle LOS

Note: Exhibit 42 only lists the study intersections that are signalized because there is no methodology for calculating bicycle LOS at stop-controlled intersections. The assumption is that the bicycle would stop and then proceed without encountering a delay.

4.5 Transit Conditions

Under 2021 Near-Term No Project conditions the transit route configuration from the Short Range Transit Plan (see Exhibit 22) would replace the current transit routes (see Exhibit 21). According to the SLO travel demand model, transit ridership can be expected to increase by 3% by 2021. No other changes to the transit system are expected.

5 2021 NEAR-TERM PLUS PROJECT CONDITIONS

5.1 Intersection LOS

The 2021 Near-Term Plus Project traffic volumes are shown in Exhibit 43. The Near-Term Plus Project intersection LOS is shown in Exhibit 44. The target LOS would not be met at the following 7 locations:

- Intersection #6, Santa Rosa St/Foothill Blvd, during the AM and PM peak hours
- Intersection #17, Santa Rosa St/Walnut St, during the PM peak hour
- Intersection #19, California Blvd/Taft St, during the PM peak hour
- Intersection #20, California Blvd/Hwy 101 NB Ramps, during the PM peak hour
- Intersection #37, US 101 SB Ramps/Madonna Rd, during the AM peak hour
- Intersection #41, Broad St/Rockview Pl, during the AM and PM peak hours
- Intersection #42, Broad St/Capitolio Wy, during the PM peak hour

These are the same 8 intersections that would not meet the target LOS under 2021 Near-Term No Project conditions.

Exhibit 48 illustrates the results of the intersection impact analysis based on CSU's significance thresholds. The exhibit shows that the 2021 Near-Term Plus Project would have no significant impacts on study intersections in the AM or PM peak hours.

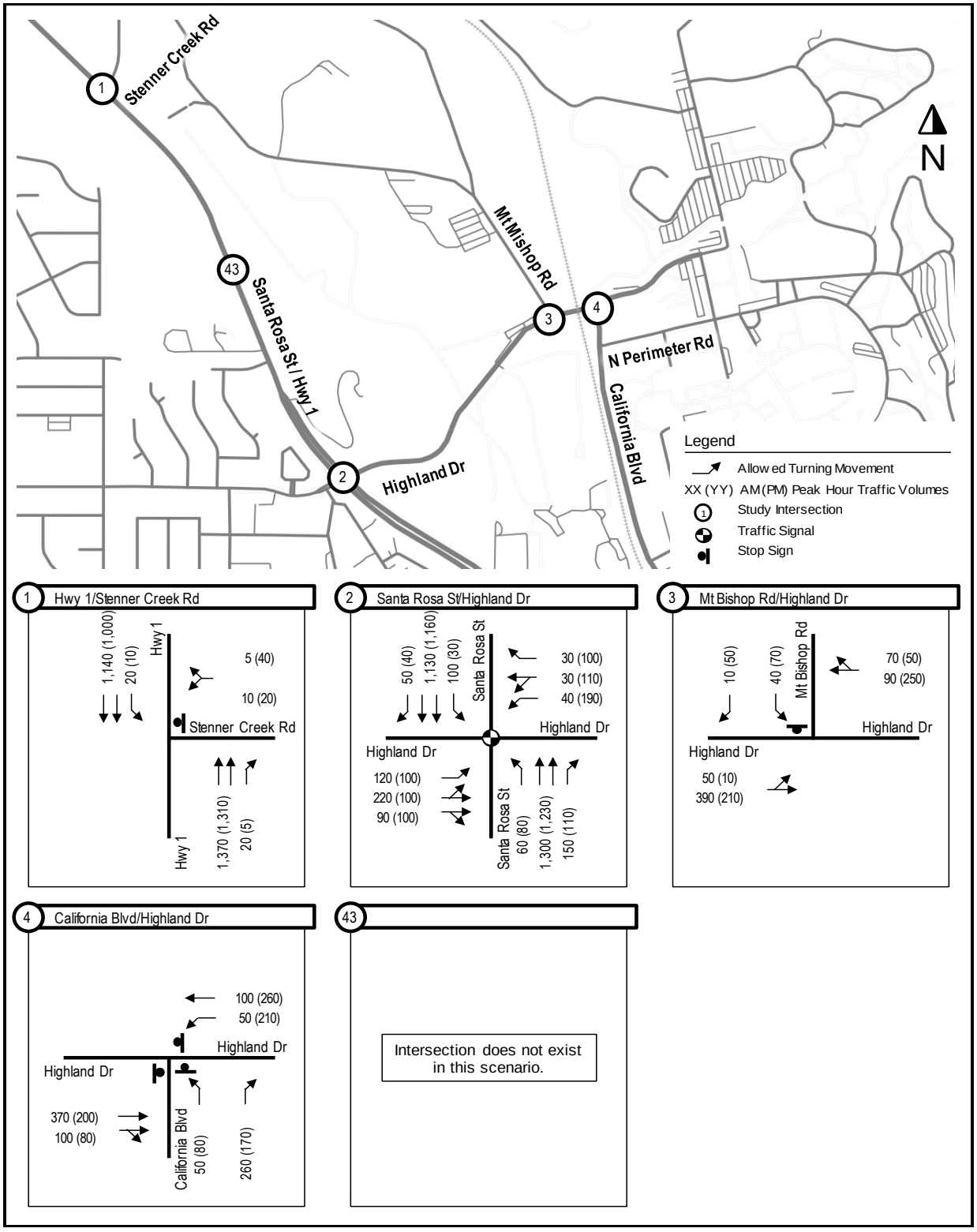


Exhibit 43: Near-Term Plus Project Traffic Volumes and Lane Configurations

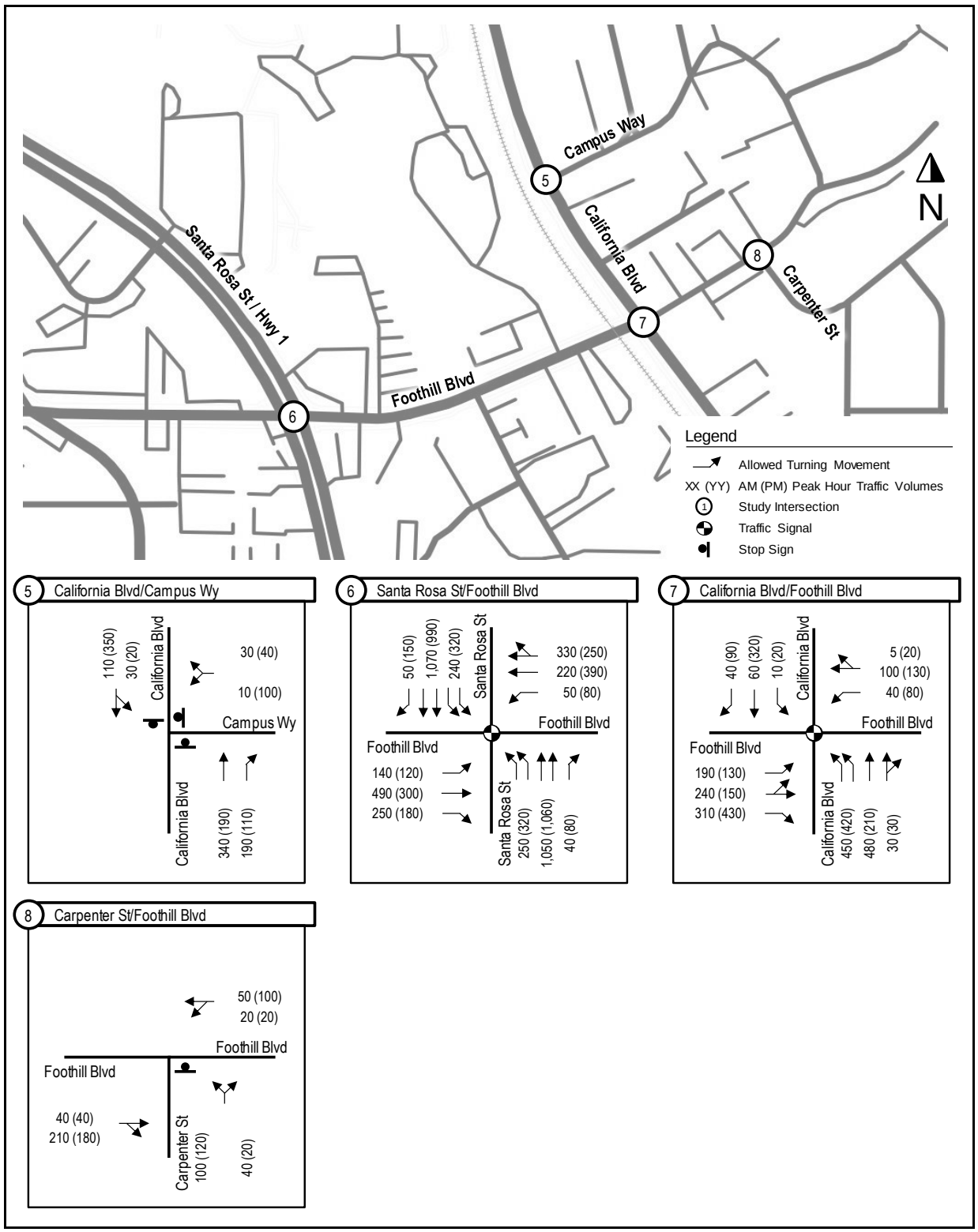


Exhibit 43: Near-Term Plus Project Traffic Volumes and Lane Configurations (Map B)

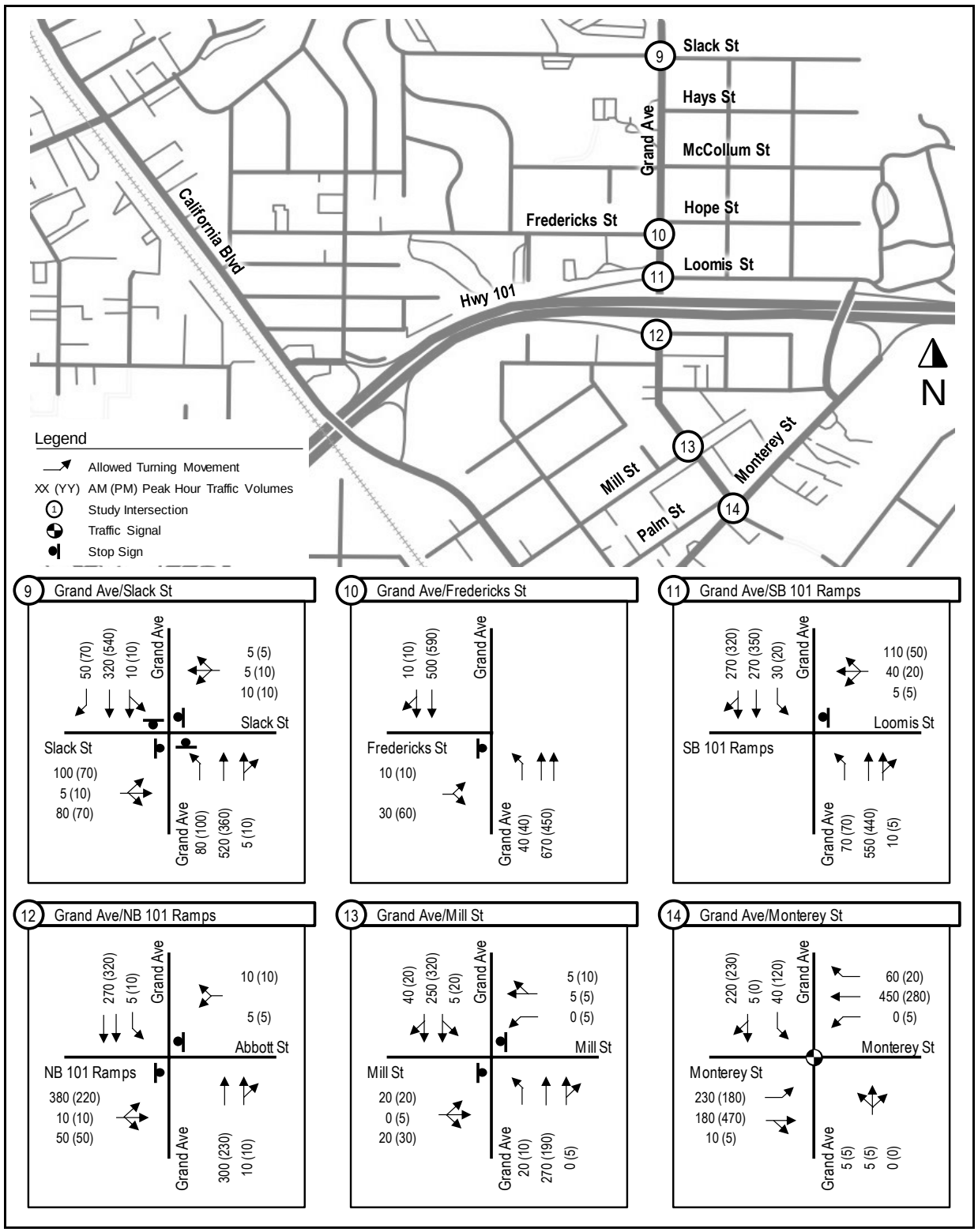


Exhibit 43: Near-Term Plus Project Traffic Volumes and Lane Configurations (Map C)

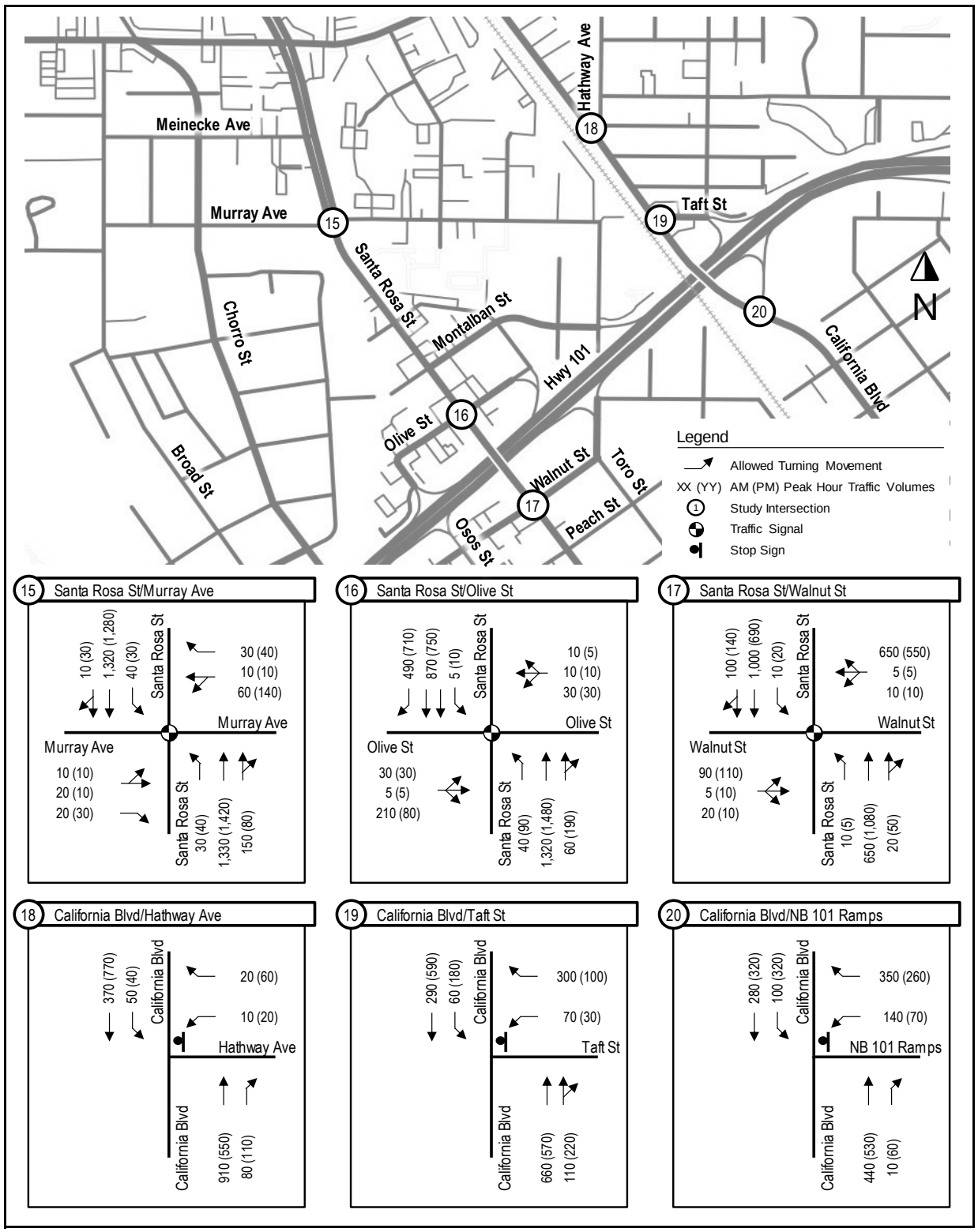


Exhibit 43: Near-Term Plus Project Traffic Volumes and Lane Configurations (Map D)

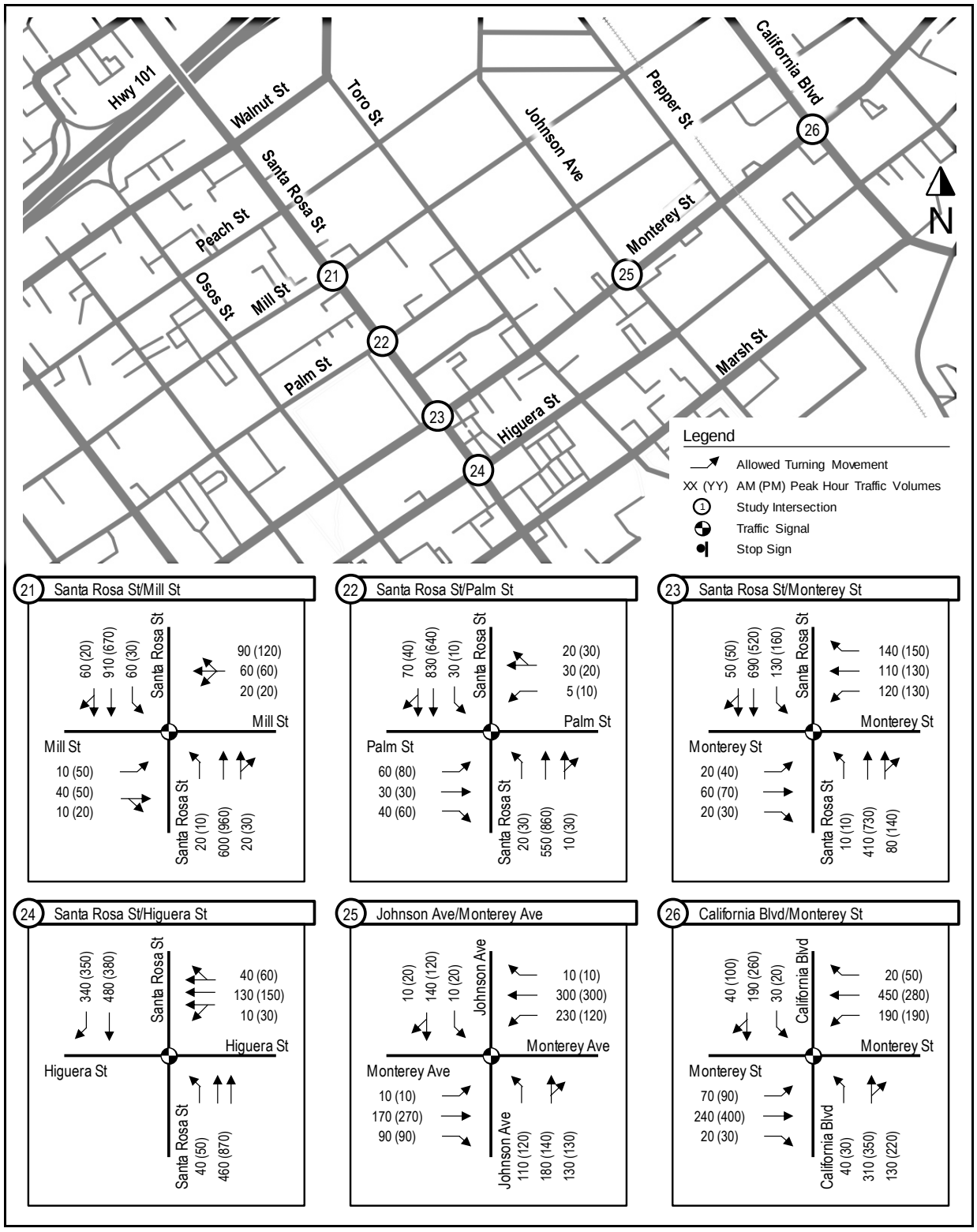


Exhibit 43: Near-Term Plus Project Traffic Volumes and Lane Configurations (Map E)

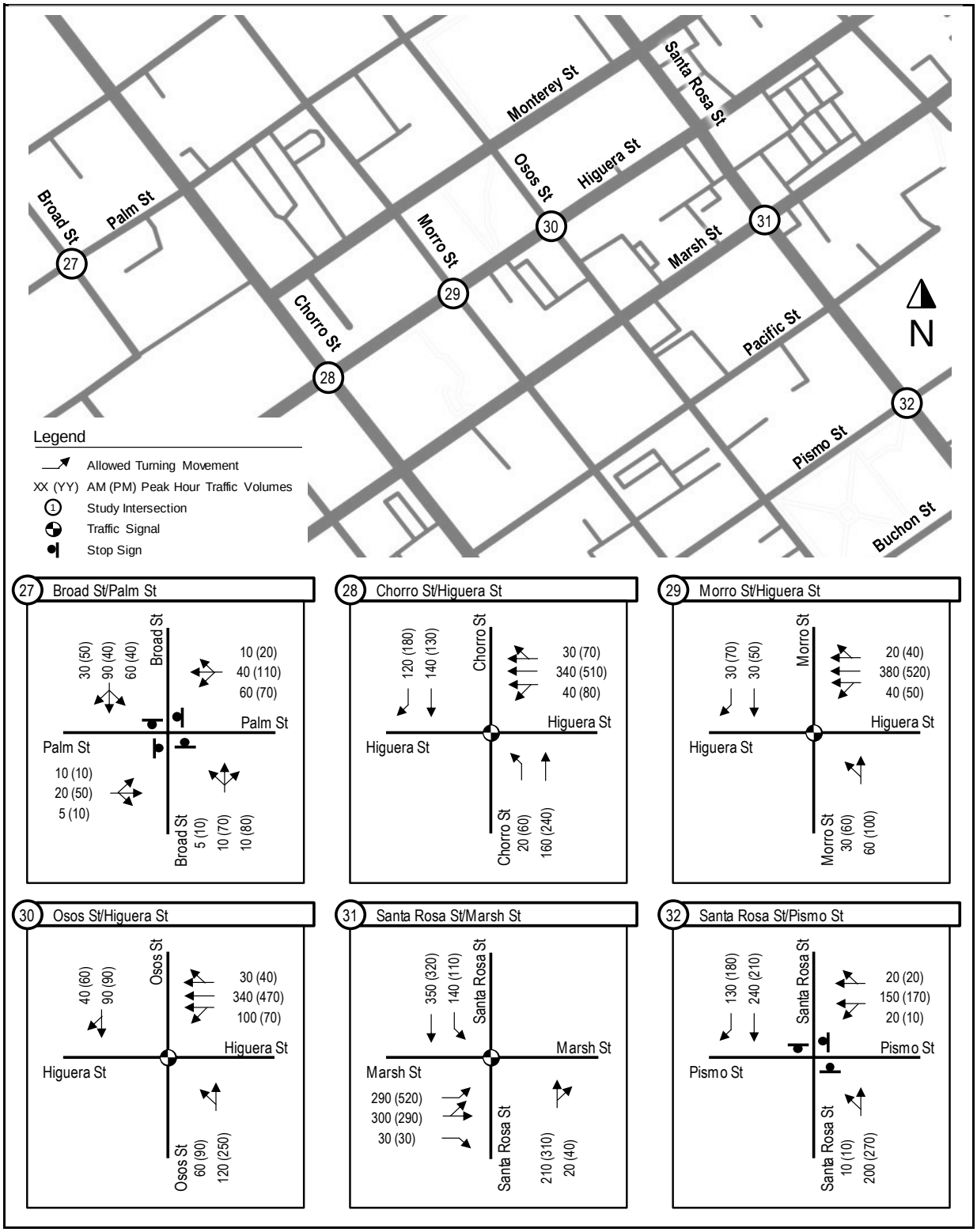


Exhibit 43: Near-Term Plus Project Traffic Volumes and Lane Configurations (Map F)

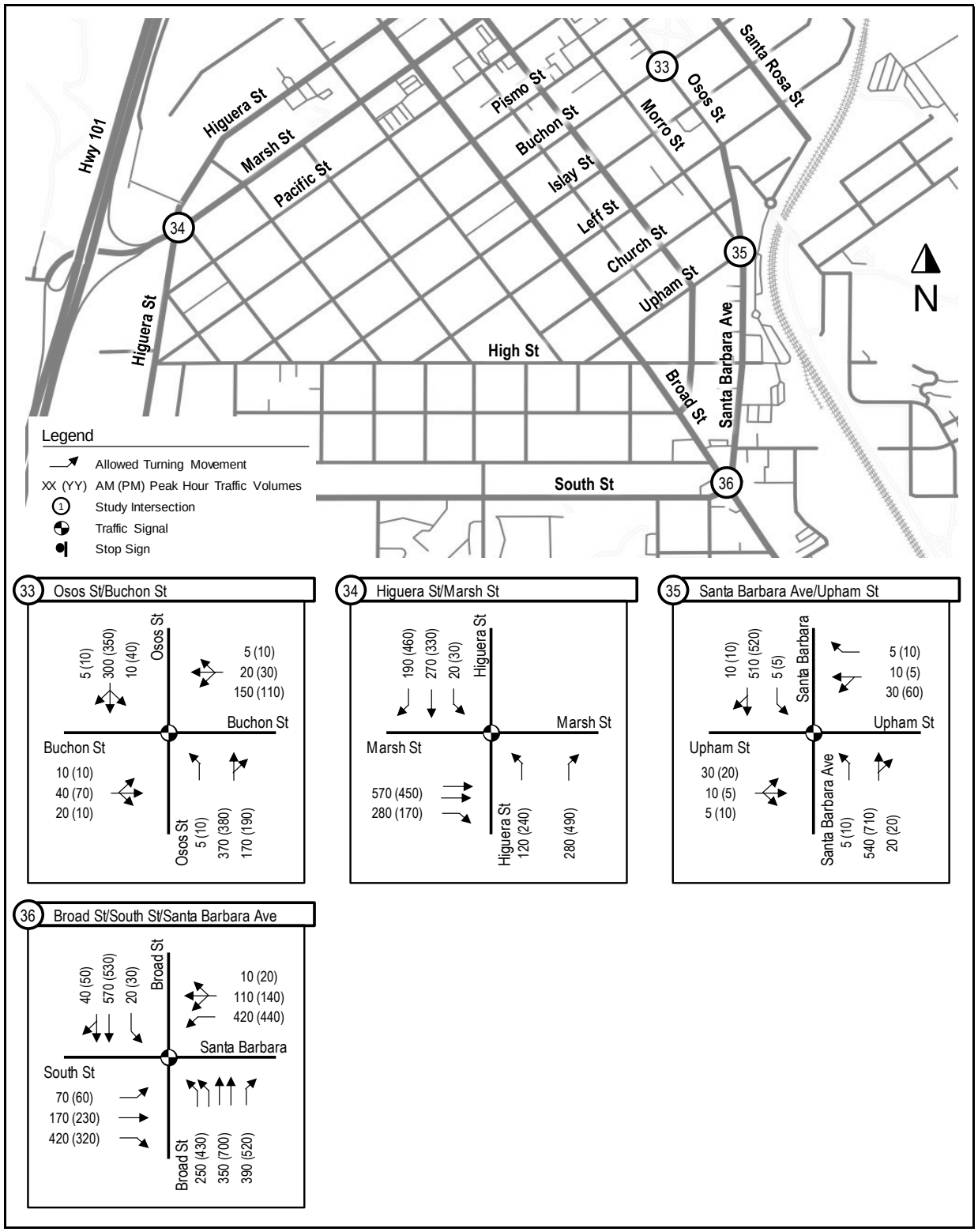


Exhibit 43: Near-Term Plus Project Traffic Volumes and Lane Configurations (Map G)

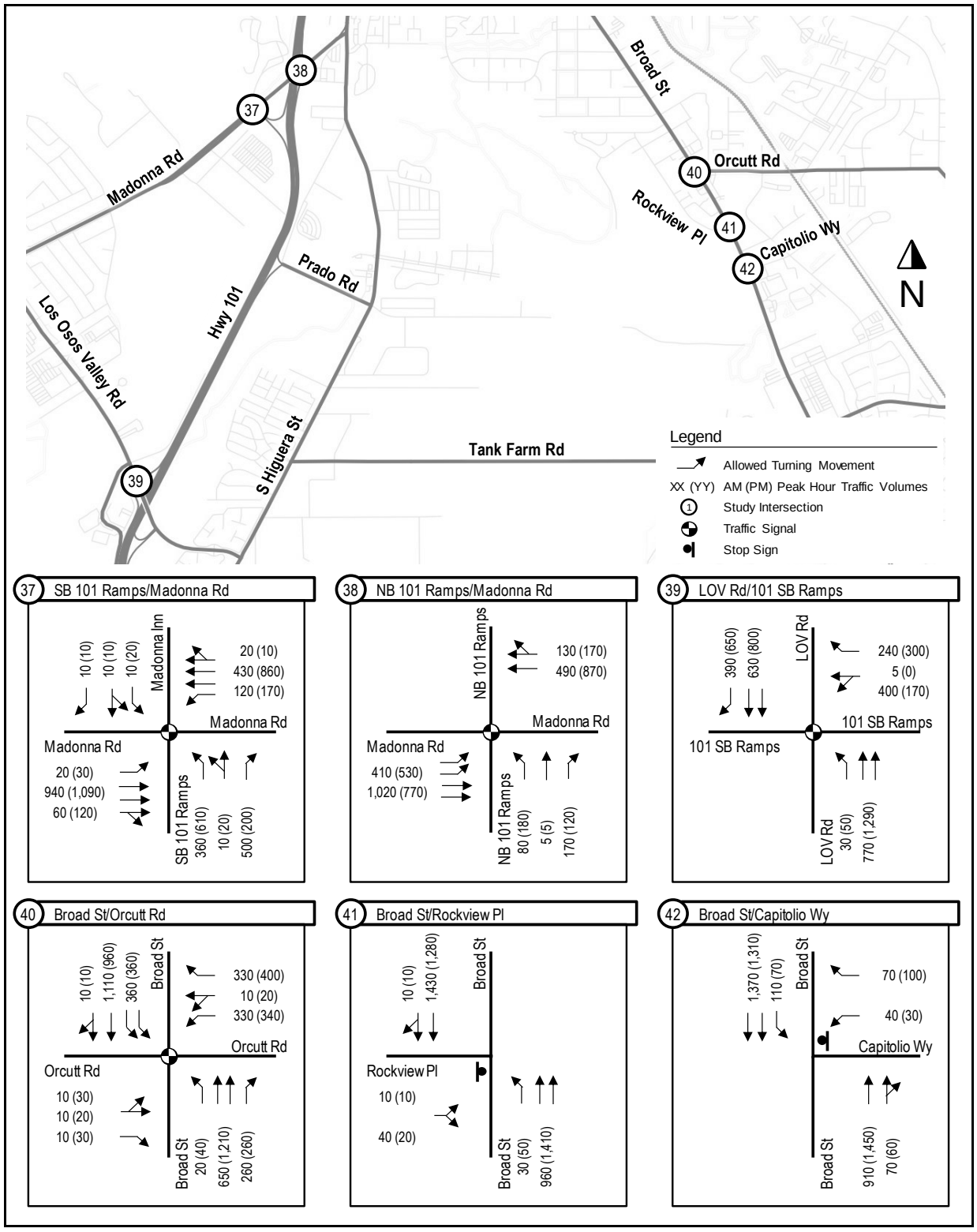


Exhibit 43: Near-Term Plus Project Traffic Volumes and Lane Configurations (Map H)

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			Average Delay	HCM LOS	Average Delay	HCM LOS
1	Hwy 1/Stenner Creek Rd	TWSC	31.9	D	28.5	D
2	Santa Rosa St/Highland Dr	Signalized	33.5	C	36.0	D
3	Mt Bishop Rd/Highland Dr	TWSC	19.0	C	15.2	C
4	California Blvd/Highland Dr	AWSC	13.7	B	13.3	B
5	California Blvd/Campus Wy	AWSC	10.1	B	12.7	B
6	Santa Rosa St/Foothill Blvd	Signalized	59.9	**E**	56.2	**E**
7	California Blvd/Foothill Blvd	Signalized	31.1	C	22.8	C
8	Carpenter St/Foothill Blvd	TWSC	15.6	C	17.9	C
9	Grand Ave/Slack St	AWSC	26.2	D	15.4	C
10	Grand Ave/Fredericks St	TWSC	13.1	B	13.0	B
11	Grand Ave/US-101 SB Ramps	TWSC	14.7	B	12.1	B
12	Grand Ave/US-101 NB Ramps	Signalized	15.3	B	10.0	B
13	Grand Ave/Mill St	TWSC	13.3	B	13.9	B
14	Grand Ave/Monterey St	Signalized	9.4	A	8.8	A
15	Santa Rosa St/Murray Ave	Signalized	25.9	C	53.3	D
16	Santa Rosa St/Olive St	Signalized	7.3	A	8.9	A
17	Santa Rosa St/Walnut St	Signalized	33.4	C	68.2	**E**
18	California Blvd/Hathway Ave	TWSC	32.5	D	21.2	C
19	California Blvd/Taft St	TWSC	30.2	D	45.0	**E**
20	California Blvd/US-101 NB Ramps	TWSC	25.9	D	40.4	**E**
21	Santa Rosa St/Mill St	Signalized	5.5	A	6.3	A
22	Santa Rosa St/Palm St	Signalized	5.8	A	3.7	A
23	Santa Rosa St/Monterey St	Signalized	6.0	A	7.0	A
24	Santa Rosa St/Higuera St	Signalized	4.7	A	5.7	A
25	Johnson Ave/Monterey Ave	Signalized	12.4	B	10.5	B
26	California Blvd/Monterey St	Signalized	24.5	C	44.6	D
27	Broad St/Palm St	AWSC	9.4	A	9.5	A
28	Chorro St/Higuera St	Signalized	11.7	B	11.8	B
29	Morro St/Higuera St	Signalized	17.7	B	17.9	B
30	Osos St/Higuera St	Signalized	11.8	B	12.9	B
31	Santa Rosa St/Marsh St	Signalized	14.3	B	13.2	B
32	Santa Rosa St/Pismo St	AWSC	11.1	B	12.7	B
33	Osos St/Buchon St	Signalized	15.3	B	8.6	A
34	Higuera St/Marsh St	Signalized*	18.1	B	15.2	B
35	Santa Barbara Ave/Upham St	Signalized	8.8	A	9.5	A
36	Broad St/South St/Santa Barbara Ave	Signalized	47.7	D	40.3	D
37	US-101 SB Ramps/Madonna Rd	Signalized	69.0	**E**	39.0	D
38	US-101 NB Ramps/Madonna Rd	Signalized	16.6	B	21.4	C
39	Los Osos Valley Rd/US-101 SB Ramps	Signalized	28.8	C	40.8	D
40	Broad St/Orcutt Rd	Signalized	29.2	C	40.8	D
41	Broad St/Rockview Pl	TWSC	85.6	**F**	>180	**F**
42	Broad St/Capitolio Wy	TWSC	24.4	C	35.5	**E**
43	Hwy 1/Project Driveway	N/A	Does not exist in this scenario			

*Intersection LOS was calculated using HCM 2000 Method, because of non-standard lane groups or phasing that do not conform to the HCM 2010 computational engine.
TWSC Intersection LOS is based on maximum approach delay.

Exhibit 44: 2021 Near-Term Plus Project Auto Level of Service (LOS) at Study Intersections

Study ID	Intersection Name	Control Type	2021 No Project		2021 Near-Term Project		Change from LOS D or Better to LOS E or F?	Unacceptable LOS and Project Adds 10 trips and adds 5 Seconds of Delay?	V/C Ratio		LOS F and Project Adds 10 trips and 5 Seconds of Delay and Increases V/C Ratio by .02?
			Average Delay	HCM LOS	Average Delay	HCM LOS			2021 No Project	2021 Near Term Project	
1	Hwy 1/Stenner Creek Rd	TWSC	30.9	D	31.9	D	No	No			No
2	Santa Rosa St/Highland Dr	Signalized	35.7	D	33.5	C	No	No			No
3	Mt Bishop Rd/Highland Dr	TWSC	21.7	C	19.0	C	No	No			No
4	California Blvd/Highland Dr	AWSC	15.3	C	13.7	B	No	No			No
5	California Blvd/Campus Wy	AWSC	10.5	B	10.1	B	No	No			No
6	Santa Rosa St/Foothill Blvd	Signalized	57.7	**E**	59.9	**E**	No	No			No
7	California Blvd/Foothill Blvd	Signalized	29.7	C	31.1	C	No	No			No
8	Carpenter St/Foothill Blvd	TWSC	14.2	B	15.6	C	No	No			No
9	Grand Ave/Slack St	AWSC	35.2	**E**	26.2	D	No	No			No
10	Grand Ave/Fredericks St	TWSC	11.4	B	13.1	B	No	No			No
11	Grand Ave/US-101 SB Ramps	TWSC	16.1	C	14.7	B	No	No			No
12	Grand Ave/US-101 NB Ramps	Signalized	20.3	C	15.3	B	No	No			No
13	Grand Ave/Mill St	TWSC	12.9	B	13.3	B	No	No			No
14	Grand Ave/Monterey St	Signalized	7.7	A	9.4	A	No	No			No
15	Santa Rosa St/Murray Ave	Signalized	26.5	C	25.9	C	No	No			No
16	Santa Rosa St/Olive St	Signalized	7.3	A	7.3	A	No	No			No
17	Santa Rosa St/Walnut St	Signalized	30.7	C	33.4	C	No	No			No
18	California Blvd/Hathway Ave	TWSC	30.1	D	32.5	D	No	No			No
19	California Blvd/Taft St	TWSC	30.1	D	30.2	D	No	No			No
20	California Blvd/US-101 NB Ramps	TWSC	21.7	C	25.9	D	No	No			No
21	Santa Rosa St/Mill St	Signalized	5.5	A	5.5	A	No	No			No
22	Santa Rosa St/Palm St	Signalized	5.8	A	5.8	A	No	No			No
23	Santa Rosa St/Monterey St	Signalized	5.7	A	6.0	A	No	No			No
24	Santa Rosa St/Higuera St	Signalized	4.8	A	4.7	A	No	No			No
25	Johnson Ave/Monterey Ave	Signalized	11.8	B	12.4	B	No	No			No
26	California Blvd/Monterey St	Signalized	24.0	C	24.5	C	No	No			No
27	Broad St/Palm St	AWSC	9.4	A	9.4	A	No	No			No
28	Chorro St/Higuera St	Signalized	11.7	B	11.7	B	No	No			No
29	Morro St/Higuera St	Signalized	17.4	B	17.7	B	No	No			No
30	Osos St/Higuera St	Signalized	11.8	B	11.8	B	No	No			No
31	Santa Rosa St/Marsh St	Signalized	14.1	B	14.3	B	No	No			No
32	Santa Rosa St/Pismo St	AWSC	11.4	B	11.1	B	No	No			No
33	Osos St/Buchon St	Signalized	15.3	B	15.3	B	No	No			No
34	Higuera St/Marsh St	Signalized*	18.1	B	18.1	B	No	No			No
35	Santa Barbara Ave/Upham St	Signalized	8.8	A	8.8	A	No	No			No
36	Broad St/South St/Santa Barbara Ave	Signalized	46.5	D	47.7	D	No	No			No
37	US-101 SB Ramps/Madonna Rd	Signalized	68.9	**E**	69.0	**E**	No	No			No
38	US-101 NB Ramps/Madonna Rd	Signalized	16.6	B	16.6	B	No	No			No
39	Los Osos Valley Rd/US-101 SB Ramps	Signalized	28.7	C	28.8	C	No	No			No
40	Broad St/Orcutt Rd	Signalized	29.2	C	29.2	C	No	No			No
41	Broad St/Rockview Pl	TWSC	85.6	**F**	85.6	**F**	No	No	0.52	0.53	No
42	Broad St/Capitolio Wy	TWSC	25.2	D	24.4	C	No	No			No
43	Hwy 1/Project Driveway	N/A	Does Not Exist		Does Not Exist		N/A	N/A			N/A

Exhibit 45: Determination of Intersection Impacts for 2021 Near-Term Plus Project in AM Peak Hour

Study ID	Intersection Name	Control Type	2021 No Project		2021 Near-Term Project		Change from LOS D or Better to LOS E or F?	LOS E and Project Adds 10 trips and adds 5 Seconds of Delay?	V/C Ratio		LOS F and Project Adds 10 trips and 5 Seconds of Delay and Increases V/C Ratio by .02?
			Average Delay	HCM LOS	Average Delay	HCM LOS			2021 No Project	2021 Near Term Project	
1	Hwy 1/Stenner Creek Rd	TWSC	23.2	C	28.5	D	No	No			No
2	Santa Rosa St/Highland Dr	Signalized	37.2	D	36.0	D	No	No			No
3	Mt Bishop Rd/Highland Dr	TWSC	16.2	C	15.2	C	No	No			No
4	California Blvd/Highland Dr	AWSC	14.2	B	13.3	B	No	No			No
5	California Blvd/Campus Wy	AWSC	15.2	C	12.7	B	No	No			No
6	Santa Rosa St/Foothill Blvd	Signalized	55.8	**E**	56.2	**E**	No	No			No
7	California Blvd/Foothill Blvd	Signalized	22.5	C	22.8	C	No	No			No
8	Carpenter St/Foothill Blvd	TWSC	17.0	C	17.9	C	No	No			No
9	Grand Ave/Slack St	AWSC	13.0	B	15.4	C	No	No			No
10	Grand Ave/Fredericks St	TWSC	12.7	B	13.0	B	No	No			No
11	Grand Ave/US-101 SB Ramps	TWSC	11.6	B	12.1	B	No	No			No
12	Grand Ave/US-101 NB Ramps	Signalized	9.0	A	10.0	B	No	No			No
13	Grand Ave/Mill St	TWSC	14.0	B	13.9	B	No	No			No
14	Grand Ave/Monterey St	Signalized	8.2	A	8.8	A	No	No			No
15	Santa Rosa St/Murray Ave	Signalized	53.4	D	53.3	D	No	No			No
16	Santa Rosa St/Olive St	Signalized	9.0	A	8.9	A	No	No			No
17	Santa Rosa St/Walnut St	Signalized	74.4	**E**	68.2	**E**	No	No			No
18	California Blvd/Hathway Ave	TWSC	21.2	C	21.2	C	No	No			No
19	California Blvd/Taft St	TWSC	52.4	**F**	45.0	**E**	No	No			No
20	California Blvd/US-101 NB Ramps	TWSC	46.2	**E**	40.4	**E**	No	No			No
21	Santa Rosa St/Mill St	Signalized	6.4	A	6.3	A	No	No			No
22	Santa Rosa St/Palm St	Signalized	3.7	A	3.7	A	No	No			No
23	Santa Rosa St/Monterey St	Signalized	6.9	A	7.0	A	No	No			No
24	Santa Rosa St/Higuera St	Signalized	5.7	A	5.7	A	No	No			No
25	Johnson Ave/Monterey Ave	Signalized	10.4	B	10.5	B	No	No			No
26	California Blvd/Monterey St	Signalized	41.7	D	44.6	D	No	No			No
27	Broad St/Palm St	AWSC	9.5	A	9.5	A	No	No			No
28	Chorro St/Higuera St	Signalized	11.8	B	11.8	B	No	No			No
29	Morro St/Higuera St	Signalized	18.0	B	17.9	B	No	No			No
30	Osos St/Higuera St	Signalized	12.7	B	12.9	B	No	No			No
31	Santa Rosa St/Marsh St	Signalized	13.2	B	13.2	B	No	No			No
32	Santa Rosa St/Pismo St	AWSC	12.8	B	12.7	B	No	No			No
33	Osos St/Buchon St	Signalized	8.8	A	8.6	A	No	No			No
34	Higuera St/Marsh St	Signalized*	14.9	B	15.2	B	No	No			No
35	Santa Barbara Ave/Upham St	Signalized	9.4	A	9.5	A	No	No			No
36	Broad St/South St/Santa Barbara Ave	Signalized	40.4	D	40.3	D	No	No			No
37	US-101 SB Ramps/Madonna Rd	Signalized	38.7	D	39.0	D	No	No			No
38	US-101 NB Ramps/Madonna Rd	Signalized	21.4	C	21.4	C	No	No			No
39	Los Osos Valley Rd/US-101 SB Ramps	Signalized	41.0	D	40.8	D	No	No			No
40	Broad St/Orcutt Rd	Signalized	40.6	D	40.8	D	No	No			No
41	Broad St/Rockview Pl	TWSC	174.2	**F**	185.9	**F**	No	**Yes**	0.76	0.76	No
42	Broad St/Capitolio Wy	TWSC	35.0	**E**	35.5	**E**	No	No			No
43	Hwy 1/Project Driveway	N/A	Does Not Exist		Does Not Exist		N/A	N/A			N/A

Exhibit 46: Determination of Intersection Impacts for 2021 Near-Term Plus Project in PM Peak Hour

5.2 Freeway LOS

The LOS for the study freeway segments under 2021 Near-Term Plus Project conditions are shown in Exhibit 47. The only segment that would not meet the LOS target of "D" is the segment between Marsh Street and Broad Street in the PM peak hour.

	ID	Freeway Segment	Analysis Type	# of Lanes	AM Peak Hour			PM Peak Hour		
					Volume	Density	LOS	Volume	Density	LOS
US-101 NB	1	Marsh St to Broad St	Basic	2	2,950	25.2	C	3,840	36.5	**E**
	2	Broad St to Osos St	Weaving	2+Aux	2,830	19.4	B	3,790	26.6	C
	3	Osos St to Toro St	Weaving	2+Aux	2,270	15.0	B	3,510	24.2	C
	4	Toro St to California Blvd	Weaving	2+Aux	1,990	13.0	B	3,190	20.9	C
	5	California Blvd to Grand Ave	Weaving	2+Aux	1,630	10.4	B	3,240	21.8	C
US-101 SB	6	Grand Ave to Taft St	Weaving	2+Aux	2,820	19.0	B	1,630	10.3	B
	7	Taft St to Montalban St	Weaving	2+Aux	2,600	16.7	B	2,280	15.9	B
	8	Lemon St to Olive St	Weaving	2+Aux	2,730	18.0	B	2,870	19.9	B
	9	Olive St to Broad St	Weaving	2+Aux	2,950	20.1	C	3,380	23.8	C
	10	Broad St to Marsh St	Basic	2	3,000	25.7	C	3,460	31.0	D

Exhibit 47: 2021 Near-Term Plus Project LOS at Study Freeway Segments

Conditions for the 2021 Near-Term No Project from Exhibit 41 are compared with those of the Near-Term Plus Project from Exhibit 47 in Exhibit 48, for the AM peak hour, and in Exhibit 49 for the PM peak hour. The comparison shows that the segment between Marsh Street and Broad Street would operate unacceptably in the PM peak hour and that the Project would add 40 trips. Even though the Project adds few trips to this segment, this impact is considered to be significant.

	ID	Freeway Segment	No Project		Plus Project		Change in Volume	Significant Impact?
			Volume	LOS	Volume	LOS		
			(A)		(B)		(C)=(B)-(A)	
US-101 NB	1	Marsh St to Broad St	2,990	C	2,950	C	-40	No
	2	Broad St to Osos St	2,990	C	2,950	C	-40	No
	3	Osos St to Toro St	2,320	B	2,270	B	-50	No
	4	Toro St to California Blvd	2,050	B	1,990	B	-60	No
	5	California Blvd to Grand Ave	1,670	B	1,630	B	-40	No
US-101 SB	6	Grand Ave to Taft St	2,760	B	2,820	B	60	No
	7	Taft St to Lemon St	2,550	B	2,600	B	50	No
	8	Lemon St to Olive St	2,670	B	2,730	B	60	No
	9	Olive St to Broad St	2,880	B	2,950	C	70	No
	10	Broad St to Marsh St	2,950	C	3,000	C	50	No

Exhibit 48: Determination of Freeway Impacts in 2021 Near-Term Plus Project, AM Peak Hour

	ID	Freeway Segment	No Project		Plus Project		Change in Volume	Significant Impact?
			Volume	LOS	Volume	LOS		
			(A)		(B)		(C)=(B)-(A)	
US-101 NB	1	Marsh St to Broad St	3,800	**E**	3,840	**E**	40	**Yes**
	2	Broad St to Osos St	3,730	C	3,790	C	60	No
	3	Osos St to Toro St	3,420	C	3,510	C	90	No
	4	Toro St to California Blvd	3,120	C	3,190	C	70	No
	5	California Blvd to Grand Ave	3,170	C	3,240	C	70	No
US-101 SB	6	Grand Ave to Taft St	1,600	B	1,630	B	30	No
	7	Taft St to Montalban St	2,270	B	2,280	B	10	No
	8	Lemon St to Olive St	2,860	B	2,870	B	10	No
	9	Olive St to Broad St	3,370	C	3,380	C	10	No
	10	Broad St to Marsh St	3,470	D	3,460	D	-10	No

Exhibit 49: Determination of Freeway Impacts in 2021 Near-Term Plus Project, PM Peak Hour

5.3 Pedestrian Conditions

CSU guidelines state that a significant pedestrian impact would occur if, "A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards." The Near-Term Project would not result in any such disruptions and thus, would have not significant pedestrian impacts.

5.4 Bicycle Conditions

The Near-Term Plus Project bicycle LOS is shown in Exhibit 50.

The CSU system has defined a significant bicycle impact as a situation where, "*A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards*." Based on this standard the Near-Term Project does not result in any significant bicycle impacts. It would not disrupt any existing or planned bicycle facilities and its substitution of bicycle trips for car trips is consistent with City of San Luis Obispo General Plan Section 4.2.3 which reads, "*The City shall work with Cal Poly and Cuesta College to de-emphasize the use of automobiles and promote the use of alternative forms of transportation in their master plans*."

ID	Intersection Name	Control Type	AM Peak Hour								PM Peak Hour							
			EB		WB		NB		SB		EB		WB		NB		SB	
			Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS
2	Santa Rosa St/Highland Dr	Signalized	3.26	C	1.83	A	4.18	D	3.58	D	3.15	C	2.46	B	3.88	D	3.73	D
6	Santa Rosa St/Foothill Blvd	Signalized	3.56	D	2.35	B	3.81	D	2.64	B	3.02	C	2.43	B	3.89	D	2.83	C
7	California Blvd/Foothill Blvd	Signalized	4.15	D	2.92	C	3.07	C	2.77	C	3.89	D	3.07	C	2.76	C	3.23	C
12	Grand Ave/Hwy 101 NB Ramps	Signalized	3.41	C	2.56	B	0.96	A	0.77	A	3.03	C	2.55	B	0.86	A	0.77	A
14	Grand Ave/Monterey St	Signalized	3.26	C	2.35	B	2.37	B	2.62	B	3.63	D	1.97	A	2.34	B	2.88	C
15	Santa Rosa St/Murray Ave	Signalized	2.77	C	2.88	C	2.21	B	2.05	B	2.78	C	3.10	C	2.22	B	2.11	B
16	Santa Rosa St/Olive St	Signalized	3.02	C	2.81	C	2.28	B	2.11	B	2.70	B	2.78	C	2.62	B	2.26	B
17	Santa Rosa St/Walnut St	Signalized	2.79	C	3.80	D	1.67	A	1.91	A	2.73	B	3.62	D	2.21	B	1.62	A
21	Santa Rosa St/Mill St	Signalized	2.59	B	2.82	C	1.60	A	2.04	B	2.80	C	2.96	C	1.97	A	1.72	A
22	Santa Rosa St/Palm St	Signalized	2.81	C	2.65	B	1.56	A	2.12	B	2.88	C	2.65	B	1.95	A	1.85	A
23	Santa Rosa St/Monterey St	Signalized	2.70	B	3.17	C	1.71	A	2.12	B	2.77	C	3.23	C	2.05	B	1.87	A
24	Santa Rosa St/Higuera St	Signalized	N/A		2.62	B	1.51	A	2.63	B	N/A		2.63	B	1.86	A	2.34	B
25	Johnson Ave/Monterey Ave	Signalized	2.63	B	3.24	C	2.41	B	2.70	B	2.75	C	2.98	C	2.11	B	2.63	B
26	California Blvd/Monterey St	Signalized	2.95	C	3.30	C	1.90	A	1.53	A	3.06	C	3.16	C	2.10	B	1.70	A
28	Chorro St/Higuera St	Signalized	N/A		2.57	B	2.45	B	2.63	B	N/A		2.67	B	2.72	B	2.69	B
29	Morro St/Higuera St	Signalized	N/A		2.38	B	2.31	B	2.29	B	N/A		2.47	B	2.45	B	2.37	B
30	Osos St/Higuera St	Signalized	N/A		2.23	B	2.43	B	2.36	B	N/A		2.26	B	2.75	C	2.43	B
31	Santa Rosa St/Marsh St	Signalized	1.48	A	N/A		1.47	A	2.04	B	1.53	A	N/A	0.00	1.78	A	1.84	A
33	Osos St/Buchon St	Signalized	1.86	A	2.16	B	2.59	B	2.16	B	1.88	A	1.99	A	2.67	B	2.30	B
34	Higuera St/Marsh St	Signalized	2.98	C	N/A		N/A		2.37	B	2.68	B	N/A		N/A		3.02	C
35	Santa Barbara Ave/Upham St	Signalized	1.41	A	1.18	A	2.21	B	3.22	C	1.38	A	1.24	A	2.44	B	3.08	C
36	Broad St/South St/Santa Barbara Ave	Signalized	4.07	D	3.70	D	1.97	A	2.04	B	3.97	D	3.88	D	2.62	B	2.04	B
37	Hwy 101 SB Ramps/Madonna Rd	Signalized	1.84	A	1.58	A	4.72	E	2.96	C	1.96	A	1.84	A	4.51	E	2.98	C
38	Hwy 101 NB Ramps/Madonna Rd	Signalized	2.57	B	1.61	A	3.46	C	N/A		2.19	B	2.01	B	2.24	B	N/A	
39	Los Osos Valley Rd/Hwy 101 SB Ramps	Signalized	N/A		3.99	D	1.86	A	1.86	A	0.00		3.61	D	2.39	B	2.21	B
40	Broad St/Orcutt Rd	Signalized	2.88	C	2.93	C	2.37	B	2.73	B	3.00	C	3.27	C	2.92	C	2.53	B

Exhibit 50: 2021 Near-Term Plus Project Bicycle LOS

Note: Exhibit 50 only lists the study intersections that are signalized because there is no methodology for calculating bicycle LOS at stop-controlled intersections. The assumption is that the bicycle would stop and then proceed without encountering a delay.

5.5 Transit Conditions

The 2021 Near-Term Project includes a small (193 person) increase in faculty and staff and a much larger (2,908 person) decrease in off-campus students. The result will be a decrease in university-related transit trips in the peak hours. The increase of 2,500 on-campus students will increase transit usage during off-peak hours.

CSU guidelines state that a significant transit impact would occur if, "*A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards*."

Since the Near-Term Project would not change or disrupt any transit plans or operations, it would have no significant transit impacts.

5.6 Effect of Project on Regional Vehicle-Miles-Traveled (VMTs)

The effect of the Near-Term Project on regional VMT was estimated using data from Cal Poly's 2015 Transportation Survey, which asked people about how far they travelled to and from campus. Exhibit 51 shows that reducing the number of students living off-campus who commute to campus from their residences would result in a decrease in VMT associated with the university, even if faculty/staff positions are increased.

	Average Travel Distance (1-way)	Existing People	Existing VMT	Near-Term People	Near-Term VMT
	(A)	(B)	(C)=(A)*(B)*2	(D)	(E)=(A)*(D)*2
Faculty/Staff	14.1	3,172	89,450	3,365	94,893
Off-Campus Students	18.6	13,756	511,723	10,848	403,546
Total			601,174		498,439
Change					-17.1%

Exhibit 51: Change in VMT from Near-Term Academic Projects

Exhibit 51 makes the very conservative assumption that the additional 193 faculty and staff would living in housing that is geographically distributed the same way as are the homes of current faculty and staff. In fact, it is expected that a number of the 420 apartments in the Grand/Slack neighborhood would be occupied by faculty and staff, so the number of faculty and staff living off-campus is likely to decrease, rather than the increase as shown in Exhibit 51. Exhibit 51 therefore presents a "worst case" scenario of the VMT reduction that would result from the Near-Term Project.

6 2035 NO PROJECT CONDITIONS

6.1 Intersection LOS

The 2035 No Project intersection LOS is shown in Exhibit 56. The target LOS would not be met at following 10 locations:

- **Intersection #1**, Hwy 1/Stenner Creek Rd, during the AM and PM peak hours
- **Intersection #9**, Grand Ave/Slack St, during the AM peak hour
- **Intersection #15**, Santa Rosa St/Murray Ave, during the PM peak hour
- Intersection #17, Santa Rosa St/Walnut St, during the PM peak hour
- Intersection #19, California Blvd/Taft St, during the AM and PM peak hours
- **Intersection #20**, California Blvd/Hwy 101 NB Ramps, during the PM peak hour
- **Intersection #26**, California Blvd/Monterey St, during the PM peak hour
- **Intersection #40**, Broad St/Orcutt Rd, during the PM peak hour
- Intersection #41, Broad St/Rockview Pl, during the AM and PM peak hours
- **Intersection #42**, Broad St/Capitolio Wy, during the AM and PM peak hours

Three of these intersections do not meet the target LOS under existing conditions. Additional intersections projected to operate below the target LOS under No Project conditions, i.e. at LOS E or F by 2035 are show in bold font above.

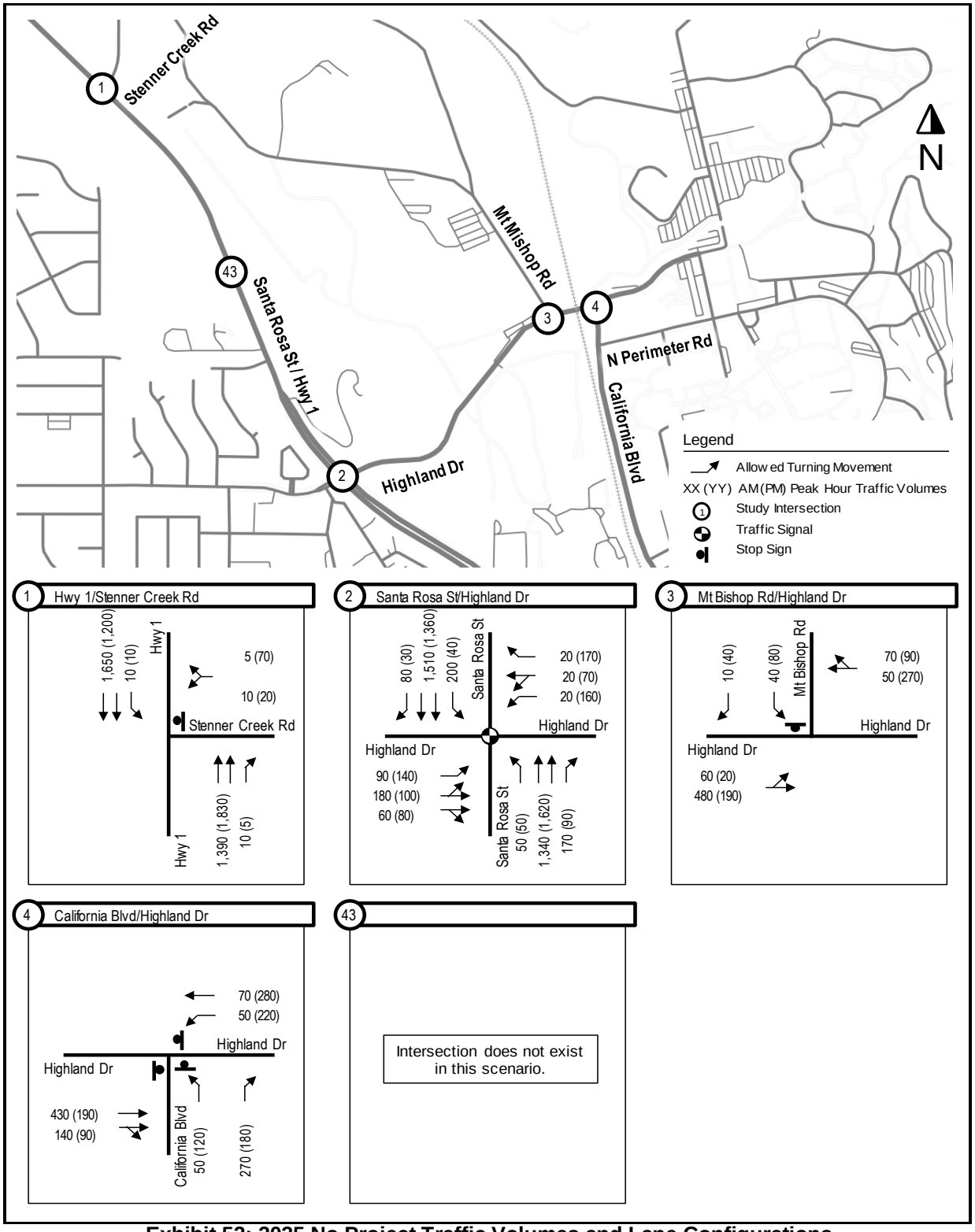


Exhibit 52: 2035 No Project Traffic Volumes and Lane Configurations

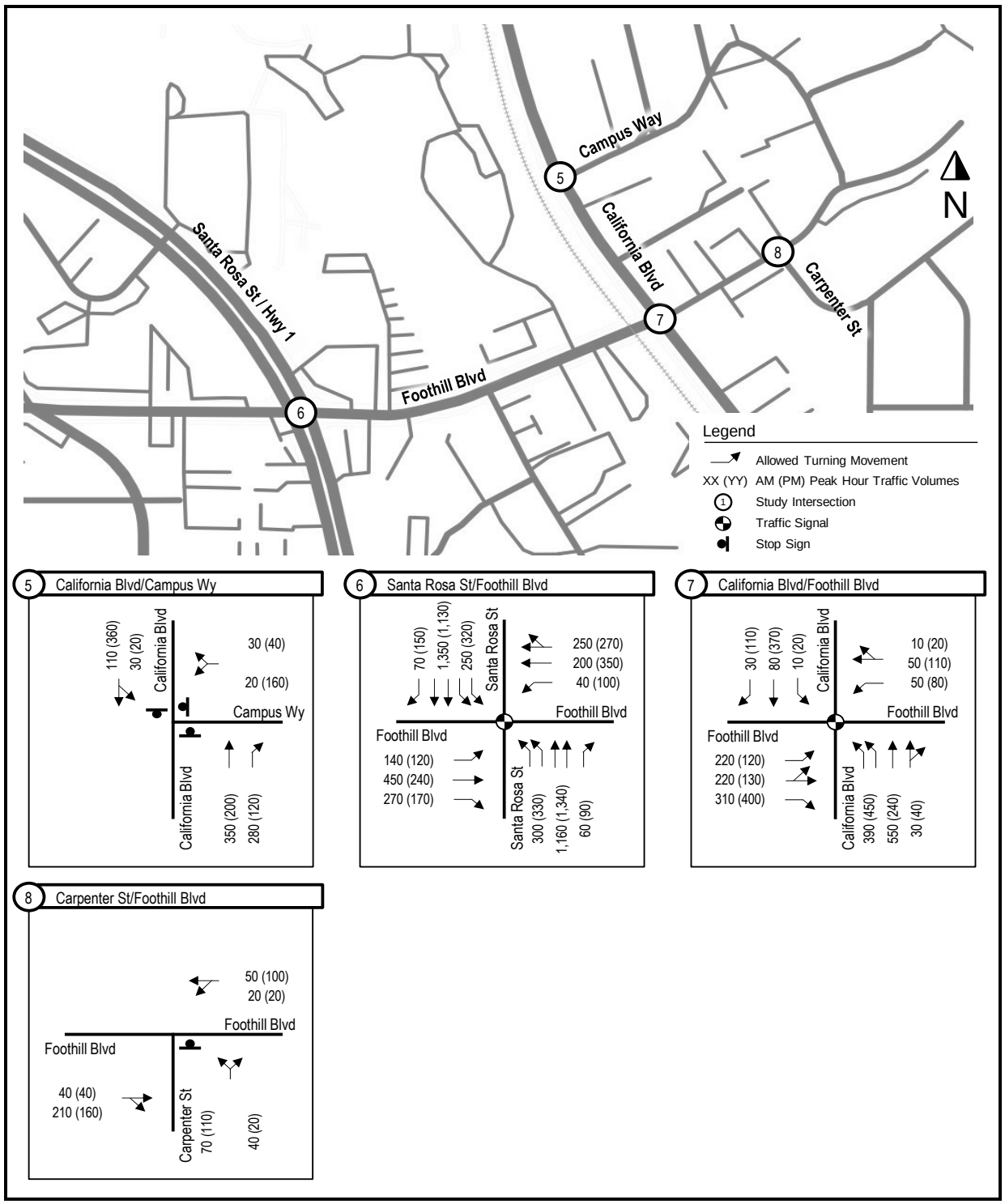


Exhibit 52: 2035 No Project Traffic Volumes and Lane Configurations (Map B)

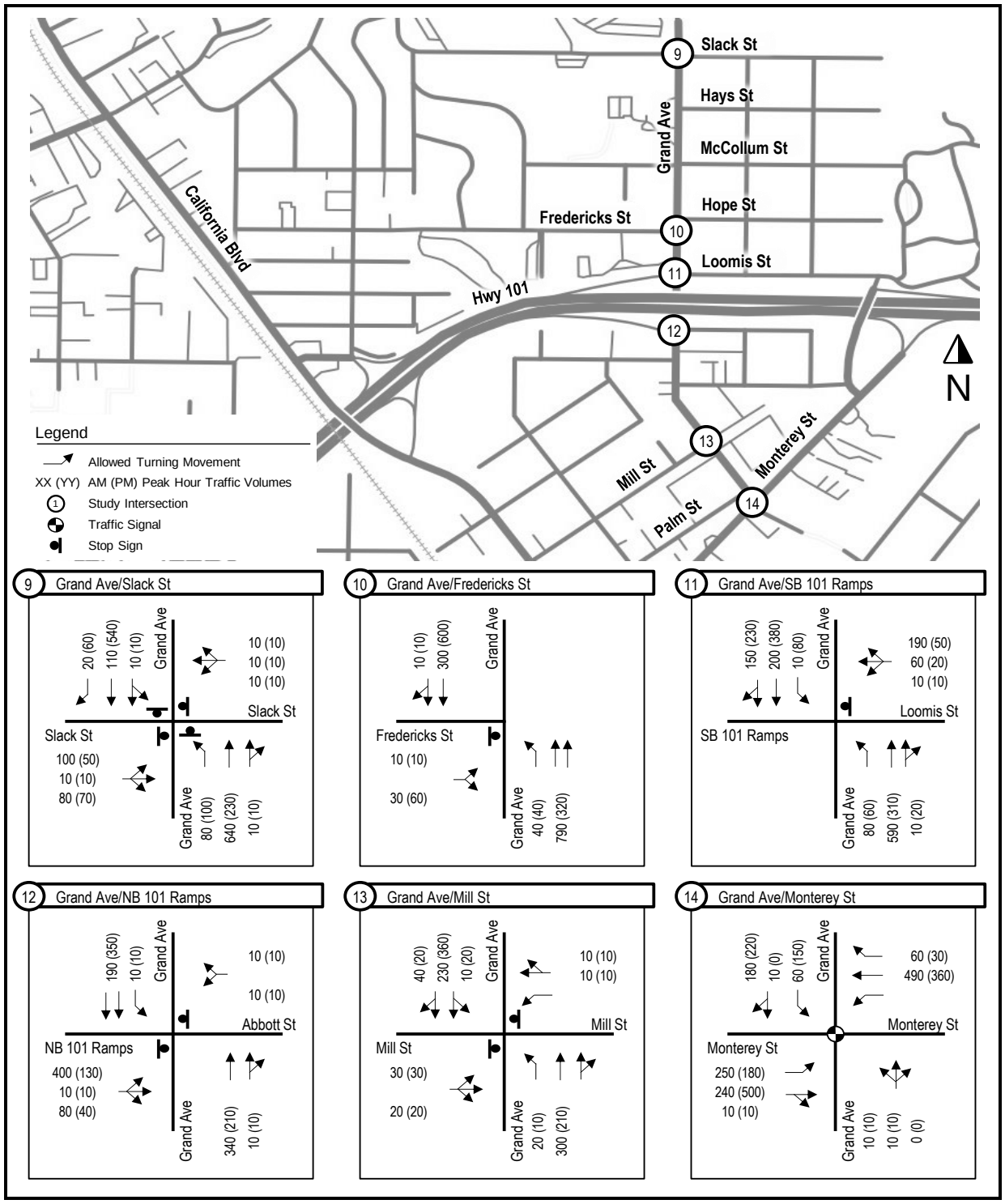


Exhibit 52: 2035 No Project Traffic Volumes and Lane Configurations (Map C)

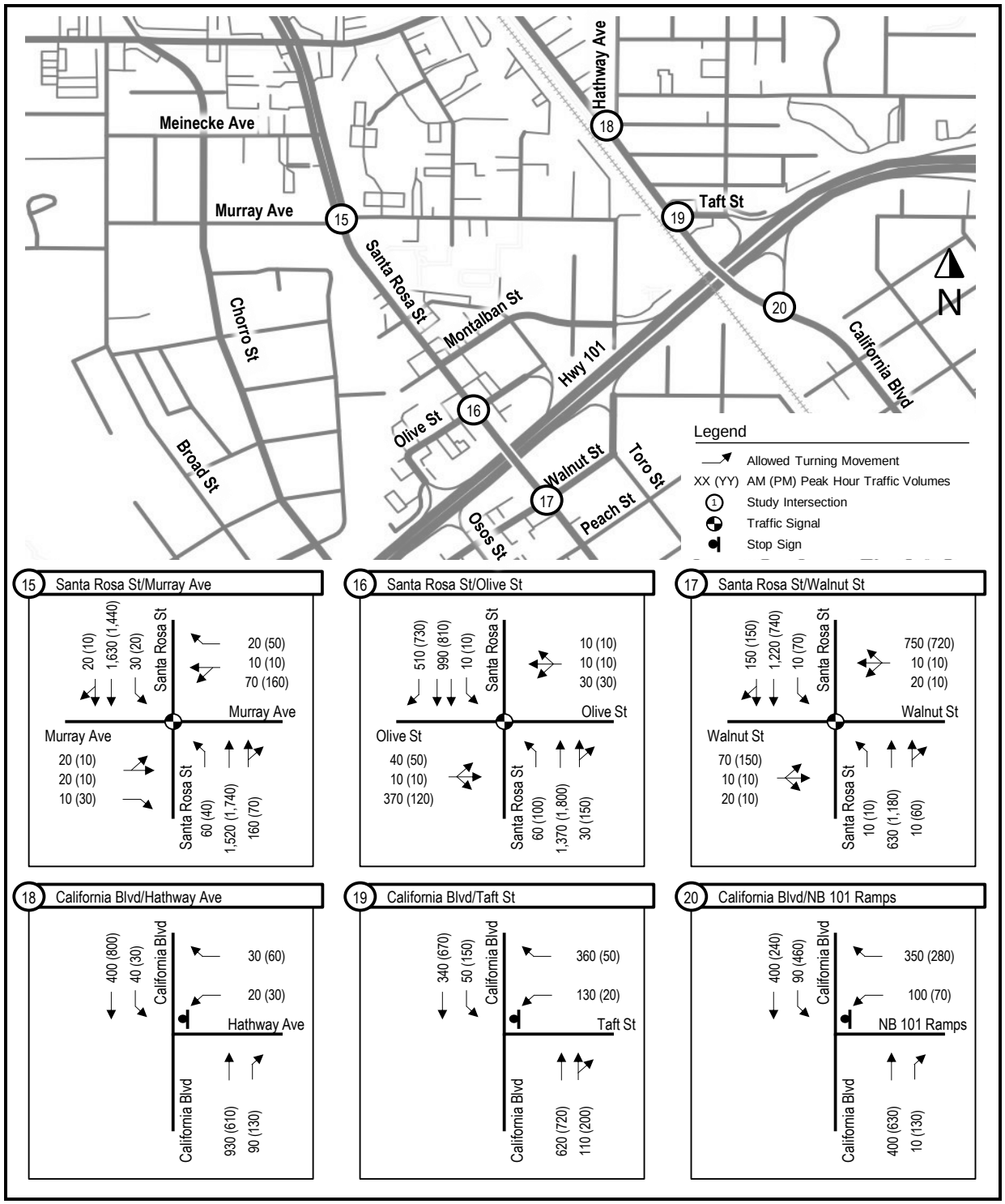


Exhibit 52: 2035 No Project Traffic Volumes and Lane Configurations (Map D)

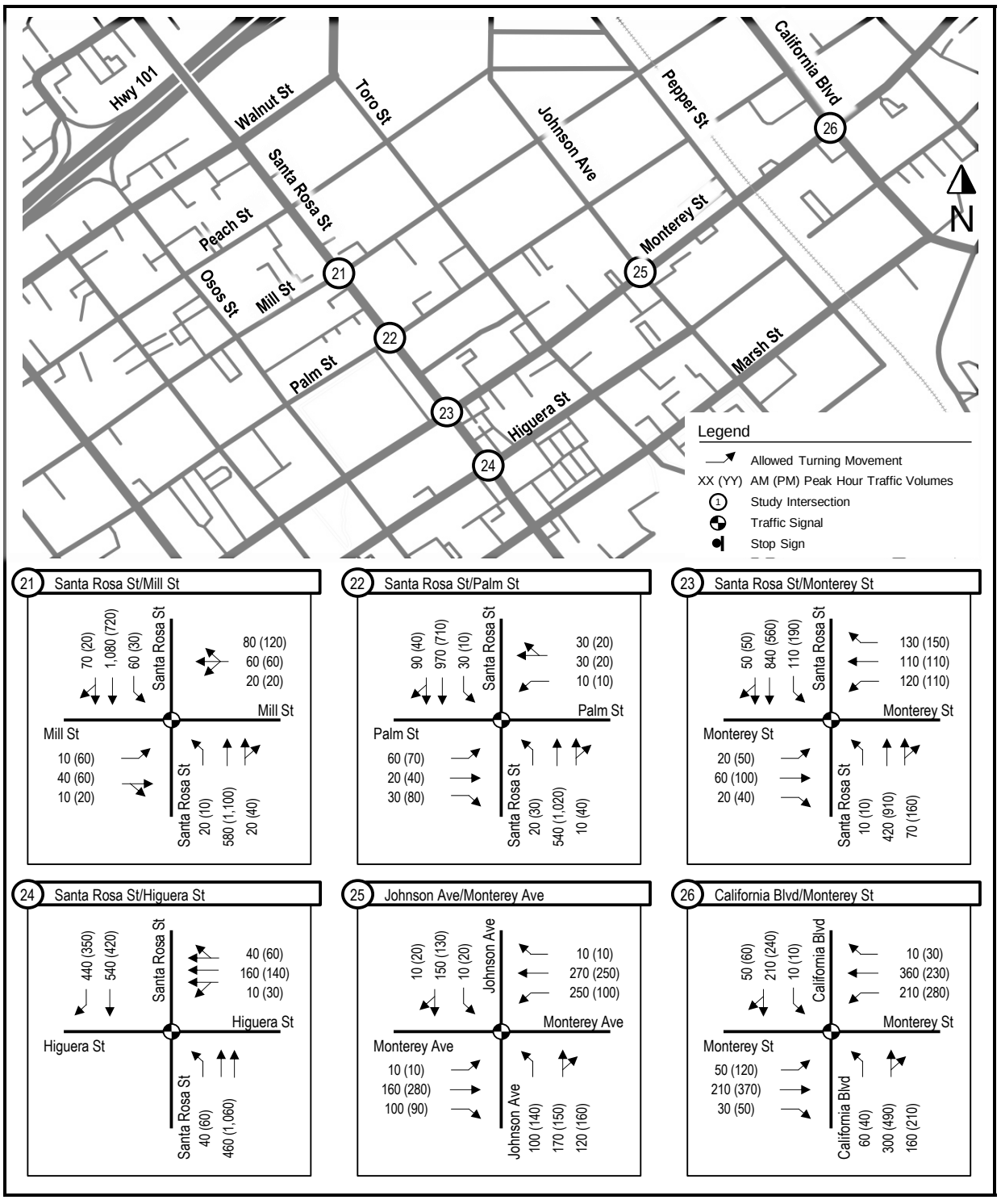


Exhibit 52: 2035 No Project Traffic Volumes and Lane Configurations (Map E)

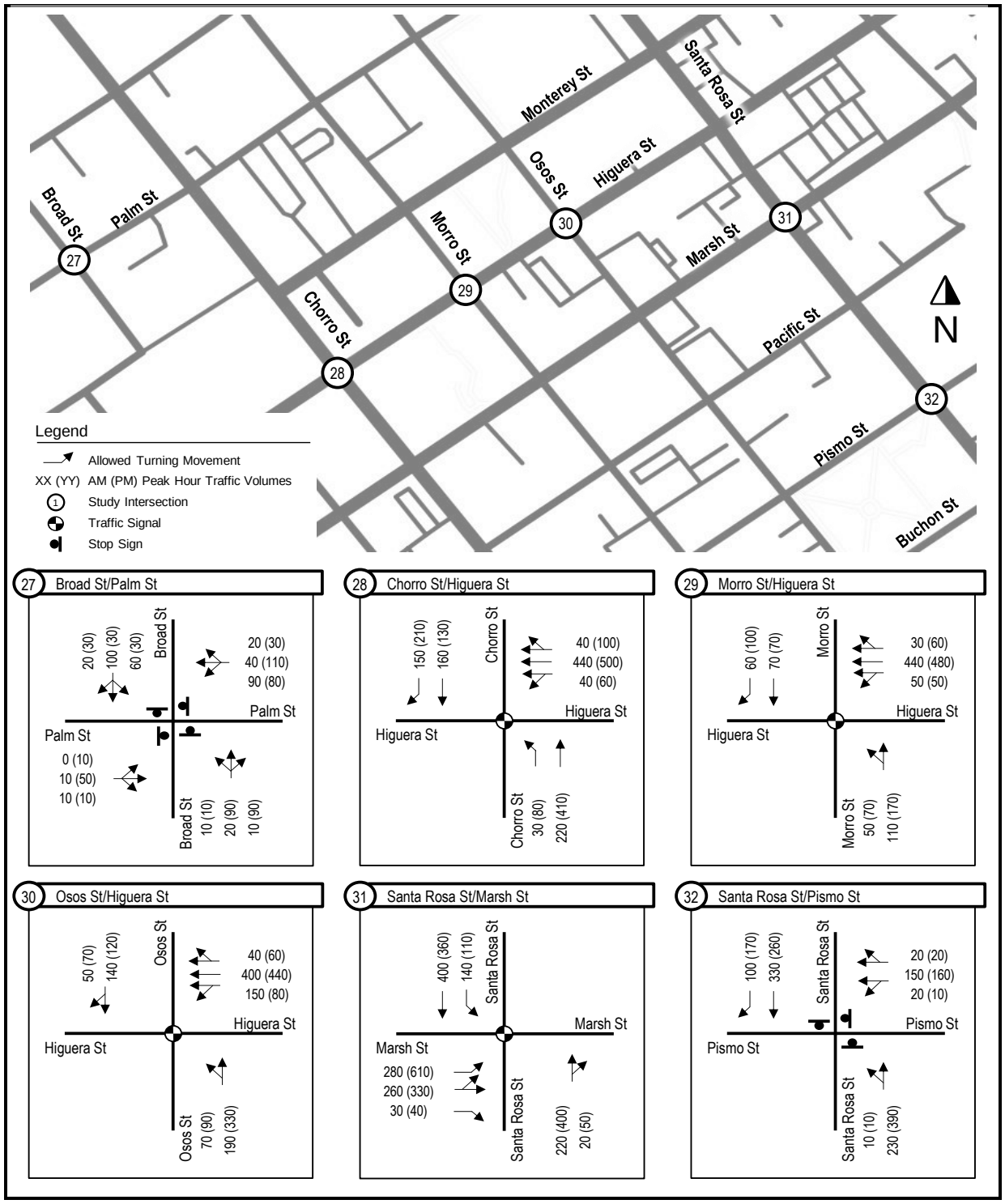


Exhibit 52: 2035 No Project Traffic Volumes and Lane Configurations (Map F)

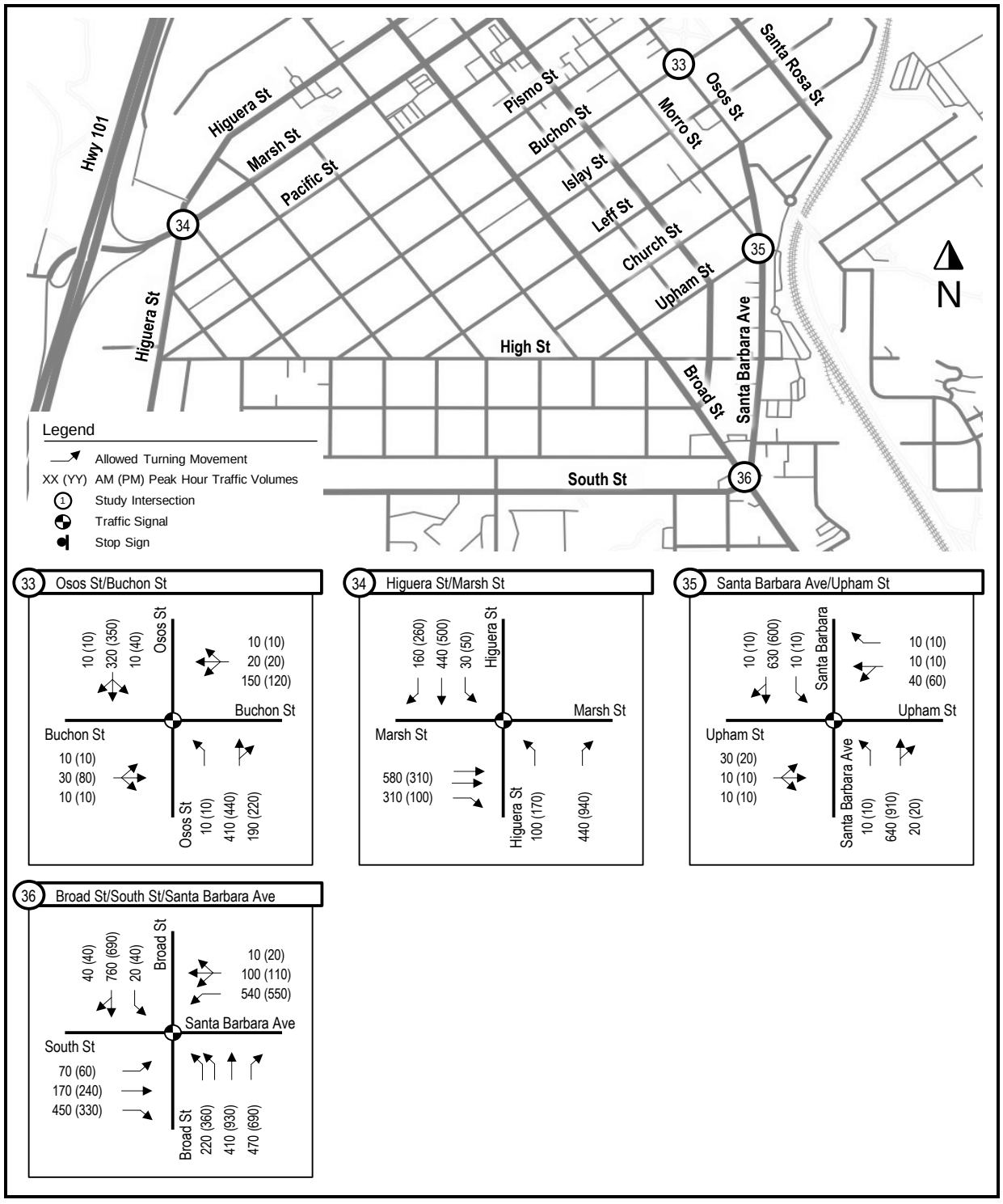


Exhibit 52: 2035 No Project Traffic Volumes and Lane Configurations (Map G)

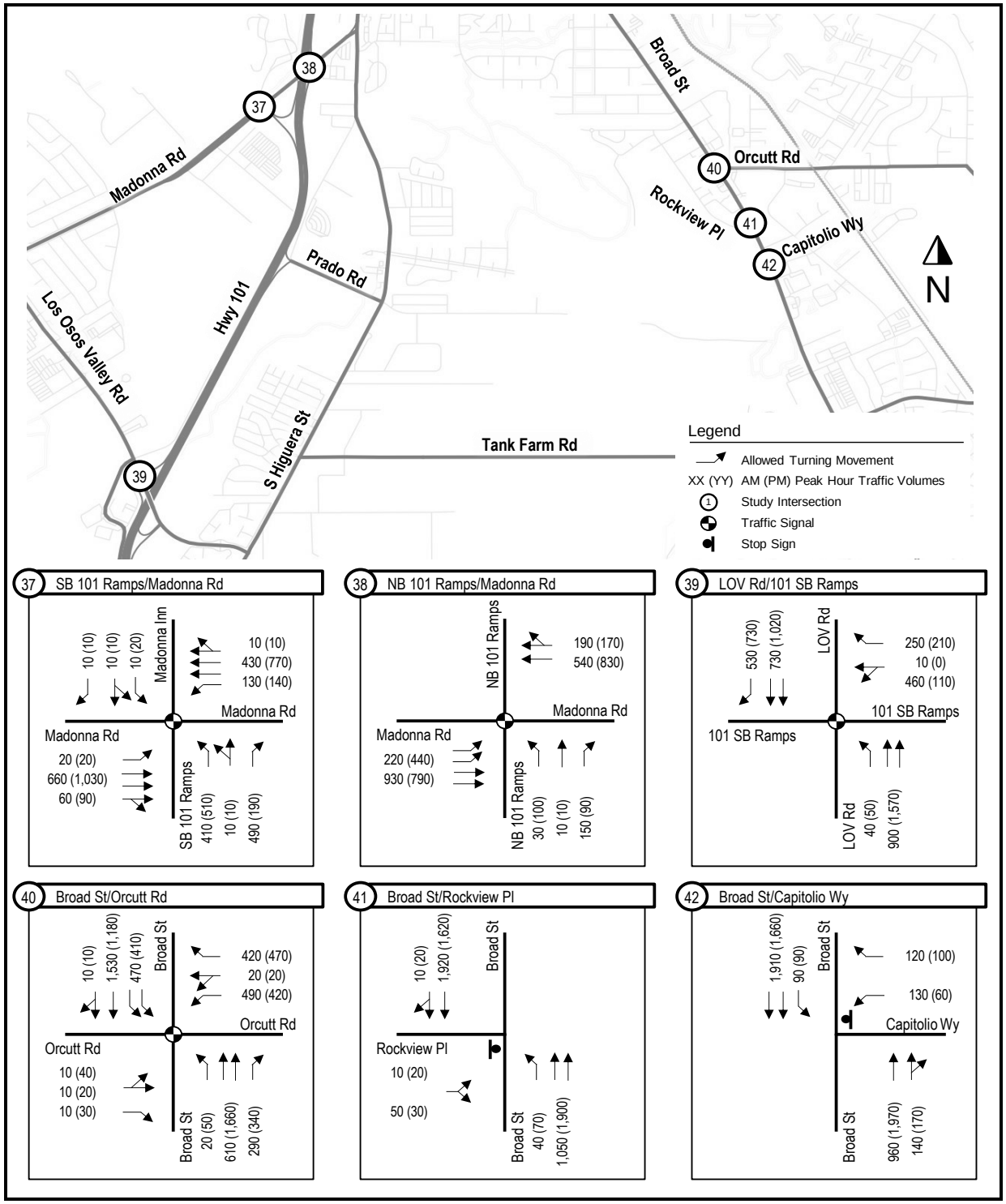


Exhibit 52: 2035 No Project Traffic Volumes and Lane Configurations (Map H)

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			Average Delay	HCM LOS	Average Delay	HCM LOS
1	Hwy 1/Stenner Creek Rd	TWSC	35.8	**E**	84.6	**F**
2	Santa Rosa St/Highland Dr	Signalized	43.1	D	49.3	D
3	Mt Bishop Rd/Highland Dr	TWSC	22.1	C	17.6	C
4	California Blvd/Highland Dr	AWSC	15.4	C	14.5	B
5	California Blvd/Campus Wy	AWSC	10.6	B	14.8	B
6	Santa Rosa St/Foothill Blvd	Signalized	51.6	D	51.4	D
7	California Blvd/Foothill Blvd	Signalized	28.3	C	34.8	C
8	Carpenter St/Foothill Blvd	TWSC	14.7	B	17.7	C
9	Grand Ave/Slack St	AWSC	39.3	**E**	13.6	B
10	Grand Ave/Fredericks St	TWSC	11.6	B	13.1	B
11	Grand Ave/US-101 SB Ramps	TWSC	17.9	C	11.7	B
12	Grand Ave/US-101 NB Ramps	Signalized	19.4	B	8.8	A
13	Grand Ave/Mill St	TWSC	13.8	B	17.0	C
14	Grand Ave/Monterey St	Signalized	8.3	A	9.4	A
15	Santa Rosa St/Murray Ave	Signalized	43.7	D	80.0	**F**
16	Santa Rosa St/Olive St	Signalized	10.0	A	20.3	C
17	Santa Rosa St/Walnut St	Signalized	92.5	**F**	133.6	**F**
18	California Blvd/Hathway Ave	TWSC	34.2	D	28.7	D
19	California Blvd/Taft St	TWSC	57.2	**F**	54.7	**F**
20	California Blvd/US-101 NB Ramps	TWSC	23.0	C	107.0	**F**
21	Santa Rosa St/Mill St	Signalized	7.3	A	6.6	A
22	Santa Rosa St/Palm St	Signalized	14.4	B	3.6	A
23	Santa Rosa St/Monterey St	Signalized	11.2	B	8.1	A
24	Santa Rosa St/Higuera St	Signalized	4.9	A	6.0	A
25	Johnson Ave/Monterey Ave	Signalized	12.1	B	10.7	B
26	California Blvd/Monterey St	Signalized	26.4	C	96.0	**F**
27	Broad St/Palm St	AWSC	9.7	A	9.7	A
28	Chorro St/Higuera St	Signalized	12.0	B	13.0	B
29	Morro St/Higuera St	Signalized	16.8	B	16.8	B
30	Osos St/Higuera St	Signalized	12.8	B	14.8	B
31	Santa Rosa St/Marsh St	Signalized	15.4	B	14.3	B
32	Santa Rosa St/Pismo St	AWSC	13.2	B	18.0	C
33	Osos St/Buchon St	Signalized	20.3	C	9.1	A
34	Higuera St/Marsh St	Signalized*	20.4	C	31.7	C
35	Santa Barbara Ave/Upham St	Signalized	11.1	B	15.0	B
36	Broad St/South St/Santa Barbara Ave	Signalized	47.9	D	42.5	D
37	US-101 SB Ramps/Madonna Rd	Signalized	49.3	D	32.2	C
38	US-101 NB Ramps/Madonna Rd	Signalized	14.2	B	17.3	B
39	Los Osos Valley Rd/US-101 SB Ramps	Signalized	38.7	D	54.7	D
40	Broad St/Orcutt Rd	Signalized	32.7	C	95.9	**F**
41	Broad St/Rockview Pl	TWSC	>180	**F**	>180	**F**
42	Broad St/Capitolio Wy	TWSC	161.1	**F**	>180	**F**
43	Hwy 1/Project Driveway	N/A	Does not exist in this scenario			

*Intersection LOS was calculated using HCM 2000 Method, because of non-standard lane groups or phasing that do not conform to the HCM 2010 computational engine.
TWSC Intersection LOS is based on maximum approach delay.

Exhibit 53: 2035 No Project Auto Level of Service (LOS) at Study Intersections

6.2 Freeway LOS

The LOS for the study freeway segments under 2035 No Project conditions are shown in Exhibit 54. Segments 1 and 2 would operate as a single segment in 2035 because of the planned permanent closure of the Broad Street northbound ramps for safety reasons.

The analysis shows that two northbound and one southbound segment would operate unacceptably in the PM peak hour, and that the southbound segment would also operate unacceptably in the AM peak hour.

	ID	Freeway Segment	Analysis Type	# of Lanes	AM Peak Hour			PM Peak Hour		
					Volume	Density	LOS	Volume	Density	LOS
US-101 NB	1	Marsh St to Broad St	Basic	2	3,140	27.2	D	4,520	51.5	**F**
	2	Broad St to Osos St	Basic	2	3,140	27.2	D	4,520	51.5	**F**
	3	Osos St to Toro St	Weaving	2+Aux	2,640	18.1	B	4,400	32.6	D
	4	Toro St to California Blvd	Weaving	2+Aux	2,230	14.6	B	4,190	29.1	D
	5	California Blvd to Grand Ave	Weaving	2+Aux	1,890	12.1	B	4,430	31.6	D
US-101 SB	6	Grand Ave to Taft St	Weaving	2+Aux	4,100	29.0	D	2,060	13.0	B
	7	Taft St to Montalban St	Weaving	2+Aux	3,770	26.0	C	2,720	18.9	B
	8	Lemon St to Olive St	Weaving	2+Aux	3,870	27.8	C	3,380	24.2	C
	9	Olive St to Broad St	Weaving	2+Aux	3,960	28.3	D	3,880	28.0	D
	10	Broad St to Marsh St	Basic	2	4,140	42.1	**E**	3,970	38.8	**E**

Exhibit 54: 2035 No Project LOS on Study Freeways

6.3 Pedestrian Conditions

The SLO travel demand model provides a generalized estimate of the growth of bicycle and pedestrian trip making. In accordance with City guidelines, peak hour intersection pedestrian volumes were estimated by applying the forecasted citywide percentage increase in pedestrian trips to the existing bicycle and pedestrian intersection movement counts. Using this methodology we forecast a 19% increase in pedestrian volumes from the existing volumes shown in Exhibit 16. The 2035 No Project pedestrian volumes are shown in Exhibit 55.

The LOS for pedestrians in the 2035 No Project condition is shown in Exhibit 56.

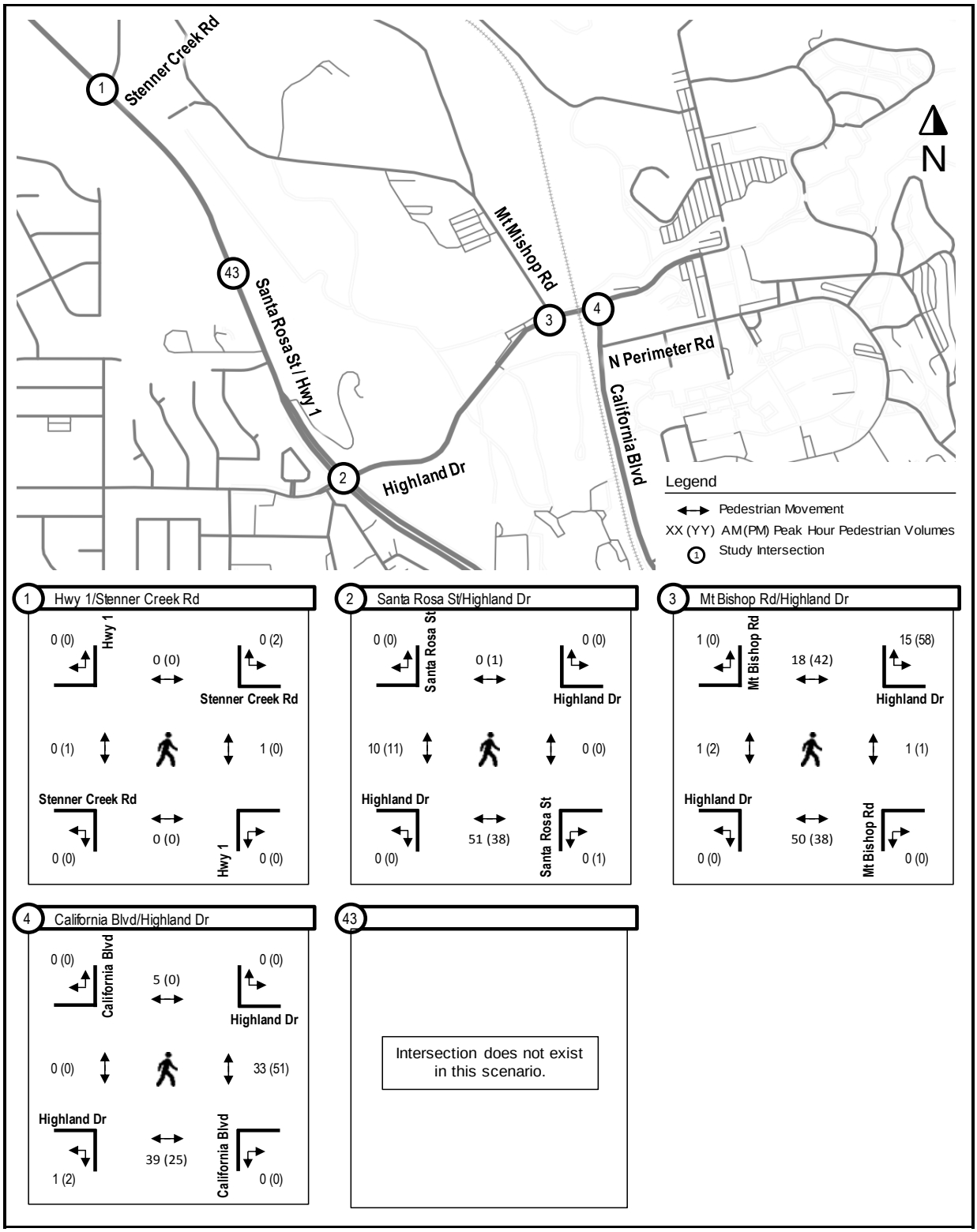


Exhibit 55: 2035 No Project Pedestrian Volumes

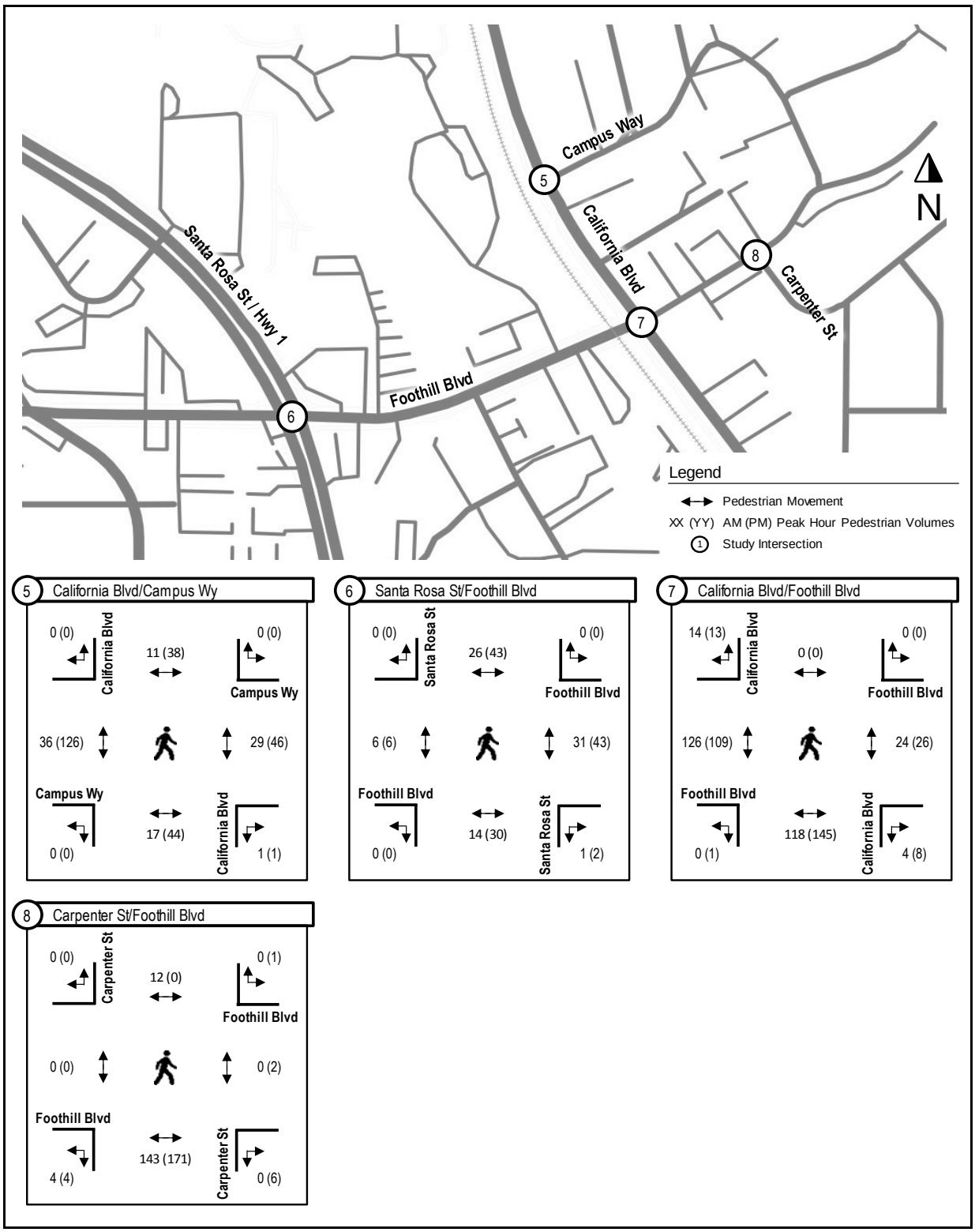


Exhibit 55: 2035 No Project Pedestrian Volumes (Map B)

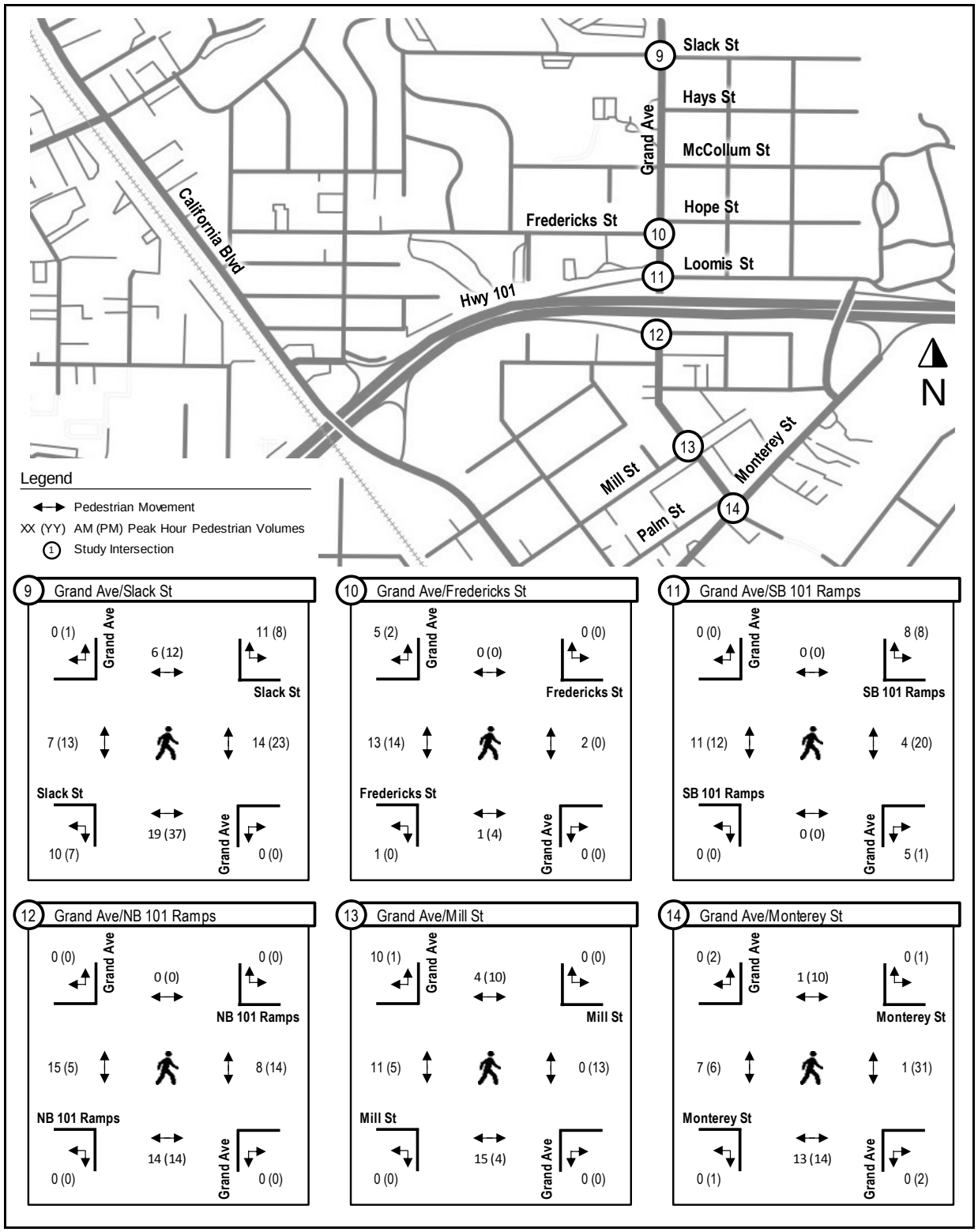


Exhibit 55: 2035 No Project Pedestrian Volumes (Map C)

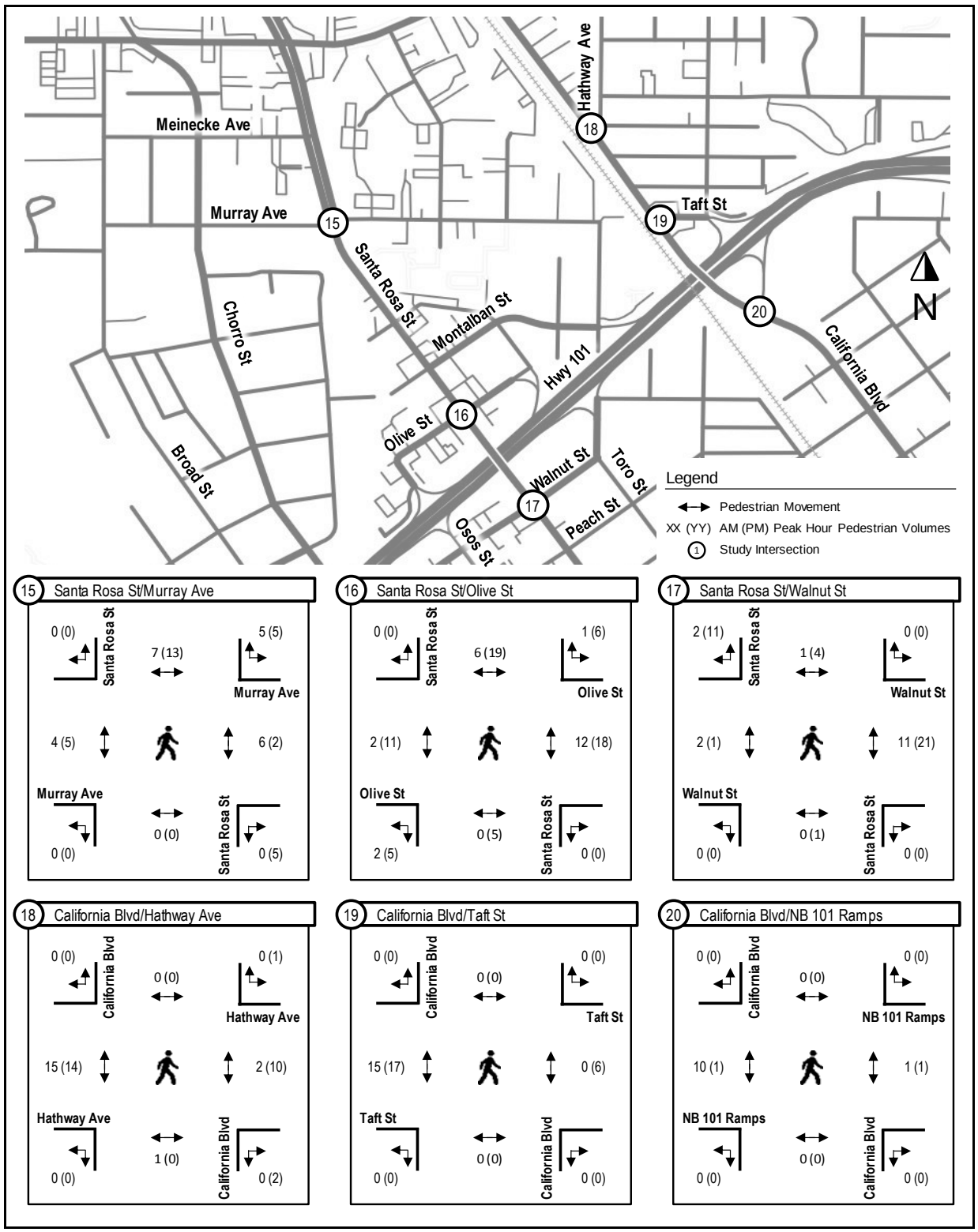


Exhibit 55: 2035 No Project Pedestrian Volumes (Map D)

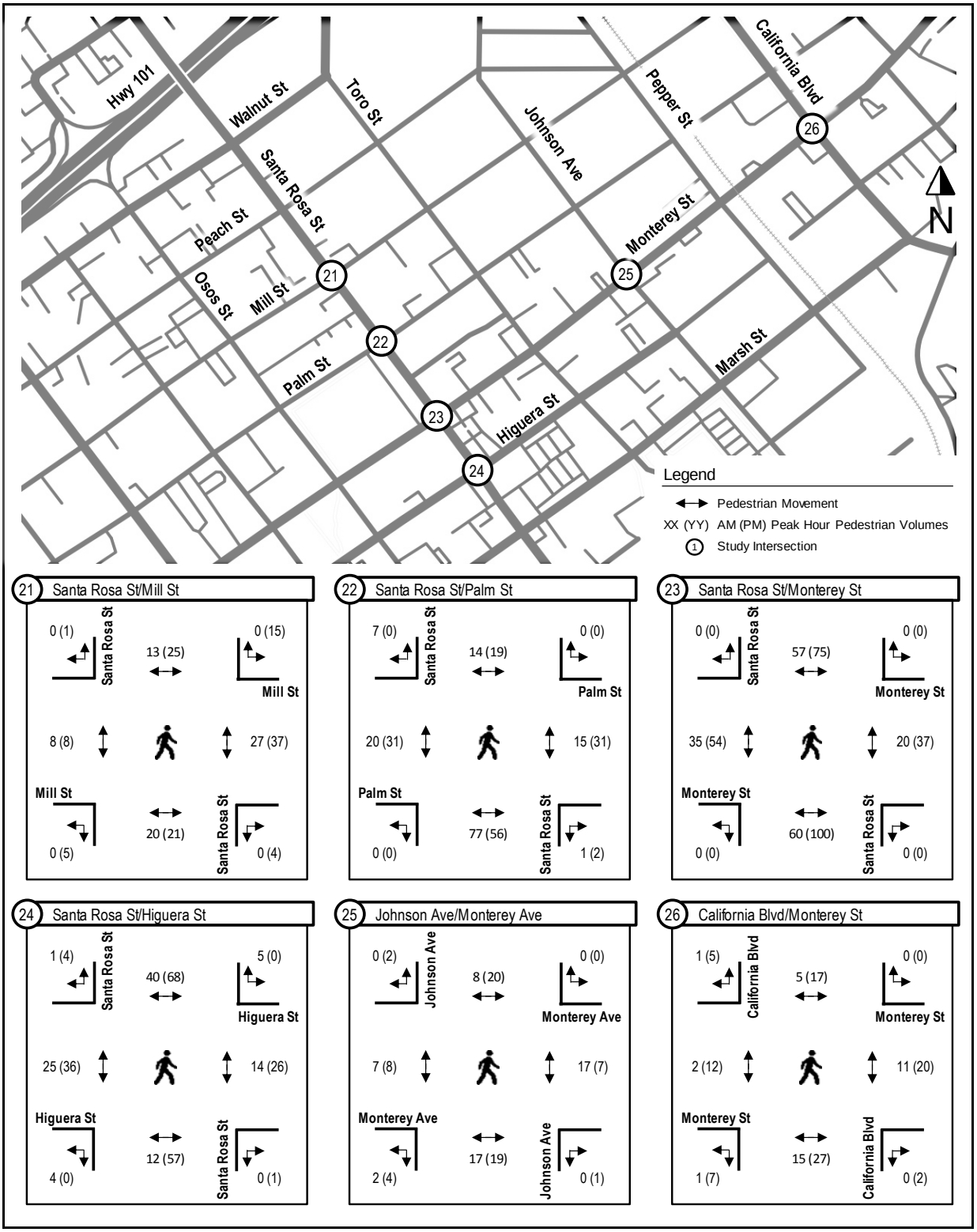


Exhibit 55: 2035 No Project Pedestrian Volumes (Map E)

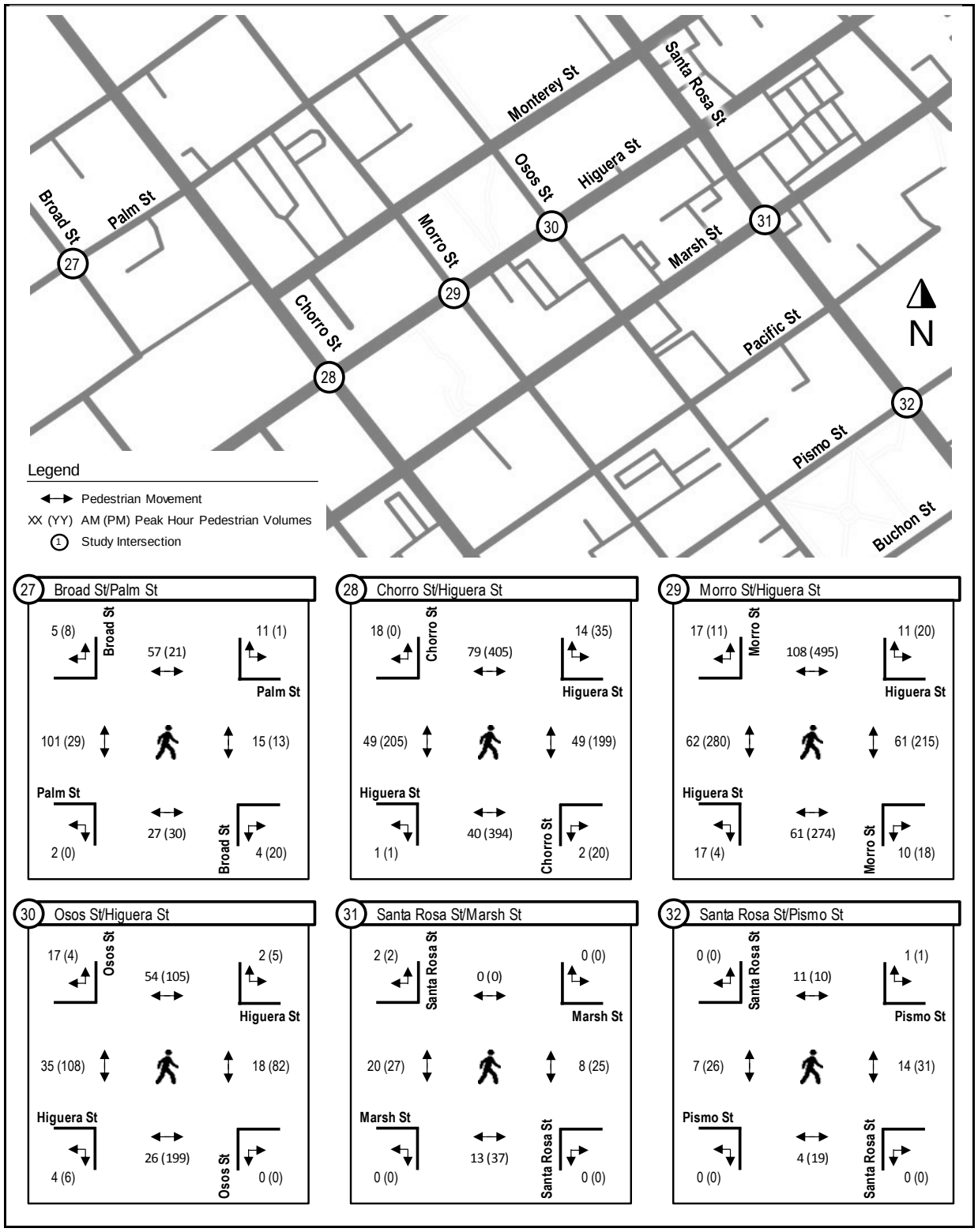


Exhibit 55: 2035 No Project Pedestrian Volumes (Map F)

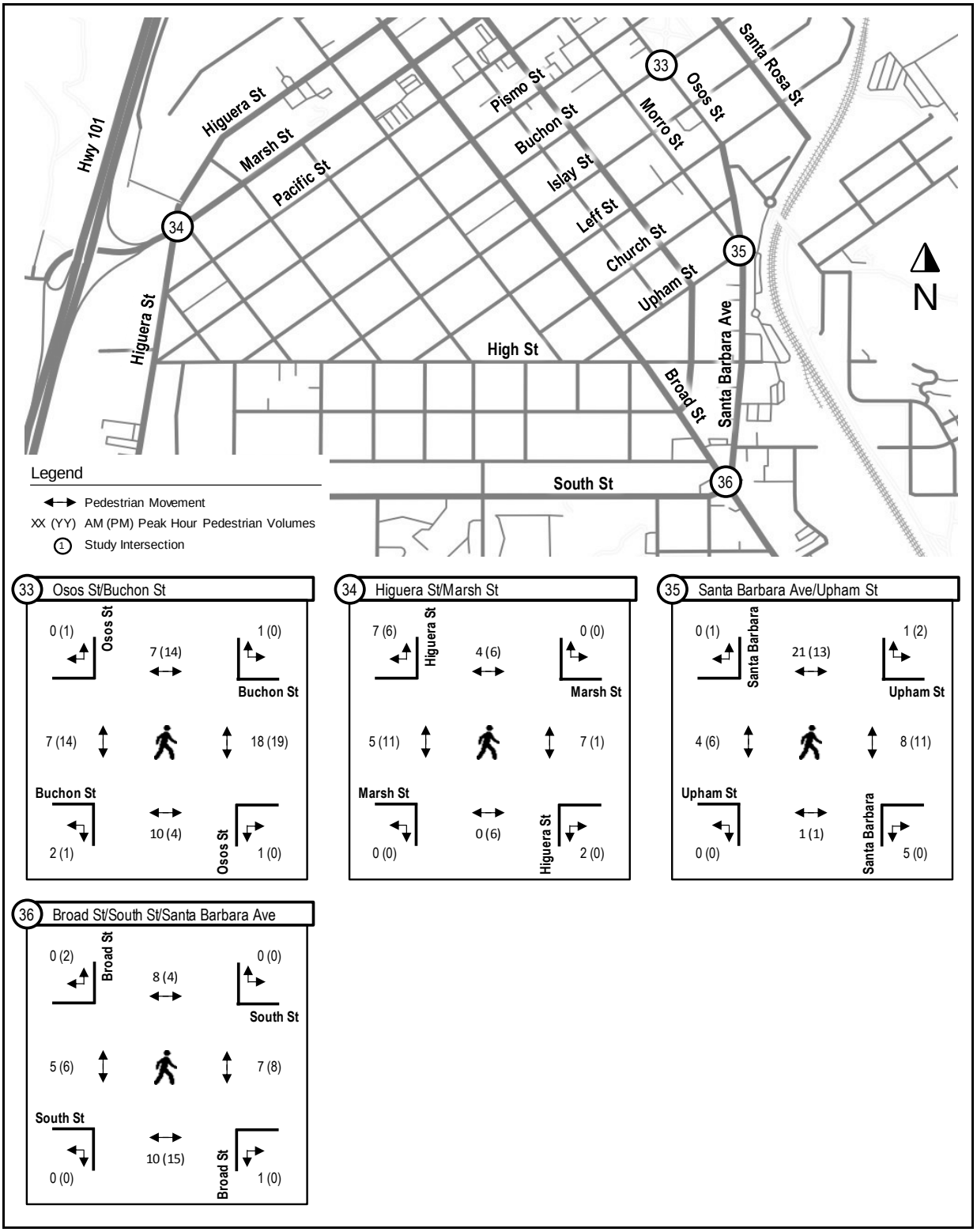


Exhibit 55: 2035 No Project Pedestrian Volumes (Map G)

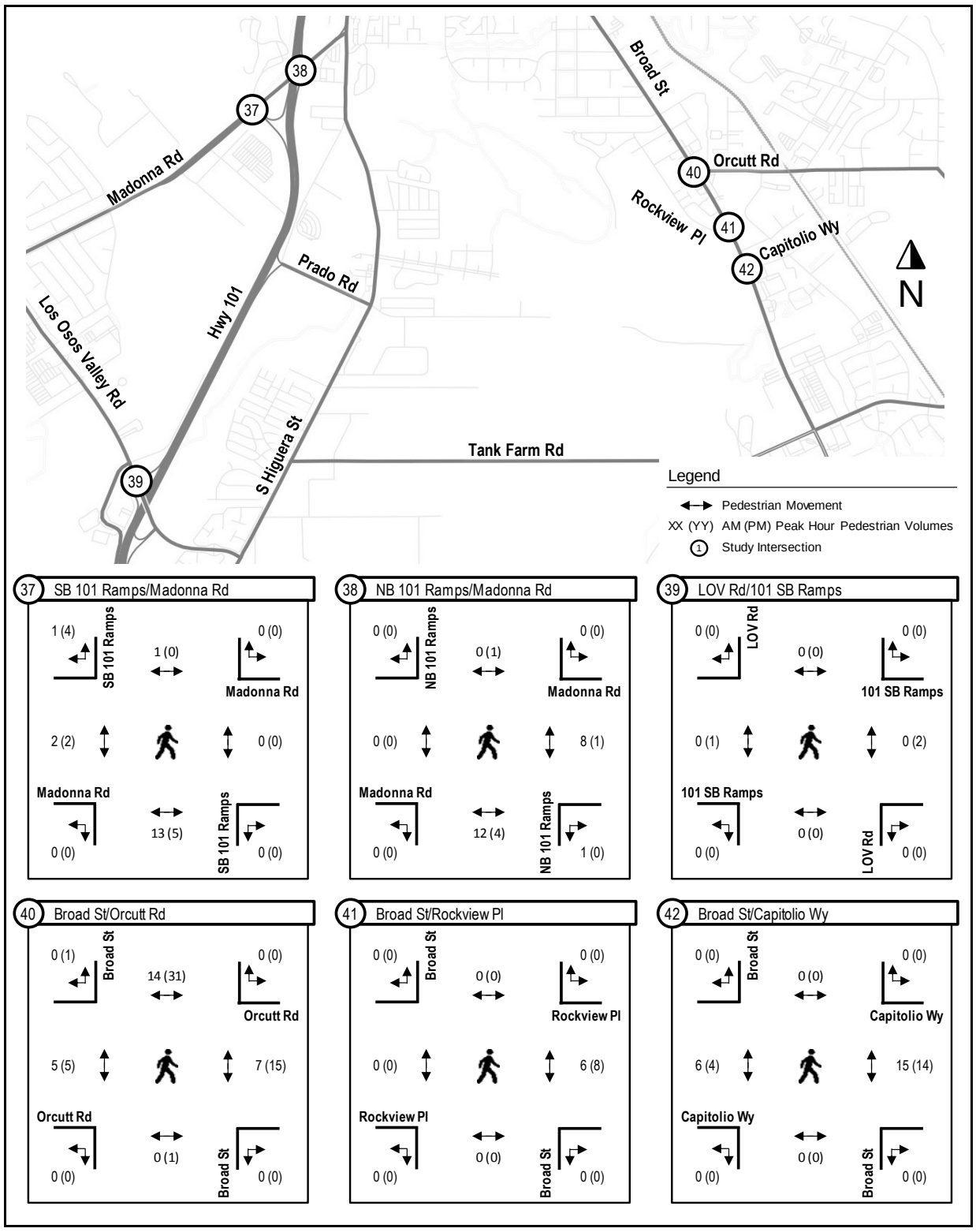


Exhibit 55: 2035 No Project Pedestrian Volumes (Map H)

ID	Intersection Name	Control Type	AM Peak Hour								PM Peak Hour							
			EB		WB		NB		SB		EB		WB		NB		SB	
			Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS
1	Hwy 1/Stenner Creek Rd	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		>180	F	>180	F
2	Santa Rosa St/Highland Dr	Signalized	2.32	B	2.48	B	3.11	C	3.12	C	2.34	B	2.52	B	3.14	C	3.15	C
3	Mt Bishop Rd/Highland Dr	TWSC	20.4	D	21.7	D	N/A		N/A		16.2	C	17.3	C	N/A		N/A	
6	Santa Rosa St/Foothill Blvd	Signalized	2.7	B	2.58	B	3.08	C	3.08	C	2.7	B	2.67	B	3.09	C	3.21	C
7	California Blvd/Foothill Blvd	Signalized	2.68	B	2.1	B	2.73	B	2.52	B	2.65	B	2.09	B	2.75	B	2.5	B
8	Carpenter St/Foothill Blvd	TWSC	2	A	2	A	N/A		N/A		3.4	A	3.4	A	N/A		N/A	
10	Grand Ave/Fredericks St	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		>180	F	>180	F
11	Grand Ave/Hwy 101 SB Ramps	TWSC	N/A		N/A		141.6	F	141.6	F	N/A		N/A		106.5	F	106.5	F
12	Grand Ave/Hwy 101 NB Ramps	Signalized	2.03	B	1.73	A	2.35	B	2.58	B	1.63	A	1.73	A	2.31	B	2.5	B
13	Grand Ave/Mill St	TWSC	N/A		N/A		87.4	F	12	C	N/A		N/A		92.1	F	13.8	C
14	Grand Ave/Monterey St	Signalized	2.65	B	2.39	B	1.75	A	2.43	B	2.6	B	2.46	B	1.75	A	2.61	B
15	Santa Rosa St/Murray Ave	Signalized	2.02	B	2.16	B	3.08	C	2.98	C	2.03	B	2.31	B	3.09	C	3.01	C
16	Santa Rosa St/Olive St	Signalized	2.66	B	1.81	A	3.02	C	2.98	C	2.44	B	1.87	A	3.12	C	3.1	C
17	Santa Rosa St/Walnut St	Signalized	1.96	A	2.29	B	2.7	B	2.91	C	2.08	B	2.27	B	2.74	B	2.97	C
18	California Blvd/Hathway Ave	TWSC	N/A		N/A		20.2	D	62	F	N/A		N/A		19	C	33.2	E
19	California Blvd/Taft St	TWSC	N/A		N/A		25.3	D	>180	F	N/A		N/A		37.5	E	>180	F
20	California Blvd/Hwy 101 NB Ramps	TWSC	N/A		N/A		123.1	F	123.1	F	N/A		N/A		125.5	F	125.5	F
21	Santa Rosa St/Mill St	Signalized	2	B	1.91	A	2.64	B	2.73	B	2.11	B	1.96	A	2.67	B	2.72	B
22	Santa Rosa St/Palm St	Signalized	2.28	B	1.99	A	2.59	B	2.66	B	2.31	B	2	A	2.68	B	2.64	B
23	Santa Rosa St/Monterey St	Signalized	2.22	B	2.53	B	2.6	B	2.71	B	2.3	B	2.57	B	2.66	B	2.87	C
24	Santa Rosa St/Higuera St	Signalized	2.29	B	2.11	B	2.43	B	2.55	B	2.2	B	2.15	B	2.55	B	2.66	B
25	Johnson Ave/Monterey Ave	Signalized	2.36	B	2.5	B	2.51	B	2.13	B	2.35	B	2.48	B	2.46	B	2.1	B
26	California Blvd/Monterey St	Signalized	2.36	B	2.4	B	2.36	B	2.17	B	2.38	B	2.44	B	2.44	B	2.25	B
28	Chorro St/Higuera St	Signalized	2.28	B	2.29	B	2.12	B	2.17	B	2.33	B	2.35	B	2.26	B	2.2	B
29	Morro St/Higuera St	Signalized	2.24	B	2.28	B	1.93	A	2.04	B	2.27	B	2.31	B	1.99	A	2.07	B
30	Osos St/Higuera St	Signalized	2.21	B	2.47	B	2.06	B	1.89	A	2.23	B	2.33	B	2.13	B	1.98	A
31	Santa Rosa St/Marsh St	Signalized	2.53	B	2.09	B	2.02	B	2.58	B	3.08	C	2.09	B	2.12	B	2.62	B
33	Osos St/Buchon St	Signalized	1.74	A	2.11	B	2.31	B	2.21	B	1.79	A	2.11	B	2.35	B	2.31	B
34	Higuera St/Marsh St	Signalized	2.52	B	2.34	B	2.51	B	2.24	B	2.4	B	2.44	B	2.62	B	2.35	B
35	Santa Barbara Ave/Upham St	Signalized	1.79	A	2.02	B	2.51	B	2.5	B	1.76	A	2.05	B	2.56	B	2.53	B
36	Broad St/South St/Santa Barbara Ave	Signalized	2.9	C	2.44	B	3.4	C	2.62	B	2.81	C	2.56	B	3.58	D	2.72	B
37	Hwy 101 SB Ramps/Madonna Rd	Signalized	2.95	C	2.98	C	2.55	B	2.17	B	3.11	C	3.04	C	2.45	B	2.17	B
38	Hwy 101 NB Ramps/Madonna Rd	Signalized	2.92	C	2.9	C	1.87	A	1.97	A	2.97	C	2.88	C	1.89	A	2.04	B
39	Los Osos Valley Rd/Hwy 101 SB Ramps	Signalized	2.06	B	2.25	B	2.88	C	2.94	C	2.26	B	2	B	3.03	C	3.22	C
40	Broad St/Orcutt Rd	Signalized	2	B	3.07	C	3.39	C	3.12	C	2.06	B	3.13	C	3.68	D	3.28	C
41	Broad St/Rockview Pl	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		>180	F	>180	F
42	Broad St/Capitolio Wy	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		>180	F	>180	F
43	Hwy 1/Project Driveway	N/A	Intersection Does Not Exist in this Scenario								Intersection Does Not Exist in this Scenario							

Note: The LOS for each direction is for pedestrian crossings in front of vehicles traveling in that direction. So "EB" is for pedestrians walking north or south across the eastbound approach of the inters

Exhibit 56: 2035 No Project Pedestrian Level of Service (LOS) at Study Intersections

Note: There is no methodology for calculating pedestrian LOS at all-way stop-controlled intersections or on the stop-controlled approaches of side-street stop-controlled intersections. The assumption is that the pedestrian would stop and then proceed without encountering a delay. Study intersections that are all-way stops are therefore not shown in Exhibit 56.

6.4 Bicycle Conditions

As with the pedestrian forecasts and in accordance with City guidelines, peak hour bicycle volumes were estimated by applying the forecasted citywide percentage increase in bicycle trips to the existing bicycle intersection movement counts. Using this methodology we forecast a 28% increase in bicycle volumes from the existing volumes shown in Exhibit 19. Based on this, the 2035 No Project bicycle volumes are shown in Exhibit 57.

The Near-Term No Project bicycle LOS is shown in Exhibit 42.

6.5 Transit Conditions

Under 2035 No Project conditions the transit route configuration from the Short-Term Transit Plan (see Exhibit 22) would replace the current transit routes (see Exhibit 21). According to the SLO travel demand model, transit ridership can be expected to increase by 11% by 2035. No other changes to the transit system are expected.

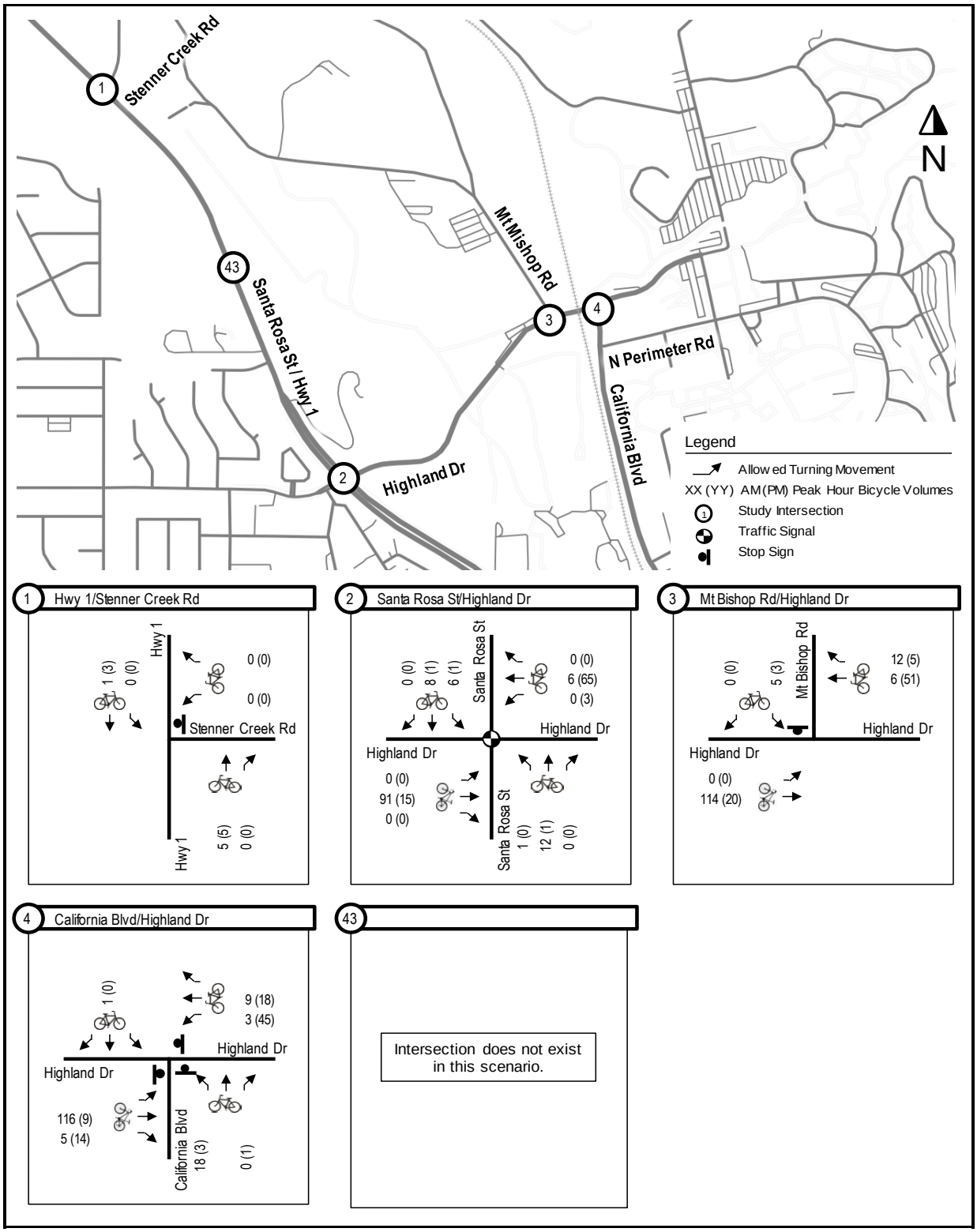


Exhibit 57: 2035 No Project Bicycle Volumes

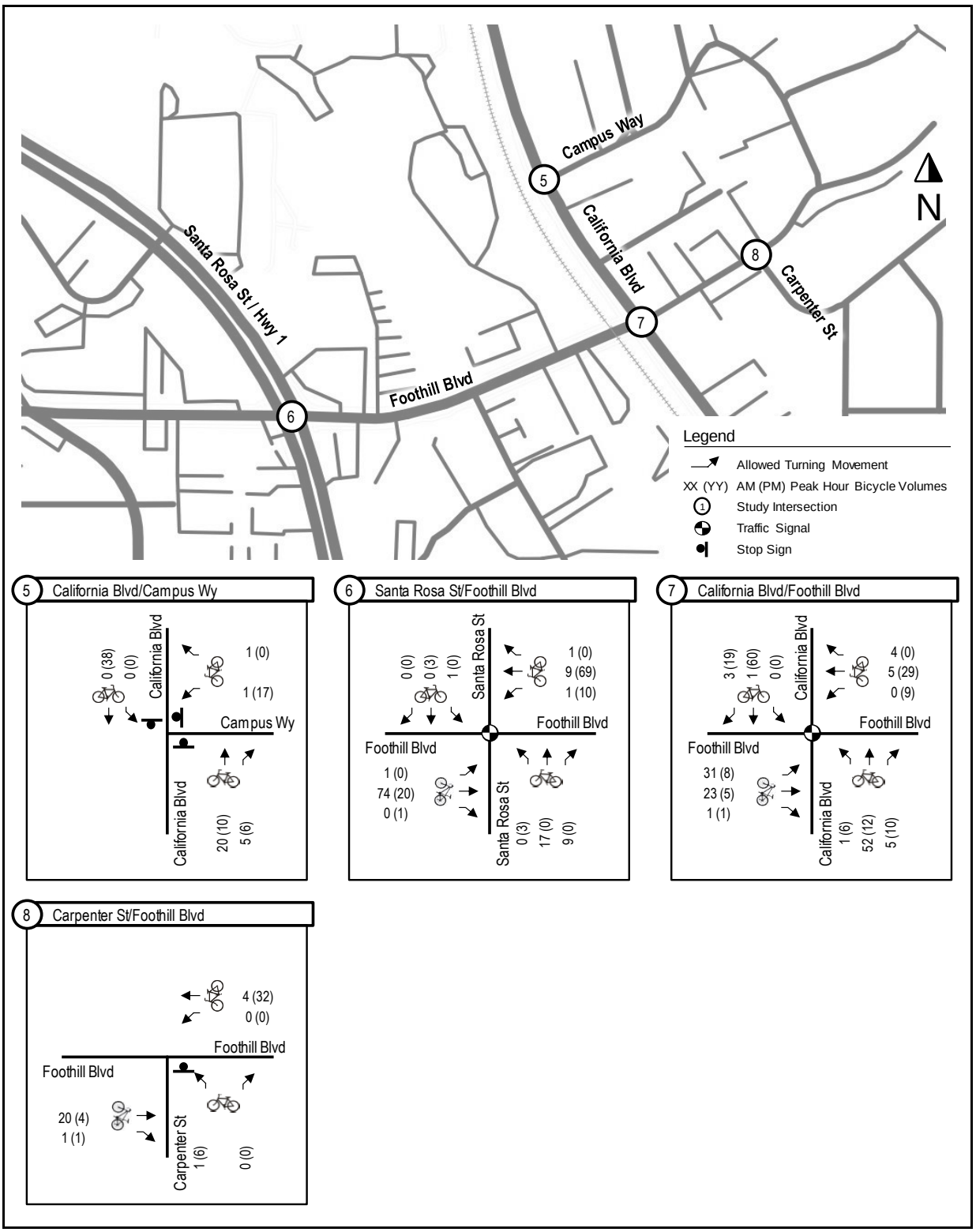


Exhibit 57: 2035 No Project Bicycle Volumes (Map B)

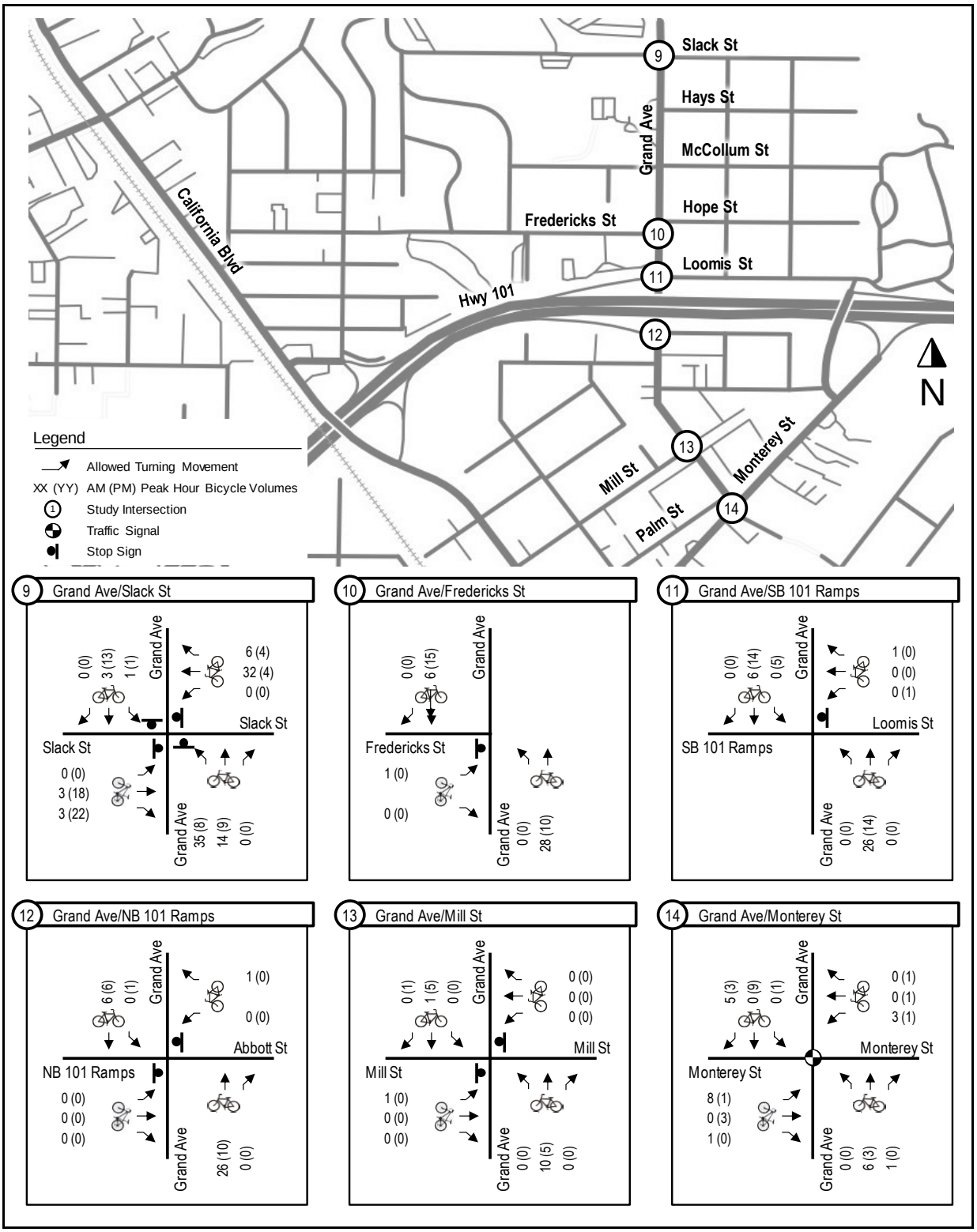


Exhibit 57: 2035 No Project Bicycle Volumes (Map C)

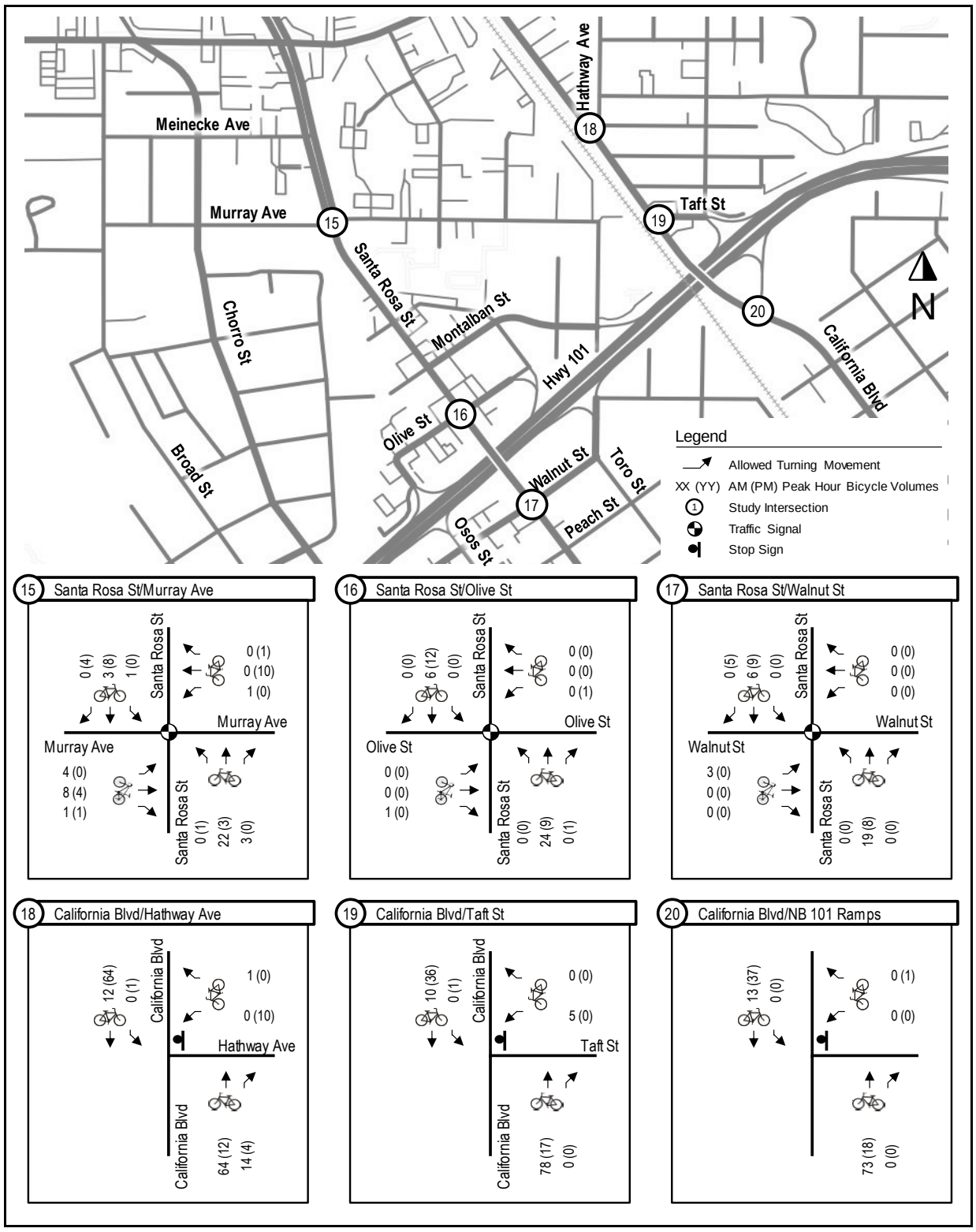


Exhibit 57: 2035 No Project Bicycle Volumes (Map D)

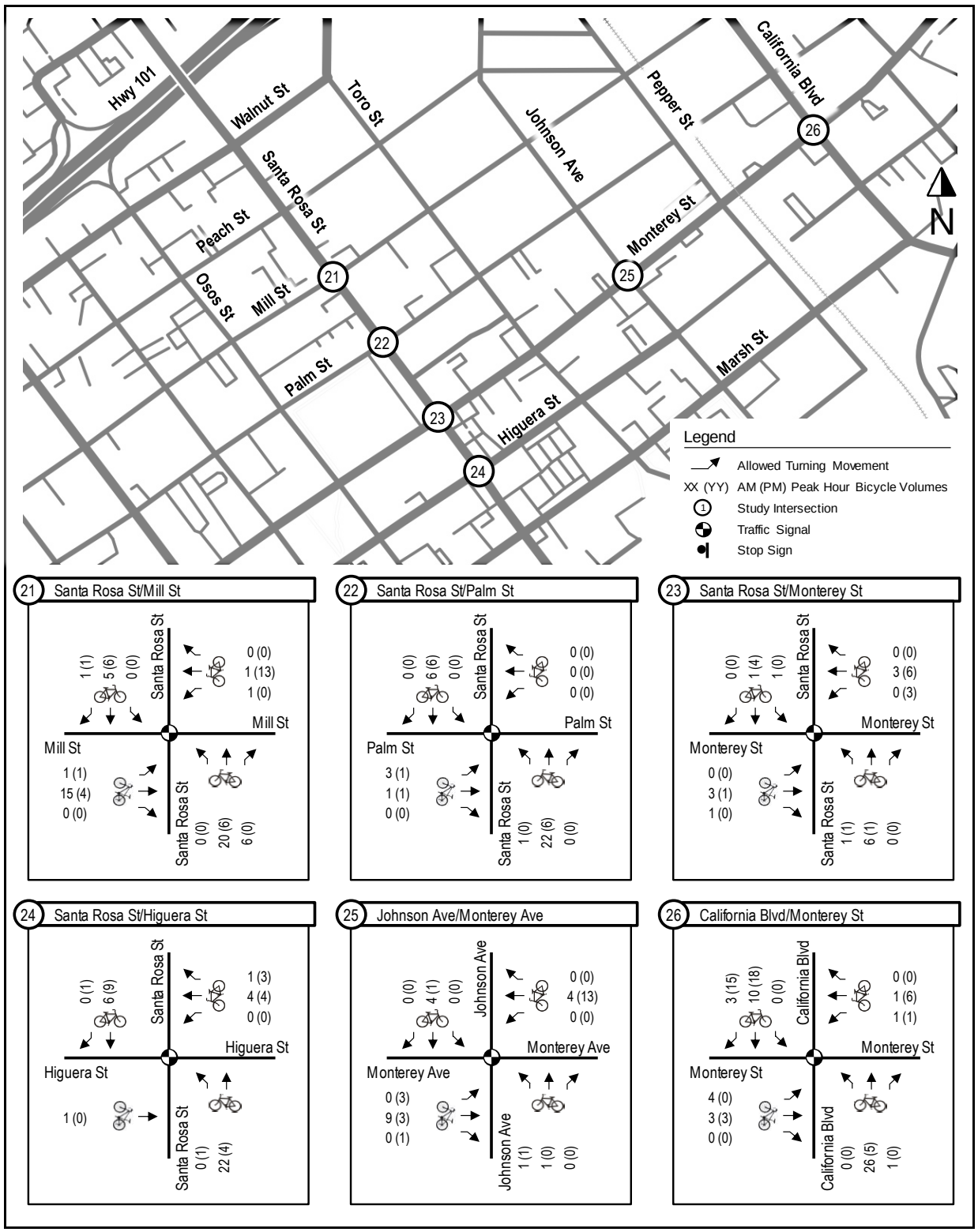


Exhibit 57: 2035 No Project Bicycle Volumes (Map E)

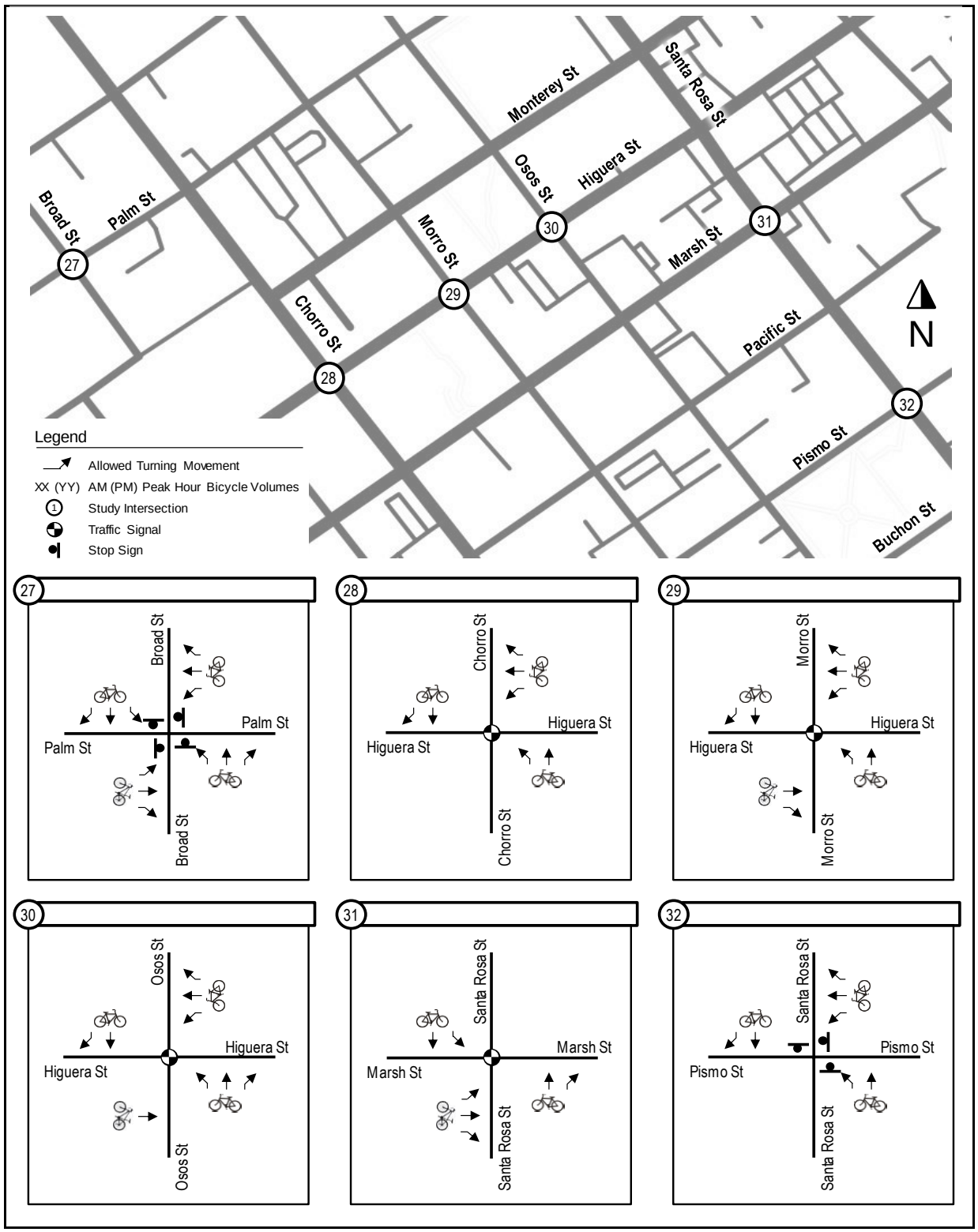


Exhibit 57: 2035 No Project Bicycle Volumes (Map F)

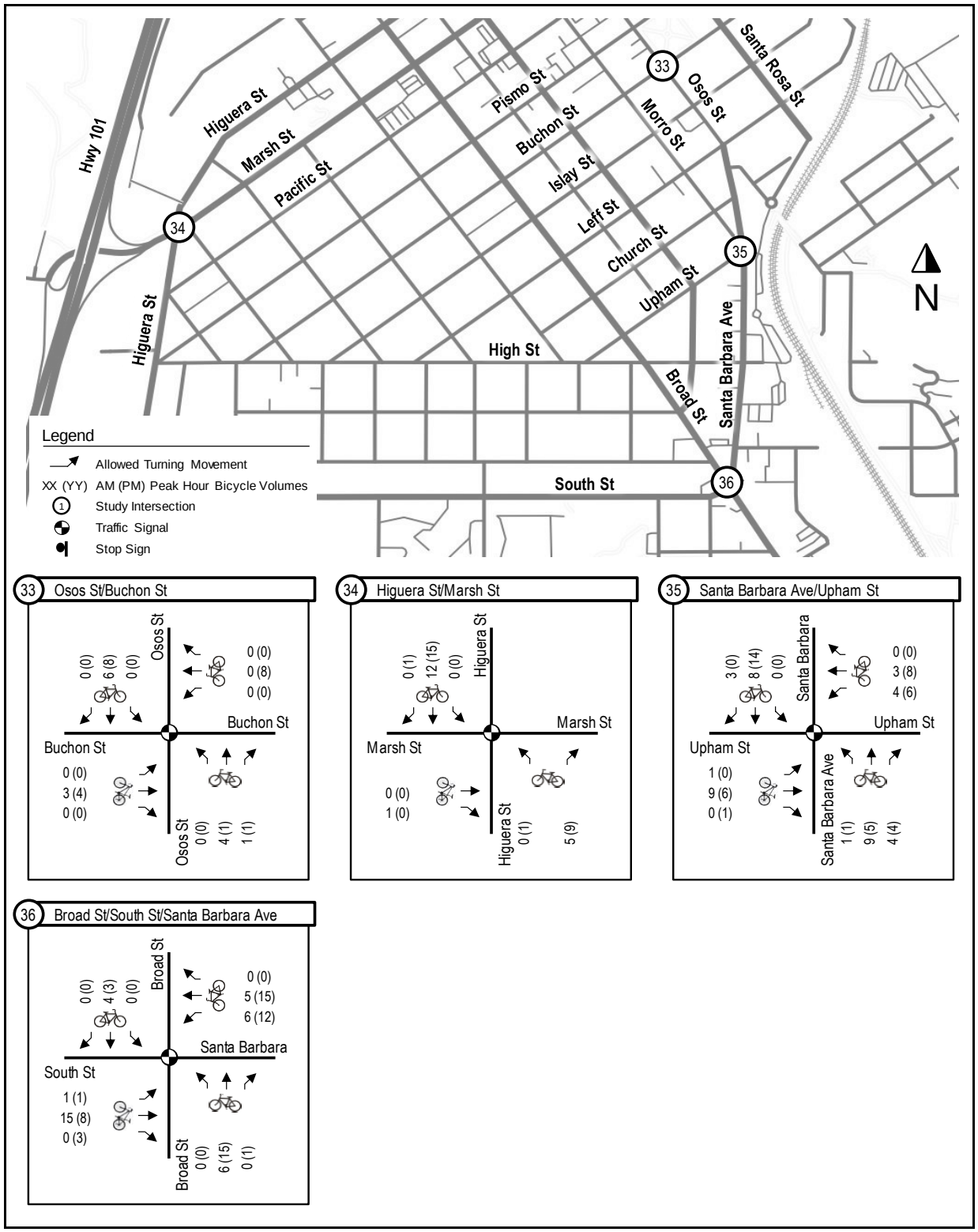


Exhibit 57: 2035 No Project Bicycle Volumes (Map G)

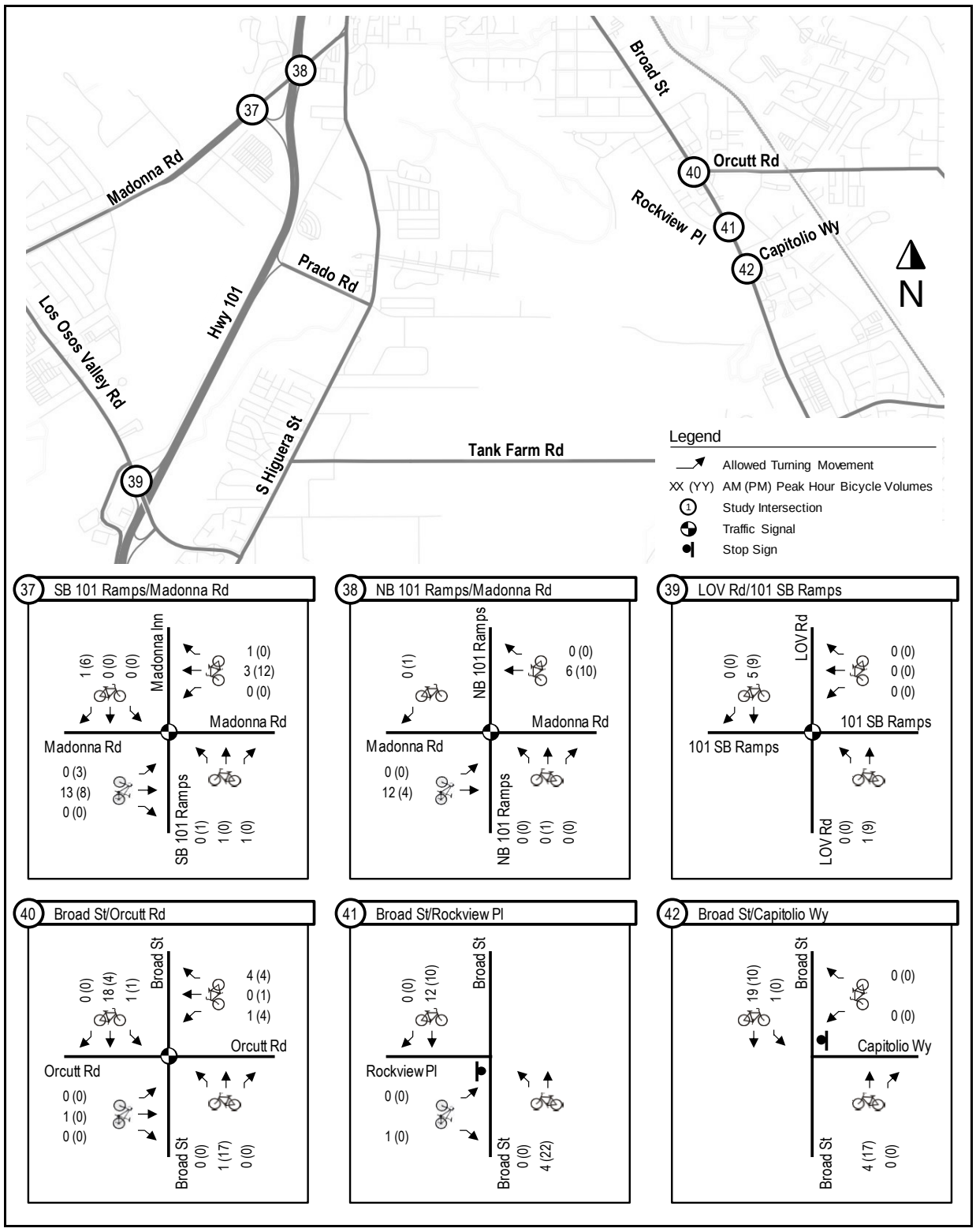


Exhibit 57: 2035 No Project Bicycle Volumes (Map H)

ID	Intersection Name	Control Type	AM Peak Hour								PM Peak Hour							
			EB		WB		NB		SB		EB		WB		NB		SB	
			Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS
2	Santa Rosa St/Highland Dr	Signalized	3.16	C	1.75	A	4.23	D	4.07	D	3.17	C	2.46	B	4.18	D	3.95	D
6	Santa Rosa St/Foothill Blvd	Signalized	3.52	D	2.25	B	3.98	D	2.91	C	2.89	C	2.43	B	4.18	D	2.96	C
7	California Blvd/Foothill Blvd	Signalized	4.18	D	2.85	C	3.08	C	2.79	C	3.77	D	3.03	C	2.83	C	3.35	C
12	Grand Ave/Hwy 101 NB Ramps	Signalized	3.52	D	2.56	B	1.01	A	0.68	A	2.83	C	2.55	B	0.84	A	0.79	A
14	Grand Ave/Monterey St	Signalized	3.42	C	2.42	B	2.37	B	2.59	B	3.69	D	2.12	B	2.34	B	2.92	C
15	Santa Rosa St/Murray Ave	Signalized	2.76	C	2.88	C	2.42	B	2.32	B	2.78	C	3.17	C	2.50	B	2.24	B
16	Santa Rosa St/Olive St	Signalized	3.40	C	2.81	C	2.32	B	2.23	B	2.82	C	2.78	C	2.92	C	2.33	B
17	Santa Rosa St/Walnut St	Signalized	2.73	B	4.03	D	1.64	A	2.16	B	2.81	C	3.95	D	2.32	B	1.72	A
21	Santa Rosa St/Mill St	Signalized	2.59	B	2.80	C	1.58	A	2.21	B	2.85	C	2.96	C	2.12	B	1.77	A
22	Santa Rosa St/Palm St	Signalized	2.76	C	2.69	B	1.55	A	2.28	B	2.92	C	2.62	B	2.12	B	1.92	A
23	Santa Rosa St/Monterey St	Signalized	2.70	B	3.15	C	1.71	A	2.25	B	2.87	C	3.16	C	2.23	B	1.93	A
24	Santa Rosa St/Higuera St	Signalized	N/A		2.64	B	1.51	A	2.93	C	N/A		2.62	B	2.04	B	2.41	B
25	Johnson Ave/Monterey Ave	Signalized	2.63	B	3.22	C	2.34	B	2.72	B	2.77	C	2.84	C	2.21	B	2.65	B
26	California Blvd/Monterey St	Signalized	2.86	C	3.16	C	1.97	A	1.55	A	3.09	C	3.20	C	2.35	B	1.57	A
28	Chorro St/Higuera St	Signalized	N/A		2.64	B	2.58	B	2.73	B	N/A		2.67	B	3.10	C	2.74	B
29	Morro St/Higuera St	Signalized	N/A		2.43	B	2.47	B	2.47	B	N/A		2.46	B	2.61	B	2.46	B
30	Osos St/Higuera St	Signalized	N/A		2.31	B	2.58	B	2.48	B	N/A		2.26	B	2.91	C	2.52	B
31	Santa Rosa St/Marsh St	Signalized	1.42	A	N/A		1.49	A	2.14	B	1.65	A	N/A	0.00	1.98	A	1.91	A
33	Osos St/Buchon St	Signalized	1.82	A	2.16	B	2.70	B	2.20	B	1.90	A	1.99	A	2.85	C	2.30	B
34	Higuera St/Marsh St	Signalized	3.02	C	N/A		N/A		2.63	B	2.49	B	N/A		N/A		2.91	C
35	Santa Barbara Ave/Upham St	Signalized	1.41	A	1.21	A	2.41	B	3.49	C	1.38	A	1.24	A	2.82	C	3.24	C
36	Broad St/South St/Santa Barbara Ave	Signalized	4.12	D	3.91	D	2.07	B	2.22	B	4.01	D	4.04	D	2.93	C	2.20	B
37	Hwy 101 SB Ramps/Madonna Rd	Signalized	1.67	A	1.58	A	4.81	E	2.96	C	1.90	A	1.77	A	4.27	E	2.98	C
38	Hwy 101 NB Ramps/Madonna Rd	Signalized	2.28	B	1.72	A	3.33	C	N/A		2.13	B	1.97	A	2.04	B	N/A	
39	Los Osos Valley Rd/Hwy 101 SB Ramps	Signalized	N/A		4.13	D	1.99	A	2.08	B	N/A		3.32	C	2.66	B	2.48	B
40	Broad St/Orcutt Rd	Signalized	2.88	C	3.40	C	2.35	B	3.22	C	3.03	C	3.58	D	3.44	C	2.77	C

Exhibit 58: 2035 No Project Bicycle LOS

Note: Exhibit 58 only lists the study intersections that are signalized because there is no methodology for calculating bicycle LOS at stop-controlled intersections. The assumption is that the bicycle would stop and then proceed without encountering a delay.

7 2035 PLUS PROJECT CONDITIONS

7.1 Effects of the Project on Transportation Demand

The Project will affect transportation demand, defined as the need or desire to go from one place to another, in a number of different ways:

- The Project will increase employment at Cal Poly by 733 jobs, which would tend to increase commuting to campus. However, the Project will also add 1,470 dwelling units located on or near (within biking distance of) the campus. Preference for renting these units will be given to those affiliated with the university. This will tend to reduce commuting to campus by car by faculty and staff.
- To the extent that residents of the five neighborhoods work elsewhere in San Luis Obispo besides the university, the effect will be to replace long-distance commuting from other cities with short-distance commuting internal to San Luis Obispo. In terms of spatial distribution of traffic, this will mean fewer trips on US 101 and Hwy 1 leading into San Luis Obispo (see Exhibit 59) but more trips on the streets between the campus and other parts of San Luis Obispo (see Exhibit 60). In some places, such as Grand Avenue near Slack Road, commute trips from the new neighborhoods will tend to go in the off-peak direction of travel (southbound in the morning, northbound in the evening, see Exhibit 60) where capacity is less of an issue than the peak direction.
- The Project will reduce the number of students living off-campus by 3,756. This will tend to reduce commuting by students by all modes.
- The Project will increase the number of students living on campus with strict limits on vehicle availability by 7,812. This will tend to increase bicycle, pedestrian, and transit travel between the campus and retail and entertainment areas in the city.

The combined effect of these changes in demand on conditions at individual facilities is described below.

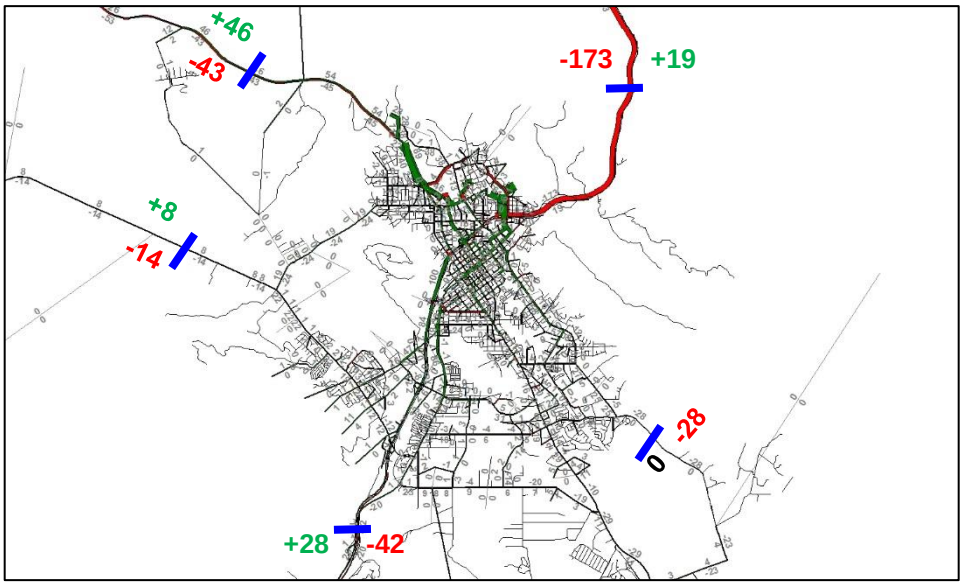


Exhibit 59: Net Effect of the Project on AM Peak-Hour Traffic Volumes (Zoomed Out)

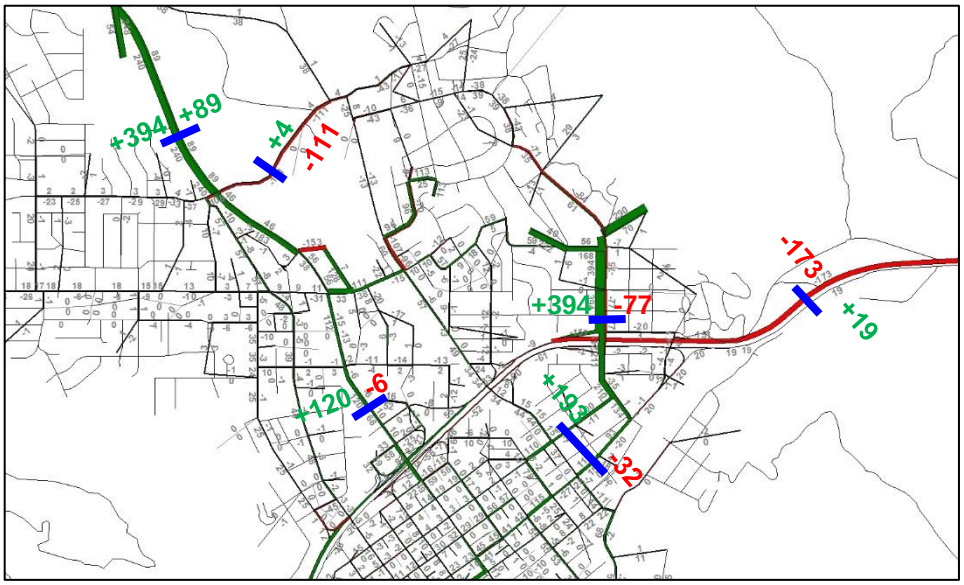


Exhibit 60: Net Effect of the Project on AM Peak-Hour Traffic Volumes (Zoomed In)

7.2 Intersection LOS

The 2035 Plus Project traffic volumes are shown in Exhibit 61. The corresponding 2035 No Project intersection LOS is shown in Exhibit 62. The target LOS would not be met at the same 11 locations that would not meet the target LOS even under No Project conditions.

Exhibit 66 compares the No Project and Plus Project to determine where the Project would have significant impacts in the AM peak hour in 2035. Exhibit 67 makes a similar comparison for the PM peak hour. The Project would have significant impacts at the following 6 locations:

- Intersection #1, Hwy 1/Stenner Creek Rd, during the AM peak hours
- Intersection #6, Santa Rosa St/Foothill Blvd, during the AM peak hour
- Intersection #9, Grand Ave/Slack St, during the AM peak hour
- Intersection #19, California Blvd/Taft St, during the AM peak hour
- Intersection #41, Broad St/Rockview Pl, during the AM peak hour
- Intersection #43, Hwy 1/Project Driveway, during the AM and PM peak hours

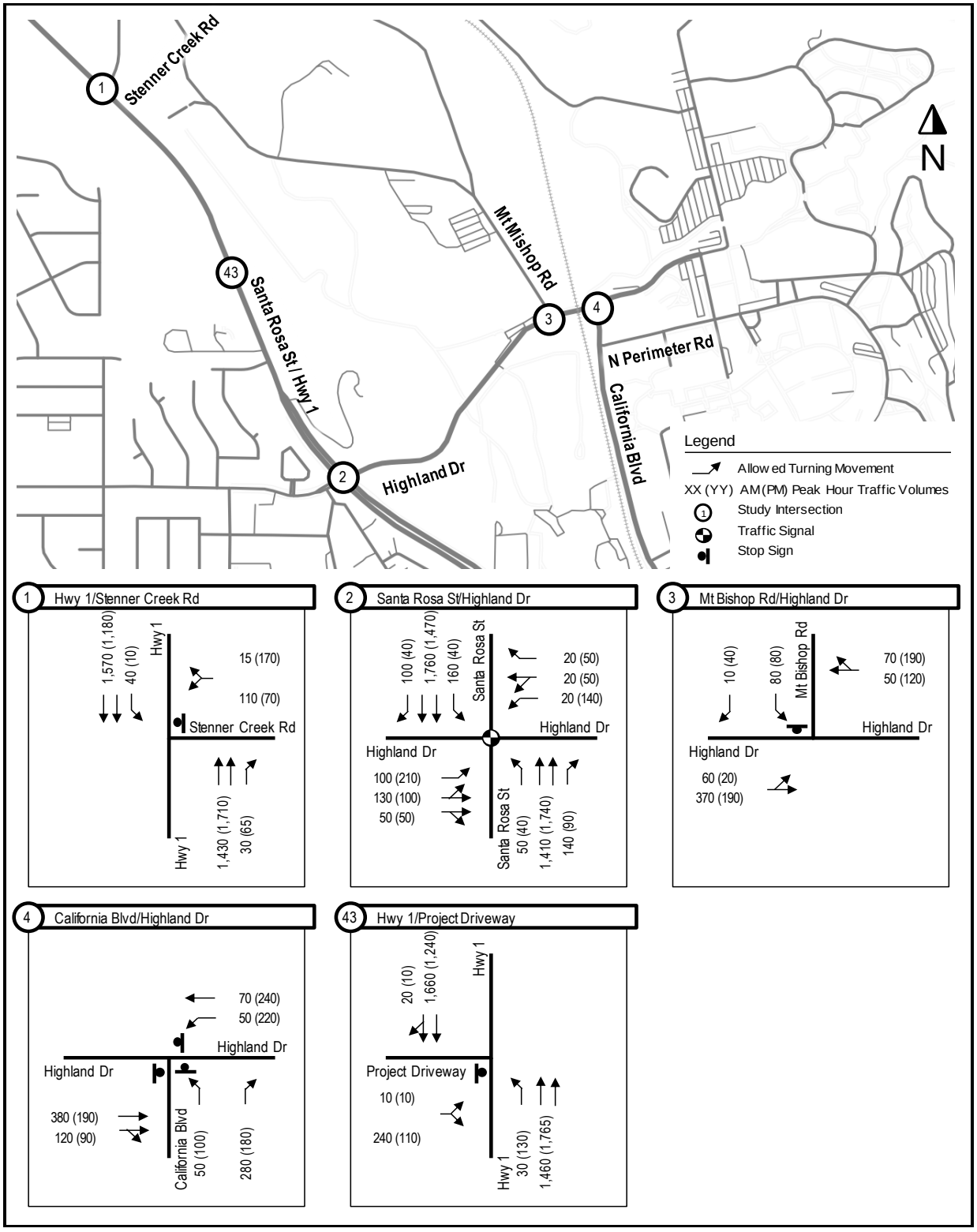


Exhibit 61: 2035 Plus Project Traffic Volumes and Lane Configurations

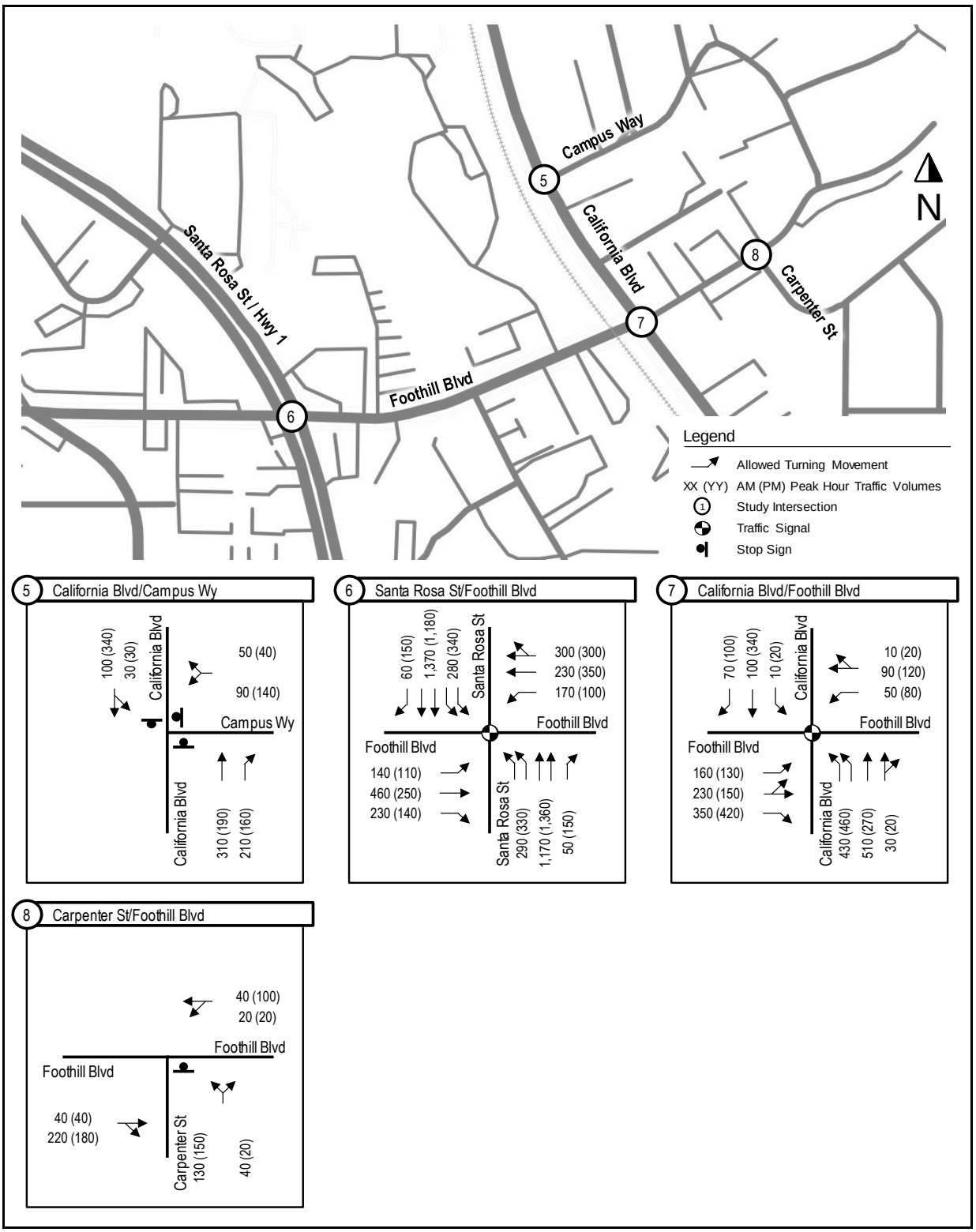


Exhibit 61: 2035 Plus Project Traffic Volumes and Lane Configurations (Map B)

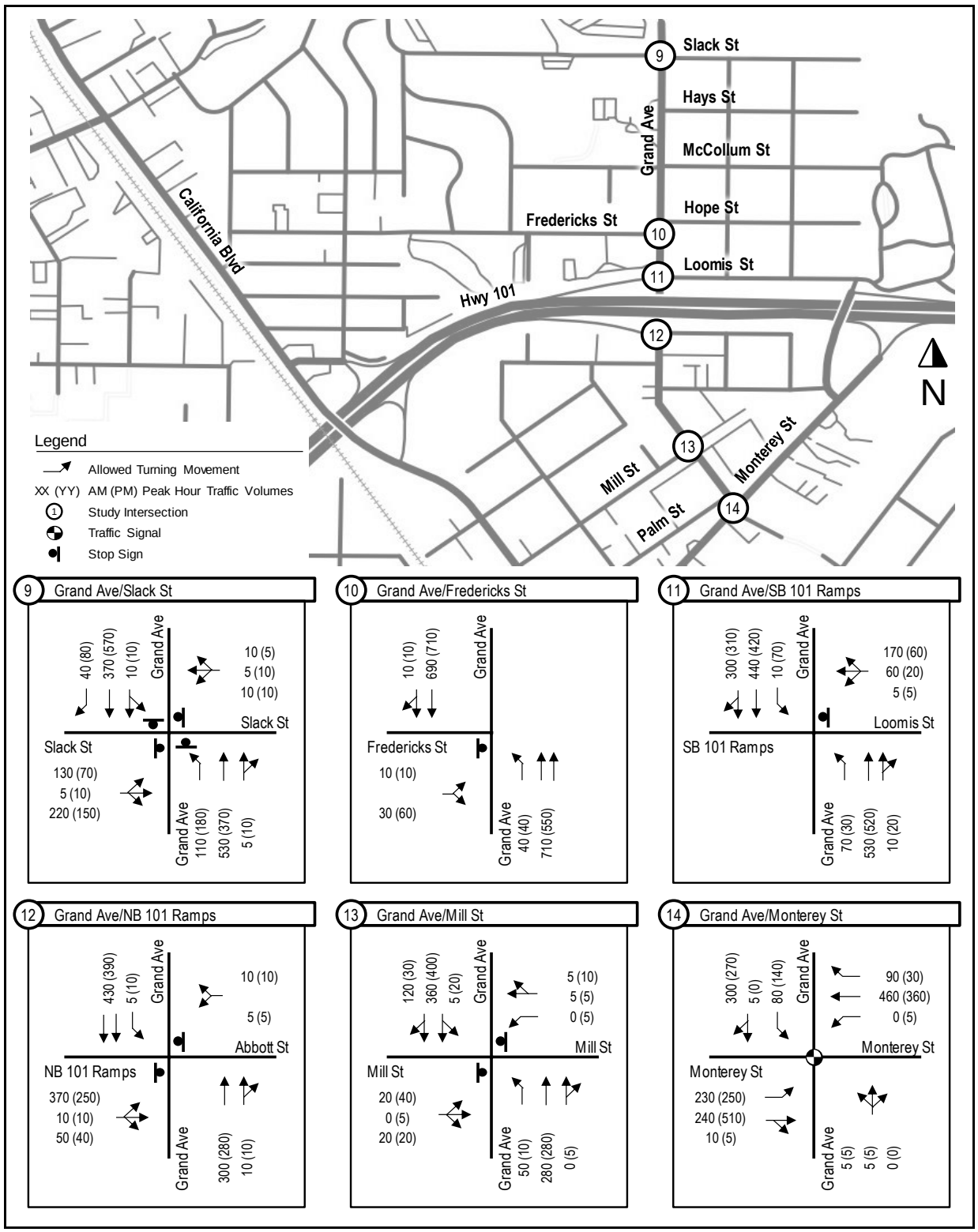


Exhibit 61: 2035 Plus Project Traffic Volumes and Lane Configurations (Map C)

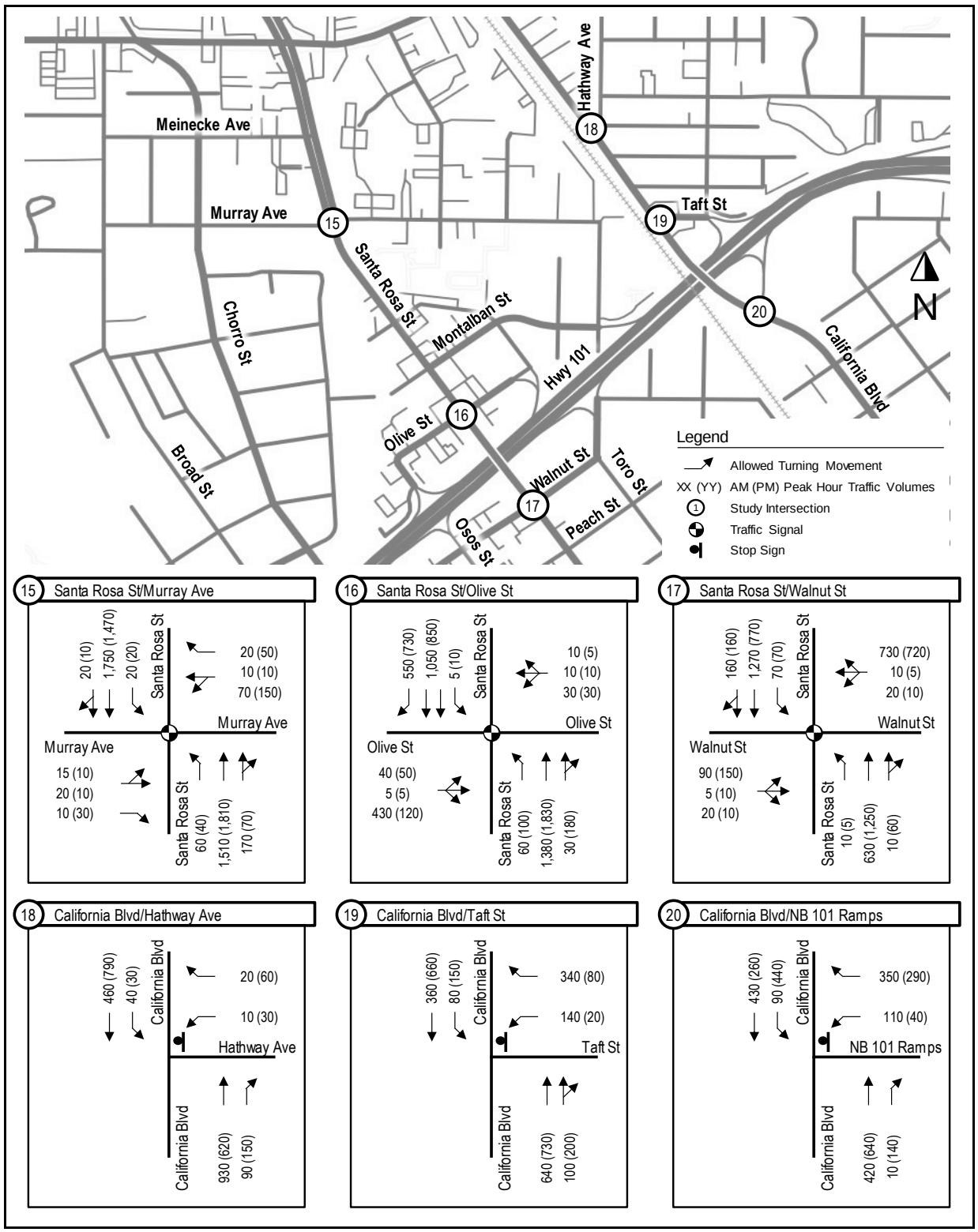


Exhibit 61: 2035 Plus Project Traffic Volumes and Lane Configurations (Map D)

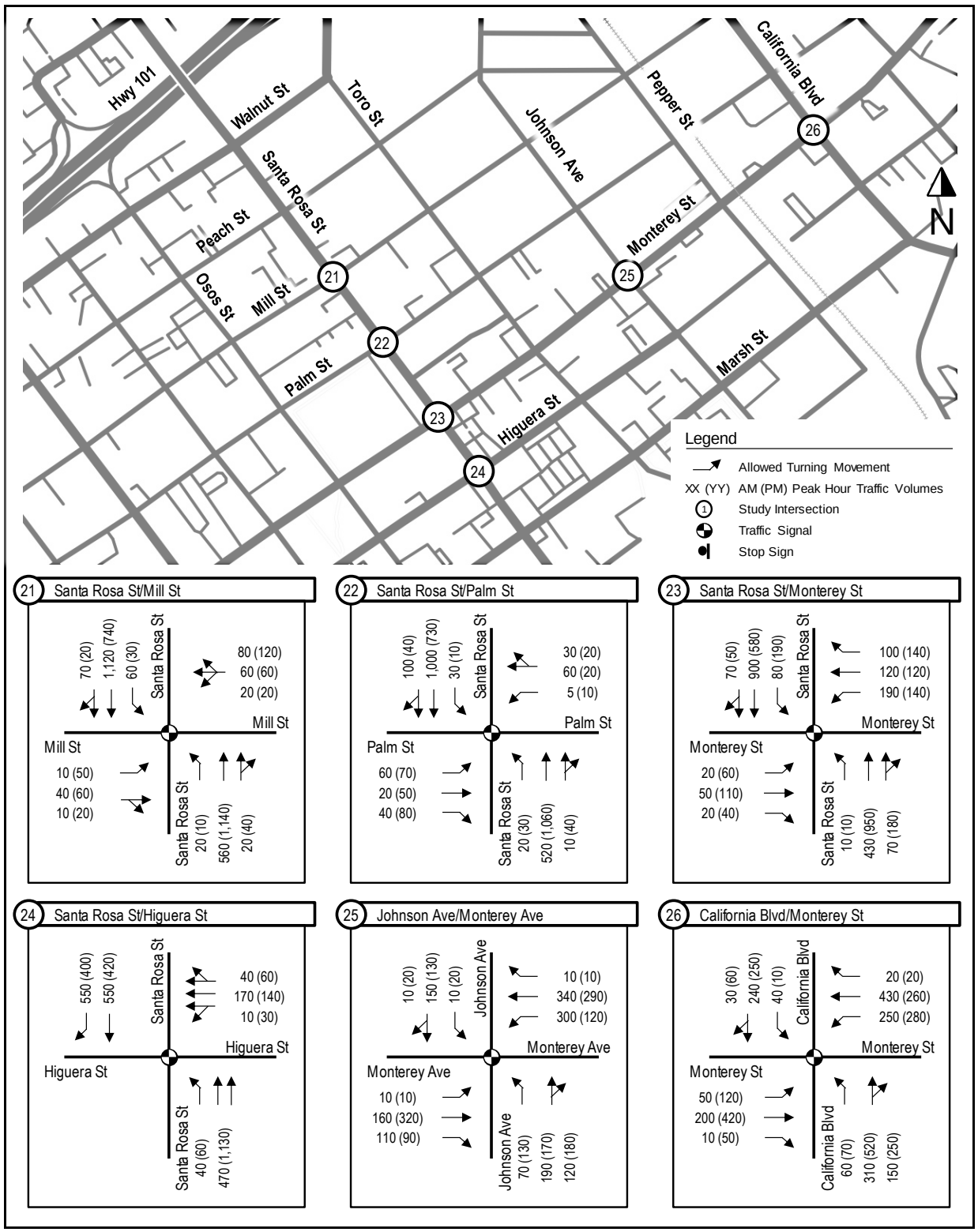


Exhibit 61: 2035 Plus Project Traffic Volumes and Lane Configurations (Map E)

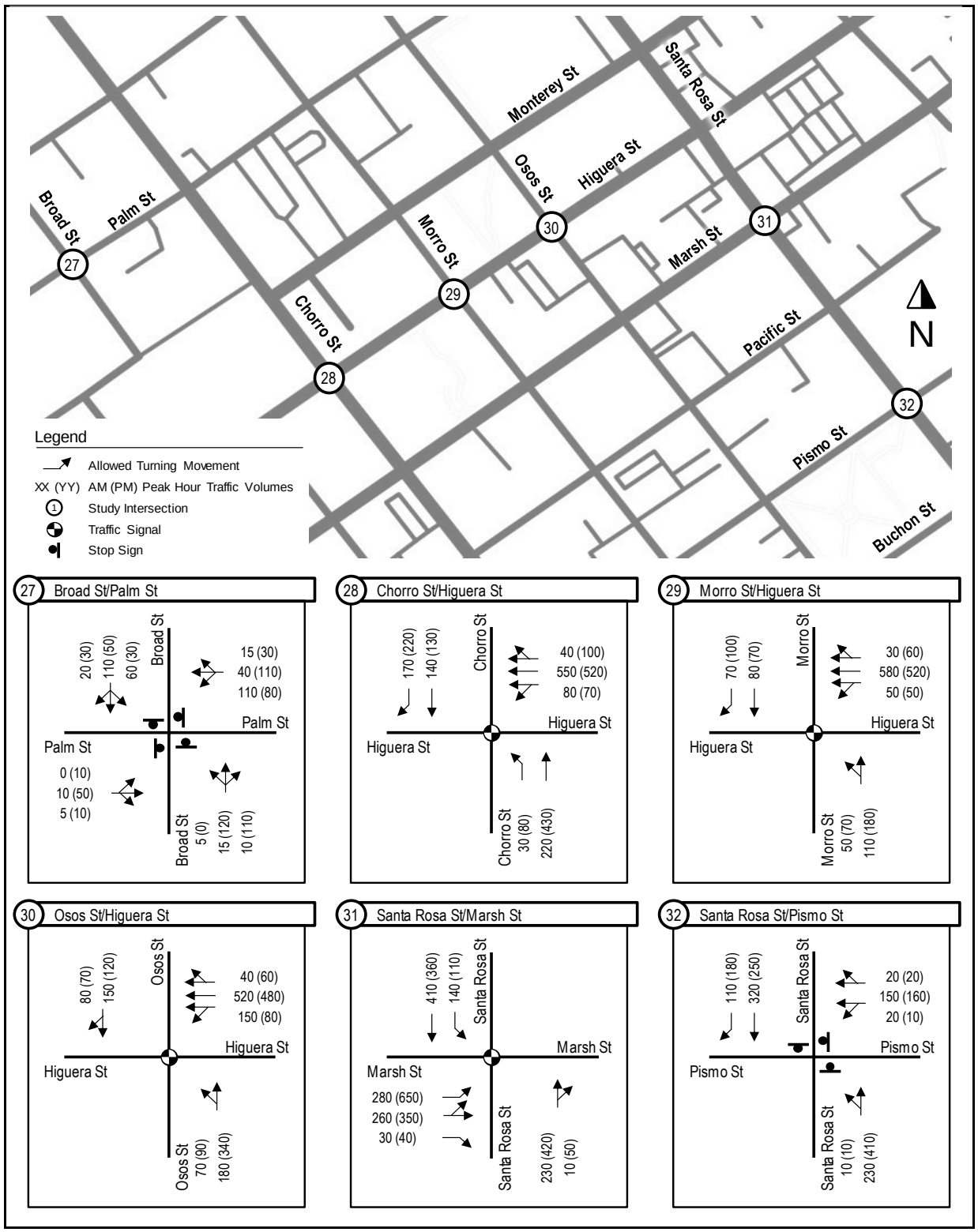


Exhibit 61: 2035 Plus Project Traffic Volumes and Lane Configurations (Map F)

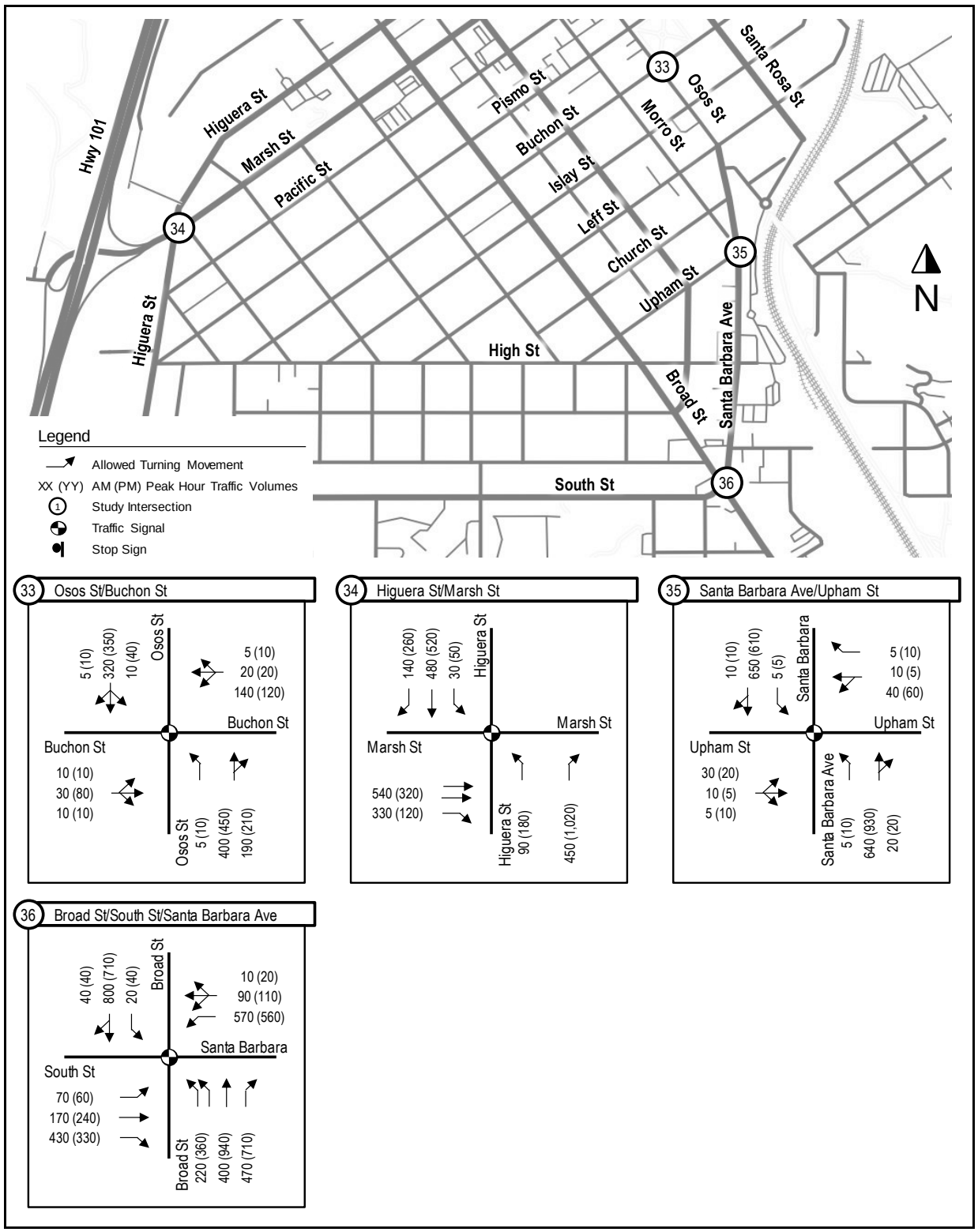


Exhibit 61: 2035 Plus Project Traffic Volumes and Lane Configurations (Map G)

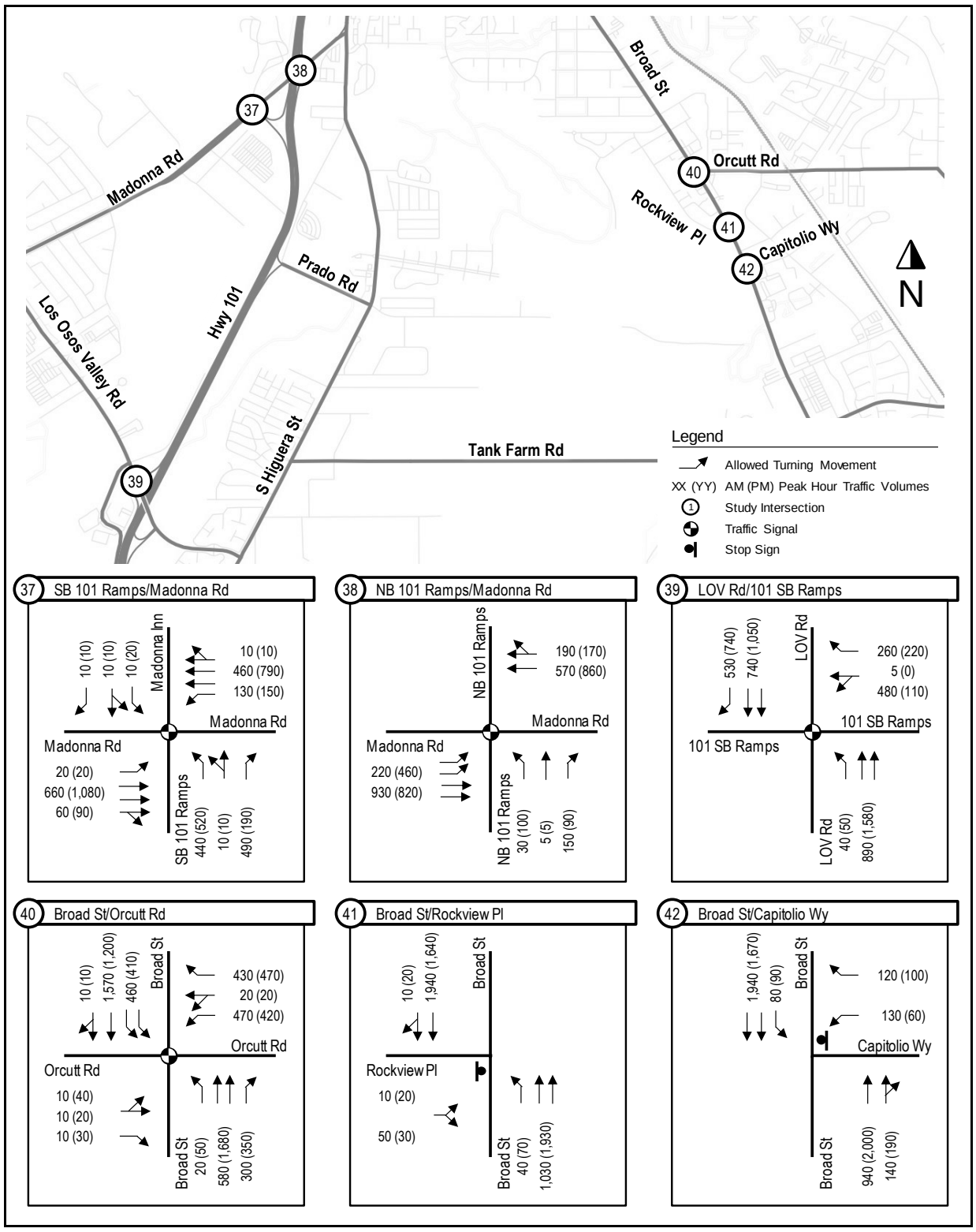


Exhibit 61: 2035 Plus Project Traffic Volumes and Lane Configurations (Map H)

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			Average Delay	HCM LOS	Average Delay	HCM LOS
1	Hwy 1/Stenner Creek Rd	TWSC	>180	**F**	84.6	**F**
2	Santa Rosa St/Highland Dr	Signalized	49.3	D	51.6	D
3	Mt Bishop Rd/Highland Dr	TWSC	22.6	C	17.6	C
4	California Blvd/Highland Dr	AWSC	14.3	B	14.5	B
5	California Blvd/Campus Wy	AWSC	10.7	B	14.8	B
6	Santa Rosa St/Foothill Blvd	Signalized	73.9	**E**	50.8	D
7	California Blvd/Foothill Blvd	Signalized	31.2	C	34.7	C
8	Carpenter St/Foothill Blvd	TWSC	18.0	C	17.7	C
9	Grand Ave/Slack St	AWSC	54.6	**F**	13.6	B
10	Grand Ave/Fredericks St	TWSC	15.4	C	13.1	B
11	Grand Ave/US-101 SB Ramps	TWSC	16.5	C	26.9	D
12	Grand Ave/US-101 NB Ramps	Signalized	16.2	B	8.7	A
13	Grand Ave/Mill St	TWSC	17.5	C	17.0	C
14	Grand Ave/Monterey St	Signalized	9.6	A	9.0	A
15	Santa Rosa St/Murray Ave	Signalized	50.9	D	80.0	**F**
16	Santa Rosa St/Olive St	Signalized	11.1	B	20.3	C
17	Santa Rosa St/Walnut St	Signalized	83.1	**F**	133.6	**F**
18	California Blvd/Hathway Ave	TWSC	29.7	D	28.7	D
19	California Blvd/Taft St	TWSC	95.0	**F**	54.7	**F**
20	California Blvd/US-101 NB Ramps	TWSC	25.7	D	107.0	**F**
21	Santa Rosa St/Mill St	Signalized	7.3	A	6.6	A
22	Santa Rosa St/Palm St	Signalized	16.1	B	3.6	A
23	Santa Rosa St/Monterey St	Signalized	12.2	B	8.0	A
24	Santa Rosa St/Higuera St	Signalized	4.9	A	6.0	A
25	Johnson Ave/Monterey Ave	Signalized	13.1	B	10.7	B
26	California Blvd/Monterey St	Signalized	28.6	C	93.0	**F**
27	Broad St/Palm St	AWSC	10.0	A	9.7	A
28	Chorro St/Higuera St	Signalized	12.1	B	13.0	B
29	Morro St/Higuera St	Signalized	18.4	B	16.8	B
30	Osos St/Higuera St	Signalized	13.2	B	14.8	B
31	Santa Rosa St/Marsh St	Signalized	15.5	B	14.3	B
32	Santa Rosa St/Pismo St	AWSC	12.9	B	18.0	C
33	Osos St/Buchon St	Signalized	19.4	B	9.1	A
34	Higuera St/Marsh St	Signalized*	20.1	C	31.7	C
35	Santa Barbara Ave/Upham St	Signalized	11.4	B	15.0	B
36	Broad St/South St/Santa Barbara Ave	Signalized	50.2	D	42.6	D
37	US-101 SB Ramps/Madonna Rd	Signalized	46.0	D	32.2	C
38	US-101 NB Ramps/Madonna Rd	Signalized	14.3	B	17.3	B
39	Los Osos Valley Rd/US-101 SB Ramps	Signalized	39.3	D	54.7	D
40	Broad St/Orcutt Rd	Signalized	32.9	C	96.0	**F**
41	Broad St/Rockview Pl	TWSC	>180	**F**	>180	**F**
42	Broad St/Capitolio Wy	TWSC	149.9	**F**	>180	**F**
43	Hwy 1/Project Driveway	TWSC	>180	**F**	173.7	**F**

*Intersection LOS was calculated using HCM 2000 Method, because of non-standard lane groups or phasing that do not conform to the HCM 2010 computational engine.
TWSC Intersection LOS is based on maximum approach delay.

Exhibit 62: 2035 Plus Project Auto Level of Service (LOS) at Study Intersections

Study ID	Intersection Name	Control Type	2035 No Project		2035 Plus Project		LOS Changes from D or Better to E or F?	LOS E or F and Project Adds 10 trips and adds 5 Seconds of Delay?	V/C Ratio		LOS F w/ Delay >120s and Project Adds 10 trips and 5 Seconds of Delay and Increases V/C Ratio by .02?
			Average Delay	HCM LOS	Average Delay	HCM LOS			2035 No Project	2035 Plus Project	
1	Hwy 1/Stenner Creek Rd	TWSC	35.8	**E**	>180	**F**	No	**Yes**			No
2	Santa Rosa St/Highland Dr	Signalized	43.1	D	49.3	D	No	No			No
3	Mt Bishop Rd/Highland Dr	TWSC	22.1	C	22.6	C	No	No			No
4	California Blvd/Highland Dr	AWSC	15.4	C	14.3	B	No	No			No
5	California Blvd/Campus Wy	AWSC	10.6	B	10.7	B	No	No			No
6	Santa Rosa St/Foothill Blvd	Signalized	51.6	D	73.9	**E**	**Yes**	No			No
7	California Blvd/Foothill Blvd	Signalized	28.3	C	31.2	C	No	No			No
8	Carpenter St/Foothill Blvd	TWSC	14.7	B	18.0	C	No	No			No
9	Grand Ave/Slack St	AWSC	39.3	**E**	54.6	**F**	No	**Yes**			No
10	Grand Ave/Fredericks St	TWSC	11.6	B	15.4	C	No	No			No
11	Grand Ave/US-101 SB Ramps	TWSC	17.9	C	16.5	C	No	No			No
12	Grand Ave/US-101 NB Ramps	Signalized	19.4	B	16.2	B	No	No			No
13	Grand Ave/Mill St	TWSC	13.8	B	17.5	C	No	No			No
14	Grand Ave/Monterey St	Signalized	8.3	A	9.6	A	No	No			No
15	Santa Rosa St/Murray Ave	Signalized	43.7	D	50.9	D	No	No			No
16	Santa Rosa St/Olive St	Signalized	10.0	A	11.1	B	No	No			No
17	Santa Rosa St/Walnut St	Signalized	92.5	**F**	83.1	**F**	No	No	0.71	0.73	No
18	California Blvd/Hathway Ave	TWSC	34.2	D	29.7	D	No	No			No
19	California Blvd/Taft St	TWSC	57.2	**F**	95.0	**F**	No	**Yes**			No
20	California Blvd/US-101 NB Ramps	TWSC	23.0	C	25.7	D	No	No			No
21	Santa Rosa St/Mill St	Signalized	7.3	A	7.3	A	No	No			No
22	Santa Rosa St/Palm St	Signalized	14.4	B	16.1	B	No	No			No
23	Santa Rosa St/Monterey St	Signalized	11.2	B	12.2	B	No	No			No
24	Santa Rosa St/Higuera St	Signalized	4.9	A	4.9	A	No	No			No
25	Johnson Ave/Monterey Ave	Signalized	12.1	B	13.1	B	No	No			No
26	California Blvd/Monterey St	Signalized	26.4	C	28.6	C	No	No			No
27	Broad St/Palm St	AWSC	9.7	A	10.0	A	No	No			No
28	Chorro St/Higuera St	Signalized	12.0	B	12.1	B	No	No			No
29	Morro St/Higuera St	Signalized	16.8	B	18.4	B	No	No			No
30	Osos St/Higuera St	Signalized	12.8	B	13.2	B	No	No			No
31	Santa Rosa St/Marsh St	Signalized	15.4	B	15.5	B	No	No			No
32	Santa Rosa St/Pismo St	AWSC	13.2	B	12.9	B	No	No			No
33	Osos St/Buchon St	Signalized	20.3	C	19.4	B	No	No			No
34	Higuera St/Marsh St	Signalized*	20.4	C	20.1	C	No	No	`		No
35	Santa Barbara Ave/Upham St	Signalized	11.1	B	11.4	B	No	No			No
36	Broad St/South St/Santa Barbara Ave	Signalized	47.9	D	50.2	D	No	No			No
37	US-101 SB Ramps/Madonna Rd	Signalized	49.3	D	46.0	D	No	No			No
38	US-101 NB Ramps/Madonna Rd	Signalized	14.2	B	14.3	B	No	No			No
39	Los Osos Valley Rd/US-101 SB Ramps	Signalized	38.7	D	39.3	D	No	No			No
40	Broad St/Orcutt Rd	Signalized	32.7	C	32.9	C	No	No			No
41	Broad St/Rockview Pl	TWSC	>180	**F**	>180	**F**	No	No	2.69	2.92	**Yes**
42	Broad St/Capitolio Wy	TWSC	161.1	**F**	149.9	**F**	No	No	1.17	1.13	No
43	Hwy 1/Project Driveway	TWSC	Does Not Exist		>180	**F**	**Yes**	No			No

Exhibit 63: Determination of Intersection Impacts for 2035 Plus Project in AM Peak Hour

Study ID	Intersection Name	Control Type	2035 No Project		2035 Plus Project		LOS Changes from D or Better to E or F?	LOS E or F and Project Adds 10 trips and adds 5 Seconds of Delay?	V/C Ratio		LOS F w/ Delay >120s and Project Adds 10 trips and 5 Seconds of Delay and Increases V/C Ratio by .02?
			Average Delay	HCM LOS	Average Delay	HCM LOS			2035 No Project	2035 Plus Project	
1	Hwy 1/Stenner Creek Rd	TWSC	84.6	**F**	84.6	**F**	No	No			No
2	Santa Rosa St/Highland Dr	Signalized	49.3	D	51.6	D	No	No			No
3	Mt Bishop Rd/Highland Dr	TWSC	17.6	C	17.6	C	No	No			No
4	California Blvd/Highland Dr	AWSC	14.5	B	14.5	B	No	No			No
5	California Blvd/Campus Wy	AWSC	14.8	B	14.8	B	No	No			No
6	Santa Rosa St/Foothill Blvd	Signalized	51.4	D	50.8	D	No	No			No
7	California Blvd/Foothill Blvd	Signalized	34.8	C	34.7	C	No	No			No
8	Carpenter St/Foothill Blvd	TWSC	17.7	C	17.7	C	No	No			No
9	Grand Ave/Slack St	AWSC	13.6	B	13.6	B	No	No			No
10	Grand Ave/Fredericks St	TWSC	13.1	B	13.1	B	No	No			No
11	Grand Ave/US-101 SB Ramps	TWSC	11.7	B	26.9	D	No	No			No
12	Grand Ave/US-101 NB Ramps	Signalized	8.8	A	8.7	A	No	No			No
13	Grand Ave/Mill St	TWSC	17.0	C	17.0	C	No	No			No
14	Grand Ave/Monterey St	Signalized	9.4	A	9.0	A	No	No			No
15	Santa Rosa St/Murray Ave	Signalized	80.0	**F**	80.0	**F**	No	No			No
16	Santa Rosa St/Olive St	Signalized	20.3	C	20.3	C	No	No			No
17	Santa Rosa St/Walnut St	Signalized	133.6	**F**	133.6	**F**	No	No	0.85	0.85	No
18	California Blvd/Hathway Ave	TWSC	28.7	D	28.7	D	No	No			No
19	California Blvd/Taft St	TWSC	54.7	**F**	54.7	**F**	No	No			No
20	California Blvd/US-101 NB Ramps	TWSC	107.0	**F**	107.0	**F**	No	No			No
21	Santa Rosa St/Mill St	Signalized	6.6	A	6.6	A	No	No			No
22	Santa Rosa St/Palm St	Signalized	3.6	A	3.6	A	No	No			No
23	Santa Rosa St/Monterey St	Signalized	8.1	A	8.0	A	No	No			No
24	Santa Rosa St/Higuera St	Signalized	6.0	A	6.0	A	No	No			No
25	Johnson Ave/Monterey Ave	Signalized	10.7	B	10.7	B	No	No			No
26	California Blvd/Monterey St	Signalized	96.0	**F**	93.0	**F**	No	No			No
27	Broad St/Palm St	AWSC	9.7	A	9.7	A	No	No			No
28	Chorro St/Higuera St	Signalized	13.0	B	13.0	B	No	No			No
29	Morro St/Higuera St	Signalized	16.8	B	16.8	B	No	No			No
30	Osos St/Higuera St	Signalized	14.8	B	14.8	B	No	No			No
31	Santa Rosa St/Marsh St	Signalized	14.3	B	14.3	B	No	No			No
32	Santa Rosa St/Pismo St	AWSC	18.0	C	18.0	C	No	No			No
33	Osos St/Buchon St	Signalized	9.1	A	9.1	A	No	No			No
34	Higuera St/Marsh St	Signalized*	31.7	C	31.7	C	No	No			No
35	Santa Barbara Ave/Upham St	Signalized	15.0	B	15.0	B	No	No			No
36	Broad St/South St/Santa Barbara Ave	Signalized	42.5	D	42.6	D	No	No			No
37	US-101 SB Ramps/Madonna Rd	Signalized	32.2	C	32.2	C	No	No			No
38	US-101 NB Ramps/Madonna Rd	Signalized	17.3	B	17.3	B	No	No			No
39	Los Osos Valley Rd/US-101 SB Ramps	Signalized	54.7	D	54.7	D	No	No			No
40	Broad St/Orcutt Rd	Signalized	95.9	**F**	96.0	**F**	No	No			No
41	Broad St/Rockview Pl	TWSC	>180	**F**	>180	**F**	No	No			No
42	Broad St/Capitolio Wy	TWSC	>180	**F**	>180	**F**	No	No			No
43	Hwy 1/Project Driveway	TWSC	Does Not Exist		173.7	**F**	**Yes**	No			No

Exhibit 64: Determination of Intersection Impacts for 2035 Plus Project in PM Peak Hour

7.3 Freeway LOS

The LOS for the study freeway segments under 2035 Plus Project conditions are shown in Exhibit 65. The analysis shows that two northbound and one southbound segment would operate unacceptably in the PM peak hour, and that the southbound segment would also operate unacceptably in the AM peak hour. These deficiencies would all also occur in the No Project condition. Note that segments 1 and 2 would operate as a single segment in 2035 because of the planned permanent closure of the Broad Street northbound ramps for safety reasons.

	ID	Freeway Segment	Analysis Type	# of Lanes	AM Peak Hour			PM Peak Hour		
					Volume	Density	LOS	Volume	Density	LOS
US-101 NB	1	Marsh St to Osos St	Basic	2	3,110	26.9	D	4,570	53.0	**F**
	2	Broad St to Osos St	Basic	2	3,110	26.9	D	4,570	53.0	**F**
	3	Osos St to Toro St	Weaving	2+Aux	2,580	17.6	B	4,470	33.2	D
	4	Toro St to California Blvd	Weaving	2+Aux	2,180	14.2	B	4,290	29.9	D
	5	California Blvd to Grand Ave	Weaving	2+Aux	1,830	11.6	B	4,530	32.8	D
US-101 SB	6	Grand Ave to Taft St	Weaving	2+Aux	4,090	29.4	D	2,130	13.5	B
	7	Taft St to Montalban St	Weaving	2+Aux	3,800	26.3	C	2,770	19.3	B
	8	Lemon St to Olive St	Weaving	2+Aux	3,950	28.8	D	3,410	24.5	C
	9	Olive St to Broad St	Weaving	2+Aux	4,020	28.5	D	3,900	28.0	C
	10	Broad St to Marsh St	Basic	2	4,240	44.3	**E**	4,000	39.3	**E**

Exhibit 65: 2035 Plus Project LOS on Study Freeways

Conditions for the 2035 No Project condition from Exhibit 54 are compared with those of the 2035 Plus Project condition from Exhibit 65 in Exhibit 66, for the AM peak hour, and in Exhibit 67 for the PM peak hour. The comparison shows that a segment would operate unacceptably in the PM peak hour and that the Project would add to the problem, which would be considered a significant impact. As shown, the Project would result in a significant impact in the southbound direction between Broad Street and Marsh Street and northbound between Marsh Street and Osos Street.

	ID	Freeway Segment	No Project		Plus Project		Change in Volume	Significant Impact?
			Volume	LOS	Volume	LOS		
			(A)		(B)		(C)=(B)-(A)	
US-101 NB	1	Marsh St to Broad St	3,140	D	3,110	D	-30	No
	2	Broad St to Osos St	3,140	D	3,110	D	-30	No
	3	Osos St to Toro St	2,640	B	2,580	B	-60	No
	4	Toro St to California Blvd	2,230	B	2,180	B	-50	No
	5	California Blvd to Grand Ave	1,890	B	1,830	B	-60	No
US-101 SB	6	Grand Ave to Taft St	4,100	D	4,090	D	-10	No
	7	Taft St to Lemon St	3,770	C	3,800	C	30	No
	8	Lemon St to Olive St	3,870	C	3,950	D	80	No
	9	Olive St to Broad St	3,960	D	4,020	D	60	No
	10	Broad St to Marsh St	4,140	**E**	4,240	**E**	100	**Yes**

Exhibit 66: Determination of Freeway Impacts in the 2035 AM Peak Hour

	ID	Freeway Segment	No Project		Plus Project		Change in Volume	Significant Impact?
			Volume	LOS	Volume	LOS		
			(A)		(B)		(C)=(B)-(A)	
US-101 NB	1	Marsh St to Broad St	4,520	**F**	4,570	**F**	50	**Yes**
	2	Broad St to Osos St	4,520	**F**	4,570	**F**	50	**Yes**
	3	Osos St to Toro St	4,400	D	4,470	D	70	No
	4	Toro St to California Blvd	4,190	D	4,290	D	100	No
	5	California Blvd to Grand Ave	4,430	D	4,530	D	100	No
US-101 SB	6	Grand Ave to Taft St	2,060	B	2,130	B	70	No
	7	Taft St to Montalban St	2,720	B	2,770	B	50	No
	8	Lemon St to Olive St	3,380	C	3,410	C	30	No
	9	Olive St to Broad St	3,880	D	3,900	C	20	No
	10	Broad St to Marsh St	3,970	**E**	4,000	**E**	30	**Yes**

Exhibit 67: Determination of Freeway Impacts in the 2035 PM Peak Hour

7.4 Pedestrian Conditions

The LOS for pedestrians in the 2035 Plus Project condition is shown in Exhibit 68.

CSU guidelines state that a significant pedestrian impact would occur if, “A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.” The CMP would not impose any such disruptions and so would have not significant pedestrian impacts.

ID	Intersection Name	Control Type	AM Peak Hour								PM Peak Hour							
			EB		WB		NB		SB		EB		WB		NB		SB	
			Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS
1	Hwy 1/Stenner Creek Rd	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		>180	F	>180	F
2	Santa Rosa St/Highland Dr	Signalized	2.31	B	2.45	B	3.16	C	3.18	C	2.33	B	2.5	B	3.14	C	3.15	C
3	Mt Bishop Rd/Highland Dr	TWSC	14.1	C	14.9	C	N/A		N/A		16.2	C	17.3	C	N/A		N/A	
6	Santa Rosa St/Foothill Blvd	Signalized	2.68	B	2.63	B	3.09	C	3.1	C	2.68	B	2.68	B	3.09	C	3.21	C
7	California Blvd/Foothill Blvd	Signalized	2.71	B	2.11	B	2.75	C	2.53	B	2.65	B	2.09	B	2.74	B	2.5	B
8	Carpenter St/Foothill Blvd	TWSC	1.8	A	1.8	A	N/A		N/A		3.4	A	3.4	A	N/A		N/A	
10	Grand Ave/Fredericks St	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		>180	F	>180	F
11	Grand Ave/Hwy 101 SB Ramps	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		106.5	F	106.5	F
12	Grand Ave/Hwy 101 NB Ramps	Signalized	1.96	A	1.73	A	2.41	B	2.64	B	1.63	A	1.73	A	2.31	B	2.5	B
13	Grand Ave/Mill St	TWSC	N/A		N/A		98	F	15.3	C	N/A		N/A		92.1	F	13.8	C
14	Grand Ave/Monterey St	Signalized	2.66	B	2.4	B	1.75	A	2.61	B	2.66	B	2.46	B	1.75	A	2.64	B
15	Santa Rosa St/Murray Ave	Signalized	2.02	B	2.16	B	3.11	C	3	C	2.03	B	2.29	B	3.09	C	3.01	C
16	Santa Rosa St/Olive St	Signalized	2.77	C	1.81	A	3.05	C	3	C	2.44	B	1.87	A	3.12	C	3.1	C
17	Santa Rosa St/Walnut St	Signalized	2.01	B	2.3	B	2.71	B	2.94	C	2.08	B	2.27	B	2.74	B	2.97	C
18	California Blvd/Hathway Ave	TWSC	N/A		N/A		17.4	C	55.7	F	N/A		N/A		19	C	33.2	E
19	California Blvd/Taft St	TWSC	N/A		N/A		25.2	D	>180	F	N/A		N/A		37.5	E	>180	F
20	California Blvd/Hwy 101 NB Ramps	TWSC	N/A		N/A		116.9	F	116.9	F	N/A		N/A		125.5	F	125.5	F
21	Santa Rosa St/Mill St	Signalized	2	B	1.91	A	2.64	B	2.74	B	2.1	B	1.96	A	2.67	B	2.72	B
22	Santa Rosa St/Palm St	Signalized	2.3	B	2.01	B	2.59	B	2.67	B	2.31	B	2	A	2.68	B	2.64	B
23	Santa Rosa St/Monterey St	Signalized	2.22	B	2.6	B	2.63	B	2.7	B	2.31	B	2.61	B	2.67	B	2.87	C
24	Santa Rosa St/Higuera St	Signalized	2.36	B	2.12	B	2.43	B	2.6	B	2.2	B	2.15	B	2.55	B	2.69	B
25	Johnson Ave/Monterey Ave	Signalized	2.38	B	2.53	B	2.49	B	2.14	B	2.35	B	2.48	B	2.45	B	2.1	B
26	California Blvd/Monterey St	Signalized	2.36	B	2.43	B	2.38	B	2.22	B	2.38	B	2.44	B	2.49	B	2.25	B
28	Chorro St/Higuera St	Signalized	2.35	B	2.43	B	2.12	B	2.18	B	2.33	B	2.36	B	2.26	B	2.2	B
29	Morro St/Higuera St	Signalized	2.32	B	2.35	B	1.94	A	2.05	B	2.27	B	2.31	B	1.99	A	2.07	B
30	Osos St/Higuera St	Signalized	2.29	B	2.54	B	2.06	B	1.91	A	2.23	B	2.33	B	2.13	B	1.98	A
31	Santa Rosa St/Marsh St	Signalized	2.53	B	2.09	B	2.02	B	2.58	B	3.13	C	2.09	B	2.12	B	2.62	B
33	Osos St/Buchon St	Signalized	1.74	A	2.09	B	2.3	B	2.2	B	1.79	A	2.11	B	2.35	B	2.31	B
34	Higuera St/Marsh St	Signalized	2.51	B	2.32	B	2.53	B	2.25	B	2.4	B	2.44	B	2.62	B	2.35	B
35	Santa Barbara Ave/Upham St	Signalized	1.79	A	2.02	B	2.52	B	2.51	B	1.76	A	2.05	B	2.56	B	2.53	B
36	Broad St/South St/Santa Barbara Ave	Signalized	2.88	C	2.45	B	3.41	C	2.63	B	2.81	C	2.56	B	3.59	D	2.72	B
37	Hwy 101 SB Ramps/Madonna Rd	Signalized	2.97	C	2.99	C	2.56	B	2.17	B	3.11	C	3.04	C	2.45	B	2.17	B
38	Hwy 101 NB Ramps/Madonna Rd	Signalized	2.93	C	2.91	C	1.87	A	1.97	A	2.97	C	2.88	C	1.89	A	2.04	B
39	Los Osos Valley Rd/Hwy 101 SB Ramps	Signalized	2.06	B	2.27	B	2.88	C	2.94	C	2.26	B	2	B	3.03	C	3.22	C
40	Broad St/Orcutt Rd	Signalized	2	B	3.07	C	3.39	C	3.12	C	2.06	B	3.13	C	3.68	D	3.28	C
41	Broad St/Rockview Pl	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		>180	F	>180	F
42	Broad St/Capitolio Wy	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		>180	F	>180	F
43	Hwy 1/Project Driveway	TWSC	N/A		N/A		>180	F	>180	F	N/A		N/A		>180	F	>180	F

Note: The LOS for each direction is for pedestrian crossings in front of vehicles traveling in that direction. So "EB" is for pedestrians walking north or south across the eastbound approach of the intersection.

Exhibit 68: 2035 Plus Project Pedestrian Level of Service (LOS) at Study Intersections

Note: There is no methodology for calculating pedestrian LOS at all-way stop-controlled intersections or on the stop-controlled approaches of side-street stop-controlled intersections. The assumption is that the pedestrian would stop and then proceed without encountering a delay. Study intersections that are all-way stops are therefore not shown in Exhibit 68.

7.5 Bicycle Conditions

The 2035 Plus Project bicycle LOS is shown in Exhibit 69.

The CSU system has defined a significant bicycle impact as a situation where, "*A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards*." Based on this standard the Project does not impose any significant bicycle impacts. It would not disrupt any existing or planned bicycle facilities. The network of on-campus bicycle facilities planned for the CMP (see Exhibit 25) is more extensive that that found in the City's Bicycle Transportation Plan (see Exhibit 18). The CMP's substitution of bicycle trips for car trips is consistent with City of San Luis Obispo General Plan Section 4.2.3: "*The City shall work with Cal Poly and Cuesta College to de-emphasize the use of automobiles and promote the use of alternative forms of transportation in their master plans*."

ID	Intersection Name	Control Type	AM Peak Hour								PM Peak Hour							
			EB		WB		NB		SB		EB		WB		NB		SB	
			Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS	Score	LOS
2	Santa Rosa St/Highland Dr	Signalized	3.11	C	1.75	A	4.27	E	4.29	E	3.17	C	2.46	B	4.18	D	3.95	D
6	Santa Rosa St/Foothill Blvd	Signalized	3.46	C	2.44	B	3.97	D	2.95	C	2.89	C	2.43	B	4.18	D	2.96	C
7	California Blvd/Foothill Blvd	Signalized	4.15	D	2.93	C	3.08	C	2.95	C	3.77	D	3.03	C	2.83	C	3.35	C
12	Grand Ave/Hwy 101 NB Ramps	Signalized	3.39	C	2.56	B	0.96	A	0.95	A	2.83	C	2.55	B	0.84	A	0.79	A
14	Grand Ave/Monterey St	Signalized	3.38	C	2.42	B	2.37	B	2.85	C	3.69	D	2.12	B	2.34	B	2.92	C
15	Santa Rosa St/Murray Ave	Signalized	2.76	C	2.88	C	2.42	B	2.41	B	2.78	C	3.17	C	2.50	B	2.24	B
16	Santa Rosa St/Olive St	Signalized	3.54	D	2.81	C	2.33	B	2.32	B	2.82	C	2.78	C	2.92	C	2.33	B
17	Santa Rosa St/Walnut St	Signalized	2.79	C	3.99	D	1.64	A	2.28	B	2.81	C	3.95	D	2.32	B	1.72	A
21	Santa Rosa St/Mill St	Signalized	2.59	B	2.80	C	1.57	A	2.25	B	2.85	C	2.96	C	2.12	B	1.77	A
22	Santa Rosa St/Palm St	Signalized	2.78	C	2.78	C	1.53	A	2.32	B	2.92	C	2.62	B	2.12	B	1.92	A
23	Santa Rosa St/Monterey St	Signalized	2.68	B	3.24	C	1.72	A	2.30	B	2.87	C	3.16	C	2.23	B	1.93	A
24	Santa Rosa St/Higuera St	Signalized	N/A		2.65	B	1.52	A	3.16	C	N/A		2.62	B	2.04	B	2.41	B
25	Johnson Ave/Monterey Ave	Signalized	2.65	B	3.46	C	2.31	B	2.72	B	2.77	C	2.84	C	2.21	B	2.65	B
26	California Blvd/Monterey St	Signalized	2.78	C	3.37	C	1.97	A	1.62	A	3.09	C	3.20	C	2.35	B	1.57	A
28	Chorro St/Higuera St	Signalized	N/A		2.74	B	2.58	B	2.73	B	N/A		2.67	B	3.10	C	2.74	B
29	Morro St/Higuera St	Signalized	N/A		2.51	B	2.47	B	2.52	B	N/A		2.46	B	2.61	B	2.46	B
30	Osos St/Higuera St	Signalized	N/A		2.38	B	2.56	B	2.55	B	N/A		2.26	B	2.91	C	2.52	B
31	Santa Rosa St/Marsh St	Signalized	1.42	A	N/A		1.48	A	2.16	B	1.65	A	N/A	0.00	1.98	A	1.91	A
33	Osos St/Buchon St	Signalized	1.82	A	2.13	B	2.69	B	2.20	B	1.90	A	1.99	A	2.85	C	2.30	B
34	Higuera St/Marsh St	Signalized	3.00	C	N/A		N/A		2.67	B	2.49	B	N/A		N/A		2.91	C
35	Santa Barbara Ave/Upham St	Signalized	1.41	A	1.21	A	2.41	B	3.53	D	1.38	A	1.24	A	2.82	C	3.24	C
36	Broad St/South St/Santa Barbara Ave	Signalized	4.08	D	3.94	D	2.07	B	2.26	B	4.01	D	4.04	D	2.93	C	2.20	B
37	Hwy 101 SB Ramps/Madonna Rd	Signalized	1.67	A	1.60	A	4.87	E	2.96	C	1.90	A	1.77	A	4.27	E	2.98	C
38	Hwy 101 NB Ramps/Madonna Rd	Signalized	2.28	B	1.74	A	3.33	C	N/A		2.13	B	1.97	A	2.04	B	N/A	
39	Los Osos Valley Rd/Hwy 101 SB Ramps	Signalized	N/A		4.19	D	1.98	A	2.09	B	N/A		3.32	C	2.66	B	2.48	B
40	Broad St/Orcutt Rd	Signalized	2.88	C	3.38	C	2.34	B	3.25	C	3.03	C	3.58	D	3.44	C	2.77	C

Exhibit 69: 2035 Plus Project Bicycle LOS

Note: Exhibit 69 only lists the study intersections that are signalized because there is no methodology for calculating bicycle LOS at stop-controlled intersections. The assumption is that the bicycle would stop and then proceed without encountering a delay.

7.6 Transit Conditions

Full build-out of the CMP would result in an increase of 733 faculty and staff positions and a decrease of 3,756 off-campus students. The result will be a decrease in university-related transit trips in the peak hours. The increase of 7,812 on-campus students will increase transit usage during off-peak hours. The overall effect of the Project would be a small (less than 1%) decrease in transit usage.

The full build-out of the CMP includes a transit center in the middle of campus (see Exhibit 25) that would be supportive of the revised routing in SLO Transit's new plan (see Exhibit 22). The CMP also features two new on-campus bus loops not found in SLO Transit's Short Range Transit Plan, one routed along Cuesta Avenue and College Avenue and the other on Pacheo Way. Exhibit 70 provides a side-by side comparison of the CMP and SLO Transit's Short-Range Transit Plan.

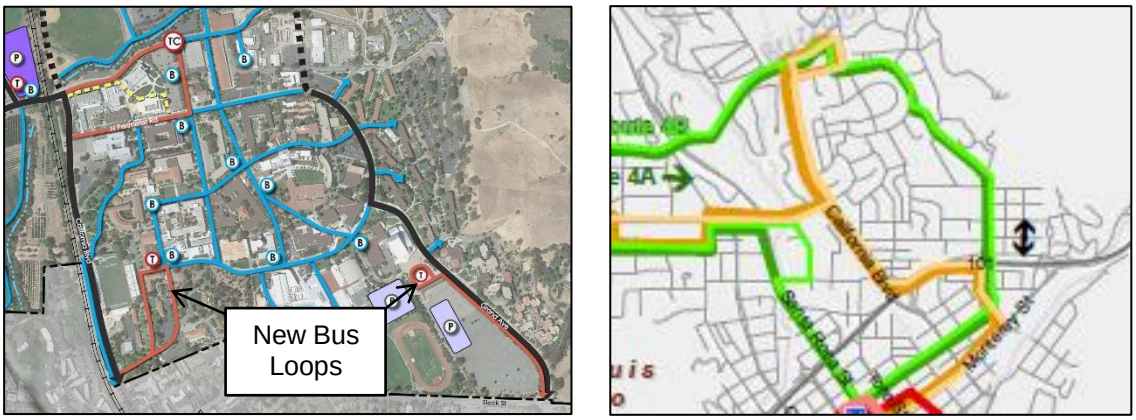


Exhibit 70: Comparison of CMP (left) and Short-Range Transit Plan (right)

CSU guidelines state that a significant transit impact would occur if, "*A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards*." Since the transit center and additional stops can be considered enhancements to transit facilities, the CMP would not disrupt or conflict with transit plans or operations, and would have no significant transit impacts.

7.7 Effect of Project on Regional Vehicle-Miles-Traveled (VMTs)

The effect of full build-out of the CMP on regional VMT was estimated using data from Cal Poly's 2015 Transportation Survey, which asked people about how far they travelled to and from campus. Exhibit 71 shows that reducing the number of students living off-campus would result in a decrease in VMT associated with the university, even if faculty/staff positions and overall enrollment are increased.

	Average Trip Distance (1-way)*	Existing People	Existing VMT	CMP Buildout People	CMP Buildout VMT
	(A)	(B)	(C)=(A)*(B)	(D)	(E)=(A)*(D)
Faculty/Staff	14.1	3,172	89,450	3,905	110,121
Off-Campus Students	18.6	13,756	511,723	10,000	372,000
Total			601,174		482,121
Change					-19.8%

Exhibit 71: Campus Master Plan's Change in VMT

Exhibit 71 makes the very conservative assumption that the additional 733 faculty and staff would living in housing that is geographically distributed the same way as is housing of current faculty and staff. Since some of the 1,470 apartments in the 5 proposed residential neighborhoods would likely be taken up by faculty and staff, the VMT reduction could in fact be greater that shown in Exhibit 71, which presents a very conservative assumption of the VMT reduction that would result from full buildout of the CMP.

8 RECOMMENDED MITIGATION MEASURES

8.1 Near-Term (2021) Mitigations

The analysis shown in Chapter 5 found that the Project would have impacts at one study freeway segment in the near term. Exhibit 72 shows the measure that could be used to mitigate these impacts.

8.1.1 US 101 Freeway

US 101 is a state highway facility under the control of Caltrans, which is responsible for any improvements. An appropriate mitigation measure has been identified but the University cannot guarantee that Caltrans will implement this improvement. Therefore, this freeway segment impact is considered significant and unavoidable.

Segment #1, US 101 Northbound, Marsh St to Broad St

With the following mitigation measure, the operations at the segment will improve to LOS C in the PM peak hour.

- Add one mainline lane for a total of 3.

8.2 Horizon Year 2035 Mitigations

The analysis shown in Chapter 7 found that the full build-out of the CMP would have impacts at six study intersections and three study freeway segments.

8.2.1 Intersections

Exhibit 73 shows the measures that could be used to mitigate the intersection impacts. In accordance with the City's "roundabout first" policy, possible use of a roundabout instead of a traffic signal was analyzed for impacted intersections within the San Luis Obispo city limits[17]. Exhibit 74 shows the result of a signal warrant analysis for the signalizations recommended in Exhibit 73. The results for individual intersections are:

Intersection #1, Hwy 1/Stenner Creek Rd.

At the time of development of the N5 (Stenner Creek) residential neighborhood, the developer(s) will fund the following mitigation measure:

- Install traffic signal at intersection

With this measure, the operations at the intersection will improve to D or better in the AM and PM peak hours and the impact will be reduced to a less than significant level.

Intersection #6, Santa Rosa St./Foothill Blvd.

At the time of development of the N4 and N5 residential neighborhoods, the developer(s) will contribute fair share to the following mitigation measure:

- Add second eastbound through lane

With this measure, the operations at the intersection will improve to LOS D in the AM and PM peak hours. However, this improvement may be infeasible due to right-of-way constraints. The City has studied a variety of potential improvements for this intersection, including additional lanes and grade separation, and reached the same conclusion that site constraints may preclude improvement. For this reason, the impact at this intersection is considered significant and unavoidable. In the event that the City or Caltrans

[17] Intersections 1 and 43 lies outside the city limits.

implements operational improvements other than adding a second eastbound through lane, then the mitigation measure would be to contribute a fair share towards those improvements.

Intersection #9, Grand Ave./Slack St.

At the time of development of the N1 (Grand/Slack) residential neighborhood, the developer(s) will fund the following mitigation measure:

- Install traffic signal at intersection

With this measure, the operations at the intersection will improve to LOS B or better in the AM and PM peak hours, and the impact will be reduced to a less than significant level.

Possible use of a roundabout at this location was studied and rejected due to impacts on adjacent properties, including a steep embankment down to an elementary school.

Intersection #19, California Blvd./Taft St.

At the time of development, the developer(s) of the N1 and N2 residential neighborhoods will:

- Contribute fair share mitigation to the roundabout improvement

The roundabout is a planned City improvement currently in a design phase, and with this measure the intersection will improve to LOS C in the AM and PM peak hours, and the impact will be reduced to a less than significant level.

Intersection #41, Broad St./Rockview Pl.

At the time of development of each residential neighborhood, the developer(s) will contribute fair share to the following mitigation measure:

- Install traffic signal at intersection

The analysis found that a roundabout would not provide an acceptable level of service at this location. Installing a traffic signal would improve the operation of the intersection to LOS B in the AM peak hour, and LOS A in the PM peak hour, and the impact will be reduced to a less than significant level. However, the location does not satisfy peak-hour signal warrants. This typically occurs when the turning movement that is being delayed has only a low volume of vehicles per hour. The City may decide that rather than install a signal for the low volume of turning traffic it would be better to let eastbound vehicles turn right and then make a U-turn downstream. The City is considering putting several roundabouts on Broad Street which would facilitate U-turns.

Intersection #43, Hwy 1/Project Driveway

The developer(s) of the Hwy 1 near Cal Fire residential neighborhood will fund the following mitigation measure:

- Install traffic signal at intersection

With this measure the operations at the intersection will improve to LOS D or better and the impact will be reduced to a less than significant level. In the event that a roundabout is installed at Intersection 1 (Hwy 1/Stenner Creek) then Caltrans may find it preferable to prohibit northbound left-turns at this direction and have vehicles U-turn at Stenner Creek Road instead.

8.2.2 US 101 Freeway

Exhibit 75 shows measures that could be used to mitigate the Project's freeway impacts. Note that segments 1 and 2 would operate as a single segment in 2035 because of the planned permanent closure of the Broad Street northbound ramps. US 101 is a state highway facility under the control of Caltrans, which is responsible for any improvements. Appropriate mitigation measures have been identified but the

University cannot guarantee that Caltrans will implement these improvements. Therefore, these freeway segment impacts are considered significant and unavoidable.

Segment #1, US 101 Northbound, Marsh St to Broad St

With the following mitigation measure, the operations at the segment will improve to LOS D in the PM peak hour.

- Add one mainline lane for a total of 3.

Segment #2, US 101 Northbound, Broad St to Osos St

With the following mitigation measure, the operations at the segment will improve to LOS D in the PM peak hour.

- Add one mainline lane for a total of 3.

Segment #10, US 101 Southbound, Broad St to Marsh St

With the following mitigation measure, the operations at the segment will improve to LOS C in the AM and PM peak hours.

- Add one mainline lane for a total of 3.

Implementation of identified mitigation measures will reduce the impacts at the identified affected intersections to less than significant levels. Impacts at the three affected US 101 freeway segments are under Caltrans control and the freeway improvements are under Caltrans' responsibility. Caltrans identified improvements to these segments of the freeway in its Transportation Planning Fact Sheet, US Route 101 in San Luis Obispo County, September 2009, as part of "General Recommendations" to widen Segments 4 and 5A to 6-lane freeway after implementation of several other measures, including encouraging alternative modes, implementing ITS components, constructing system-wide operational improvements, enhancing intermodal facilities, facilitating goods movement, and similar measures. The widening of the freeway to 6 lanes is not included in the current Regional Transportation Plan (RTP), it is not included in the SLOCOG's US 101 long-term Corridor Mobility Master Plan, and it is not funded. Therefore, the University cannot guarantee implementation of the recommended improvements within the 2035 planning horizon and impacts on the identified freeway segments are considered significant and unavoidable.

Freeway Mitigations		2021 Without Mitigation				Recommended Mitigation	2021 With Mitigation	
ID	Freeway Segment	No Project		Plus Project			Plus Project	
		Density	LOS	Density	LOS		Density	LOS
1	US-101 NB, Marsh St to Broad St, PM Peak Hr	35.9	E	36.50	E	Add one mainline lane for a total of 3	21.7	C

Exhibit 72: Recommended 2021 Near-Term Mitigations

Study ID	Intersection Name	Control Type	2035 Without Mitigation				Potential Mitigation	2035 With Mitigation			
			AM Peak Hour		PM Peak Hour			AM Peak Hour		PM Peak Hour	
			Average Delay	HCM LOS	Average Delay	HCM LOS		Average Delay	HCM LOS	Average Delay	HCM LOS
1	Hwy 1/Stenner Creek Rd	TWSC	>180	**F**	84.6	**F**	Signalize	9.5	A	6.0	A
6	Santa Rosa St/Foothill Blvd	Signalized	73.9	**E**	50.8	D	Add 2nd EB Through Lane*	53.2	D	49.4	D
9	Grand Ave/Slack St	AWSC	54.6	**F**	13.6	B	Signalize	8.7	A	5.4	A
19	California Blvd/Taft St	TWSC	95.0	**F**	54.7	**F**	Roundabout	17.5	C	15.7	C
41	Broad St/Rockview Pl	TWSC	>180	**F**	>180	**F**	Signalize	11.5	B	9.4	A
43	Hwy 1/Project Driveway	TWSC	>180	**F**	173.7	**F**	Signalize	15.2	B	9.0	A

* The City has identified operational improvements for this intersection in their CIP. Any mitigation would need to be consistent with the CIP.

Exhibit 73: Recommended 2035 Horizon-Year Intersection Mitigations

ID	Intersection:	Does Intersection Meet Peak 1-Hour Signal Warrant?									
		Existing		2021 No Project		2021 Plus Project		2035 No Project		2035 Plus Project	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Hwy 1/Stenner Creek Rd	No	No	No	No	No	No	No	No	**Yes**	**Yes**
9	Grand Ave/Slack St	No	No	No	No	No	No	No	No	**Yes**	**Yes**
19	California Blvd/Taft St	No	No	Yes	No	Yes	No	Yes	No	Yes	**Yes**
41	Broad St/Rockview Pl	No	No	No	No	No	No	No	No	No	No
43	Hwy 1/Project Driveway	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**Yes**	**Yes**

Exhibit 74: Signal Warrant Analysis

ID	Freeway Segment	Period	2035 Without Mitigation				Recommended Mitigation	2035 With Mitigation	
			No Project		Plus Project			Plus Project	
			Density	LOS	Density	LOS		Density	LOS
1*	US-101 NB, Marsh St to Broad St	PM Peak Hr	51.5	F	53.00	F	Add one mainline lane for a total of 3	26.2	D
2*	US-101 NB, Broad St to Osos St	PM Peak Hr	51.5	F	53.00	F	Add one mainline lane for a total of 3	26.2	D
10**	US-101 SB, Broad St to Marsh St	AM Peak Hr	42.1	E	44.30	E	Add one mainline lane for a total of 3	24.0	C
		PM Peak Hr	38.8	E	39.3	E		22.6	C

Notes:

* Northbound sections 1 and 2 will form a single section once the NB Broad Street ramps are removed.

** Impacts occur at this location in both the AM and PM peak hours. The measure identified in the table would mitigate the impacts in both periods.

Exhibit 75: Recommended 2035 Horizon-Year Freeway Mitigations

9 LIST OF APPENDICES

Appendix A

Level of Service Standards of the City of San Luis Obispo

Under "Multi-Modal Circulation Policies"

6.1.2. Multimodal Level of Service (LOS) Objectives, Service Standards, and Significance Criteria

The City shall strive to achieve level of service objectives and shall maintain level of service minimums for all four modes of travel; Pedestrians, Bicyclists, Transit, & Vehicles per Table 2 and the Highway Capacity manual.

Table 2. MMLOS Objectives and Service Standards		
Travel Mode	**LOS Objective**	**Minimum LOS Standard**
Bicycle[1]	B	D
Pedestrian[2]	B	C
Transit[3]	C	Baseline LOS or LOS D, whichever is lower
Vehicle	C	E (Downtown), D (All Other Routes)

(1) Bicycle LOS objectives & standards only apply to routes identified in the City's adopted Bicycle Transportation Plan.

(2) Exceptions to minimum pedestrian LOS objectives & standards may apply when its determined that sidewalks are not consistent with neighborhood character including topography, street design and existing density.

(3) Transit LOS objectives & standards only apply to routes identified in the City's Short Range Transit Plan.

Appendix B

Intersection Counts Datasheets

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:					
Tue, Feb 23, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843	
	NORTH & SOUTH:	Santa Rosa	LOCATION #:	3	
	EAST & WEST:	Stenner Creek	CONTROL:	STOP W	

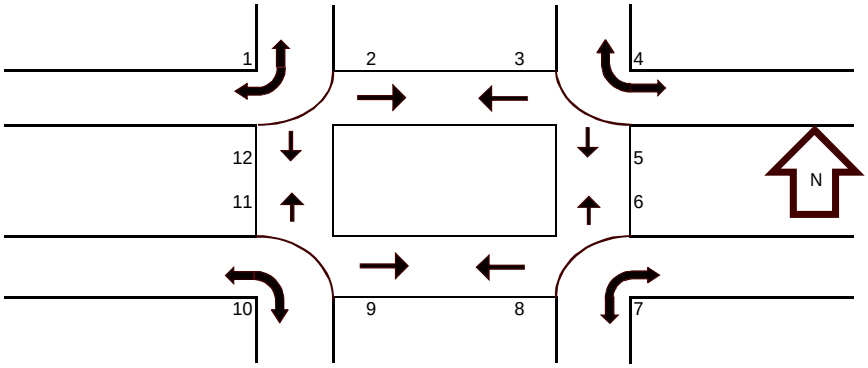
NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Stenner Creek			WESTBOUND Stenner Creek				U-TURNS				
	LANES:	NL X	NT 2	NR 1	SL 1	ST 2	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5	TOTAL	NB 0	SB 0	EB X	WB 0	TTL
AM	7:30 AM	0	295	0	1	328	0	0	0	0	1	0	0	625	0	0	0	0	0
	7:45 AM	0	370	2	6	276	0	0	0	0	2	0	0	656	0	1	0	0	1
	8:00 AM	0	324	2	0	219	0	0	0	0	2	0	1	548	0	0	0	0	0
	8:15 AM	0	314	3	2	246	0	0	0	0	1	0	1	567	0	0	0	0	0
	8:30 AM	0	323	1	3	242	0	0	0	0	0	0	1	570	0	0	0	0	0
	8:45 AM	0	331	1	1	218	0	0	0	0	0	0	0	551	0	0	0	0	0
	9:00 AM	0	289	2	2	173	0	0	0	0	1	0	1	468	0	0	0	0	0
	9:15 AM	0	256	0	3	195	0	0	0	0	2	0	1	457	0	0	0	0	0
	VOLUMES	0	2,502	11	18	1,897	0	0	0	0	9	0	5	4,442	0	1	0	0	1
	APPROACH %	0%	100%	0%	1%	99%	0%	0%	0%	0%	64%	0%	36%						
	APP/DEPART	2,513	/	2,508	1,915	/	1,906	0	/	28	14	/	0	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	0	1,303	7	9	1,069	0	0	0	0	6	0	2	2,396					
	APPROACH %	0%	99%	1%	1%	99%	0%	0%	0%	0%	75%	0%	25%						
	PEAK HR FACTOR		0.880			0.819			0.000			0.667		0.913					
	APP/DEPART	1,310	/	1,306	1,078	/	1,075	0	/	15	8	/	0	0					
MD	11:00 AM	0	233	1	2	257	0	0	0	0	1	0	2	496	0	0	0	0	0
	11:15 AM	0	242	1	0	207	0	0	0	0	3	0	4	457	0	0	0	0	0
	11:30 AM	0	228	1	0	233	0	0	0	0	2	0	0	464	0	0	0	0	0
	11:45 AM	0	231	0	4	279	0	0	0	0	2	0	2	518	0	1	0	0	1
	12:00 PM	0	278	2	2	289	0	0	0	0	1	0	2	574	0	1	0	0	1
	12:15 PM	0	254	1	1	294	0	0	0	0	2	0	0	552	0	0	0	0	0
	12:30 PM	0	246	1	1	219	0	0	0	0	1	0	0	468	0	0	0	0	0
	12:45 PM	0	264	0	0	241	0	0	0	0	1	0	2	508	0	0	0	0	0
	VOLUMES	0	1,976	7	10	2,019	0	0	0	0	13	0	12	4,037	0	2	0	0	2
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	52%	0%	48%						
	APP/DEPART	1,983	/	1,990	2,029	/	2,032	0	/	15	25	/	0	0					
	BEGIN PEAK HR		11:45 AM																
	VOLUMES	0	1,009	4	8	1,081	0	0	0	0	6	0	4	2,112					
	APPROACH %	0%	100%	0%	1%	99%	0%	0%	0%	0%	60%	0%	40%						
	PEAK HR FACTOR		0.904			0.923			0.000			0.625		0.920					
	APP/DEPART	1,013	/	1,015	1,089	/	1,087	0	/	10	10	/	0	0					
PM	05:00 PM	0	292	1	1	285	0	0	0	0	2	0	5	586	0	1	0	0	1
	5:15 PM	0	321	0	2	230	0	0	0	0	5	0	4	562	0	0	0	0	0
	5:30 PM	0	288	0	0	192	0	0	0	0	2	0	4	486	0	0	0	0	0
	5:45 PM	0	250	1	2	202	0	0	0	0	3	0	2	460	0	0	0	0	0
	6:00 PM	0	159	0	1	217	0	0	0	0	3	0	6	386	0	1	0	0	1
	6:15 PM	0	199	0	0	182	0	0	0	0	1	0	1	383	0	0	0	0	0
	6:30 PM	0	153	0	1	212	0	0	0	0	1	0	2	369	0	0	0	0	0
	6:45 PM	0	156	0	2	143	0	0	0	0	0	0	1	302	0	2	0	0	2
	VOLUMES	0	1,818	2	9	1,663	0	0	0	0	17	0	25	3,534	0	4	0	0	4
	APPROACH %	0%	100%	0%	1%	99%	0%	0%	0%	0%	40%	0%	60%						
	APP/DEPART	1,820	/	1,847	1,672	/	1,680	0	/	7	42	/	0	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	0	1,151	2	5	909	0	0	0	0	12	0	15	2,094					
	APPROACH %	0%	100%	0%	1%	99%	0%	0%	0%	0%	44%	0%	56%						
	PEAK HR FACTOR		0.898			0.799			0.000			0.750		0.893					
	APP/DEPART	1,153	/	1,167	914	/	921	0	/	6	27	/	0	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	2
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	2	1	0	0	0	0	0	0	0	3
MD	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	3	0	0	2	0	0	0	0	0	5
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	3	0	0	2	0	0	0	0	0	5
PM	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	2	0	0	0	0	0	0	1	0	3
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	2	0	0	0	0	0	0	1	0	3



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Stenner Creek

PROJECT #: SC0843
LOCATION #: 3
CONTROL: STOP W

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Stenner Creek			WESTBOUND Stenner Creek			
	LANES:	NL X	NT 2	NR 1	SL 1	ST 2	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5	TOTAL
AM	7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	8:30 AM	0	3	0	0	0	0	0	0	0	0	0	0	3
	8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	9:00 AM	0	1	0	0	3	0	0	0	0	0	0	0	4
	9:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	VOLUMES	0	6	0	0	6	0	0	0	0	0	0	0	12
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	6	/	6	6	/	6	0	/	0	0	/	0	0
	BEGIN PEAK HR		8:15 AM											
	VOLUMES	0	4	0	0	5	0	0	0	0	0	0	0	9
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.333			0.417			0.000			0.000		0.563
	APP/DEPART	4	/	4	5	/	5	0	/	0	0	/	0	0
MD	11:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
	11:15 AM	0	0	0	0	3	0	0	0	0	0	0	0	3
	11:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	10	0	0	0	0	0	0	0	0	0	0	10
	12:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	12:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	4
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	15	0	0	7	0	0	0	0	0	0	0	22
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	15	/	15	7	/	7	0	/	0	0	/	0	0
	BEGIN PEAK HR		11:45 AM											
	VOLUMES	0	12	0	0	4	0	0	0	0	0	0	0	16
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.300			0.500			0.000			0.000		0.400
	APP/DEPART	12	/	12	4	/	4	0	/	0	0	/	0	0
PM	05:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	5:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
	5:30 PM	0	2	0	0	1	0	0	0	0	0	0	0	3
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	5	0	0	2	0	0	0	0	0	0	0	7
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	5	/	5	2	/	2	0	/	0	0	/	0	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	0	4	0	0	2	0	0	0	0	0	0	0	6
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.500			0.500			0.000			0.000		0.500
	APP/DEPART	4	/	4	2	/	2	0	/	0	0	/	0	0

Santa Rosa

NORTH SIDE

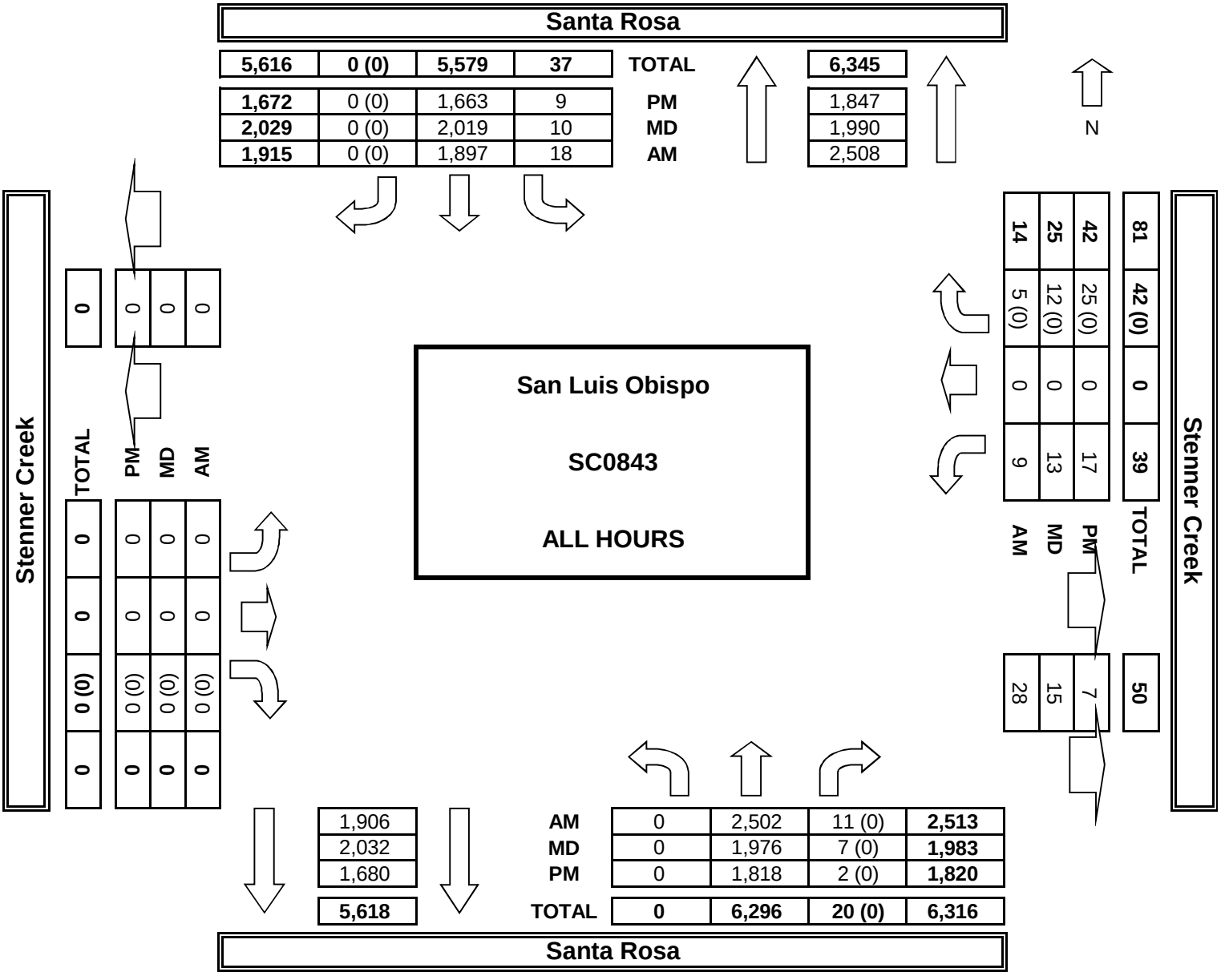
Stenner Creek — WEST SIDE — EAST SIDE — Stenner Creek

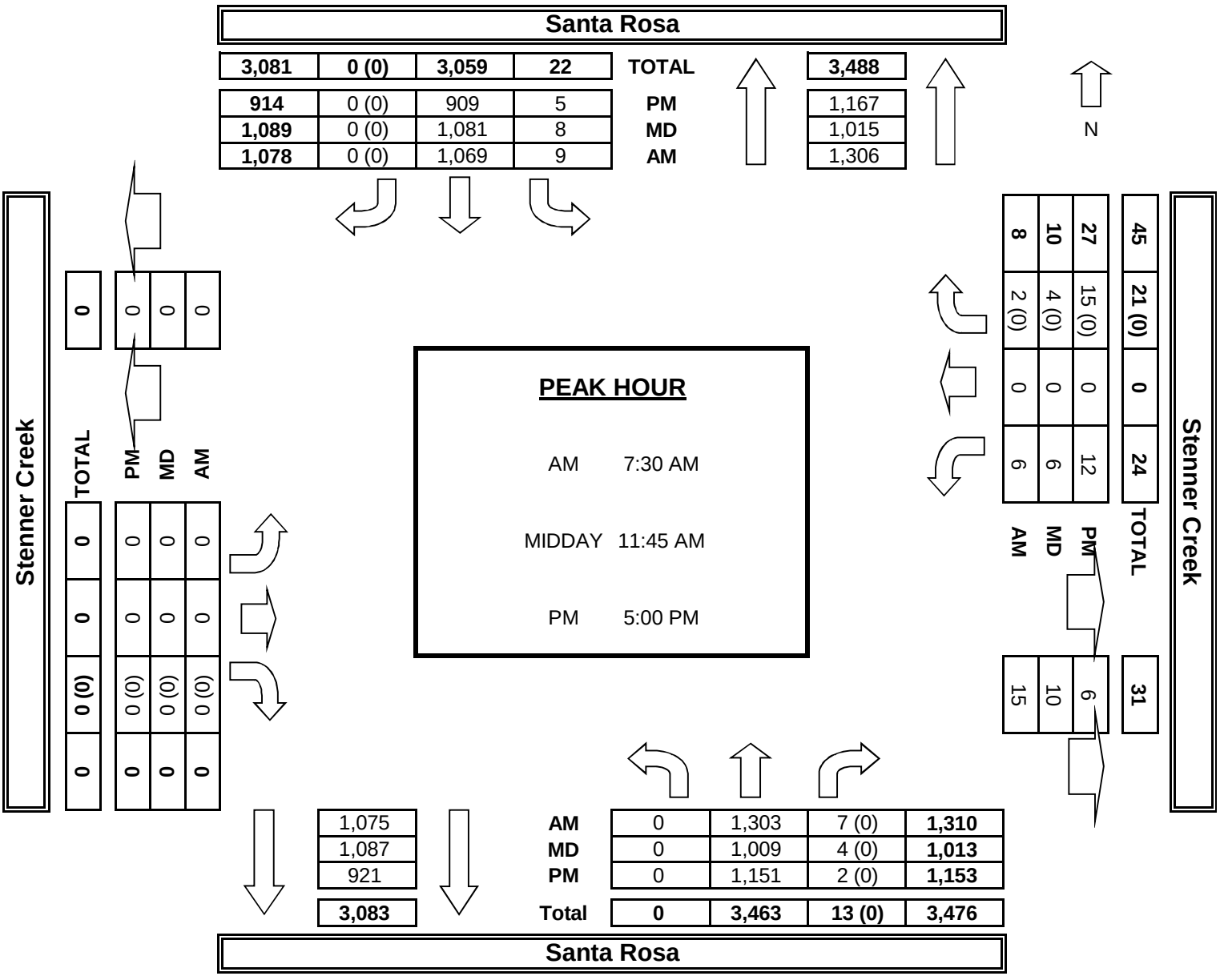
SOUTH SIDE

Santa Rosa

AimTD LLC

TURNING MOVEMENT COUNTS




Santa Rosa
3,081 | 0 (0) | 3,059 | 22 | TOTAL | 3,488
914 | 0 (0) | 909 | 5 | PM | 1,167
1,089 | 0 (0) | 1,081 | 8 | MD | 1,015
1,078 | 0 (0) | 1,069 | 9 | AM | 1,306
N
Stenner Creek
TOTAL
PM
MD
AM
0
0 | 0 | 0
0
0 | 0 | 0
0
0 | 0 | 0
0 (0)
0 (0) | 0 (0) | 0 (0)
0
0 | 0 | 0
PEAK HOUR
AM 7:30 AM
MIDDAY 11:45 AM
PM 5:00 PM
45
21 (0) | 0 | 24
27 | 15 (0) | 0 | 12
10 | 4 (0) | 0 | 6
8 | 2 (0) | 0 | 6
TOTAL
PM
MD
AM
31
6 | 10 | 15
Stenner Creek
1,075
1,087
921
3,083
AM | 0 | 1,303 | 7 (0) | 1,310
MD | 0 | 1,009 | 4 (0) | 1,013
PM | 0 | 1,151 | 2 (0) | 1,153
Total | 0 | 3,463 | 13 (0) | 3,476
Santa Rosa

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Highland

PROJECT #: SC0843
LOCATION #: 102
CONTROL: SIGNAL

NOTES:

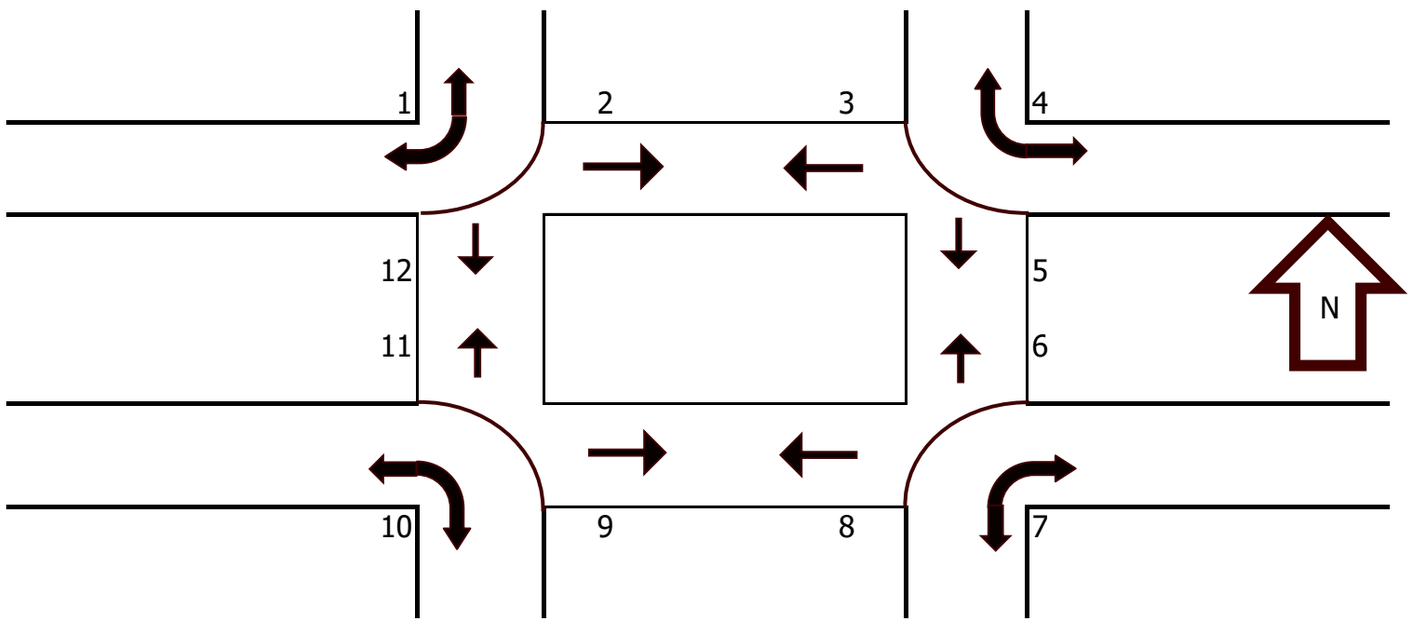
AM PM MD OTHER OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Highland			WESTBOUND Highland				U-TURNS				
	LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1.5	ET 1	ER 0.5	WL 1.5	WT 0.5	WR 1	TOTAL	NB 0	SB 0	EB X	WB 0	TTL
AM	7:30 AM	1	313	42	19	255	2	21	57	24	5	6	6	751	0	0	0	0	0
	7:45 AM	7	378	79	38	278	10	28	112	19	9	4	5	967	0	0	0	0	0
	8:00 AM	14	295	35	19	263	14	23	43	22	11	14	8	761	0	0	0	0	0
	8:15 AM	27	289	26	28	219	18	39	65	41	9	6	5	772	0	0	0	0	0
	8:30 AM	13	293	37	17	220	2	29	54	24	11	7	11	718	2	0	0	0	2
	8:45 AM	15	237	55	17	190	9	29	76	30	12	5	6	681	0	0	0	0	0
	9:00 AM	11	265	22	12	130	2	22	32	18	16	13	9	552	0	0	0	0	0
	9:15 AM	20	281	17	8	204	5	22	31	20	12	8	8	636	3	0	0	0	3
	VOLUMES	108	2,351	313	158	1,759	62	213	470	198	85	63	58	5,838	5	0	0	0	5
	APPROACH %	4%	85%	11%	8%	89%	3%	24%	53%	22%	41%	31%	28%						
	APP/DEPART	2,772	/	2,622	1,979	/	2,047	881	/	941	206	/	228	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	49	1,275	182	104	1,015	44	111	277	106	34	30	24	3,251					
	APPROACH %	3%	85%	12%	9%	87%	4%	22%	56%	21%	39%	34%	27%						
	PEAK HR FACTOR		0.811			0.892			0.777			0.667		0.840					
	APP/DEPART	1,506	/	1,410	1,163	/	1,155	494	/	563	88	/	123	0					
MD	11:00 AM	7	194	20	9	263	10	10	23	7	35	17	5	600	0	0	0	0	0
	11:15 AM	10	234	13	6	228	6	14	16	9	26	11	4	577	0	0	0	0	0
	11:30 AM	8	198	39	11	247	7	12	24	11	23	6	11	597	2	0	0	0	2
	11:45 AM	23	233	30	8	226	9	9	50	15	15	11	10	639	0	0	0	0	0
	12:00 PM	11	283	20	12	219	10	17	17	24	45	22	11	691	0	0	0	0	0
	12:15 PM	11	260	18	8	240	15	15	10	11	53	26	13	680	0	1	0	0	1
	12:30 PM	9	247	18	7	299	5	19	8	13	36	4	9	674	0	0	0	0	0
	12:45 PM	10	210	26	6	200	9	22	33	18	33	6	3	576	1	1	0	0	2
	VOLUMES	89	1,859	184	67	1,922	71	118	181	108	266	103	66	5,034	3	2	0	0	5
	APPROACH %	4%	87%	9%	3%	93%	3%	29%	44%	27%	61%	24%	15%						
	APP/DEPART	2,132	/	2,045	2,060	/	2,299	407	/	430	435	/	260	0					
	BEGIN PEAK HR		11:45 AM																
	VOLUMES	54	1,023	86	35	984	39	60	85	63	149	63	43	2,684					
	APPROACH %	5%	88%	7%	3%	93%	4%	29%	41%	30%	58%	25%	17%						
	PEAK HR FACTOR		0.926			0.850			0.703			0.693		0.971					
	APP/DEPART	1,163	/	1,127	1,058	/	1,196	208	/	205	255	/	156	0					
PM	04:45 PM	26	254	15	9	325	15	17	11	22	23	25	15	757	1	0	0	0	1
	5:00 PM	25	272	21	4	364	15	18	15	16	48	28	24	850	1	0	0	0	1
	5:15 PM	24	291	21	8	249	7	22	15	27	70	40	37	811	2	0	0	0	2
	5:30 PM	16	289	37	7	219	10	21	25	22	44	38	25	753	0	0	0	0	0
	5:45 PM	23	221	32	8	238	6	20	49	24	47	32	27	727	1	0	0	0	1
	6:00 PM	25	183	24	4	206	11	11	13	17	77	35	13	619	2	0	0	0	2
	6:15 PM	23	168	16	7	182	6	13	13	21	56	27	15	547	1	0	0	0	1
	6:30 PM	21	182	23	2	165	6	9	10	11	22	12	6	469	0	0	0	0	0
	VOLUMES	183	1,860	189	49	1,948	76	131	151	160	387	237	162	5,533	8	0	0	0	8
	APPROACH %	8%	83%	8%	2%	94%	4%	30%	34%	36%	49%	30%	21%						
	APP/DEPART	2,232	/	2,153	2,073	/	2,503	442	/	389	786	/	488	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	91	1,106	94	28	1,157	47	78	66	87	185	131	101	3,171					
	APPROACH %	7%	86%	7%	2%	94%	4%	34%	29%	38%	44%	31%	24%						
	PEAK HR FACTOR		0.944			0.804			0.849			0.709		0.933					
	APP/DEPART	1,291	/	1,285	1,232	/	1,433	231	/	188	417	/	265	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	0	0	0	0	2	14	0	0	2	0	18
	7:45 AM	0	0	0	0	0	0	0	12	0	0	2	0	14
	8:00 AM	0	0	0	0	0	0	0	10	0	0	2	0	12
	8:15 AM	0	0	0	0	0	0	0	6	1	0	1	0	8
	8:30 AM	0	0	0	0	0	0	0	11	3	0	3	0	17
	8:45 AM	0	0	0	0	0	0	0	16	2	0	1	1	20
	9:00 AM	0	0	0	0	0	0	0	6	2	0	3	0	11
	9:15 AM	0	0	0	0	0	0	0	4	2	0	0	0	6
	TOTAL	0	0	0	0	0	0	2	79	10	0	14	1	106
MD	11:00 AM	0	0	0	0	0	0	0	4	1	0	0	1	6
	11:15 AM	0	0	0	0	0	0	0	3	7	0	1	0	11
	11:30 AM	0	0	0	0	0	0	1	9	1	0	2	0	13
	11:45 AM	0	0	0	0	0	0	0	7	2	0	1	0	10
	12:00 PM	0	0	1	0	0	0	0	4	3	0	0	1	9
	12:15 PM	0	0	0	0	0	0	0	1	7	0	1	1	10
	12:30 PM	0	0	0	0	0	0	0	3	7	0	0	1	11
	12:45 PM	0	0	0	0	0	0	0	6	1	0	1	0	8
	TOTAL	0	0	1	0	0	0	1	37	29	0	6	4	78
PM	4:45 PM	0	0	0	0	0	0	0	1	6	0	0	0	7
	5:00 PM	0	0	1	0	0	0	0	1	1	0	1	0	4
	5:15 PM	0	0	0	0	0	0	1	3	5	0	2	2	13
	5:30 PM	0	0	0	0	0	0	0	1	13	0	0	1	15
	5:45 PM	0	0	0	0	0	0	0	1	7	0	3	0	11
	6:00 PM	0	0	0	0	0	0	0	0	4	0	0	1	5
	6:15 PM	0	0	0	0	0	0	0	2	5	0	0	0	7
	6:30 PM	0	0	0	0	0	0	0	2	9	0	1	1	13
	TOTAL	0	0	1	0	0	0	1	11	50	0	7	5	75



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Highland

PROJECT #: SC0843
LOCATION #: 102
CONTROL: SIGNAL

NOTES:

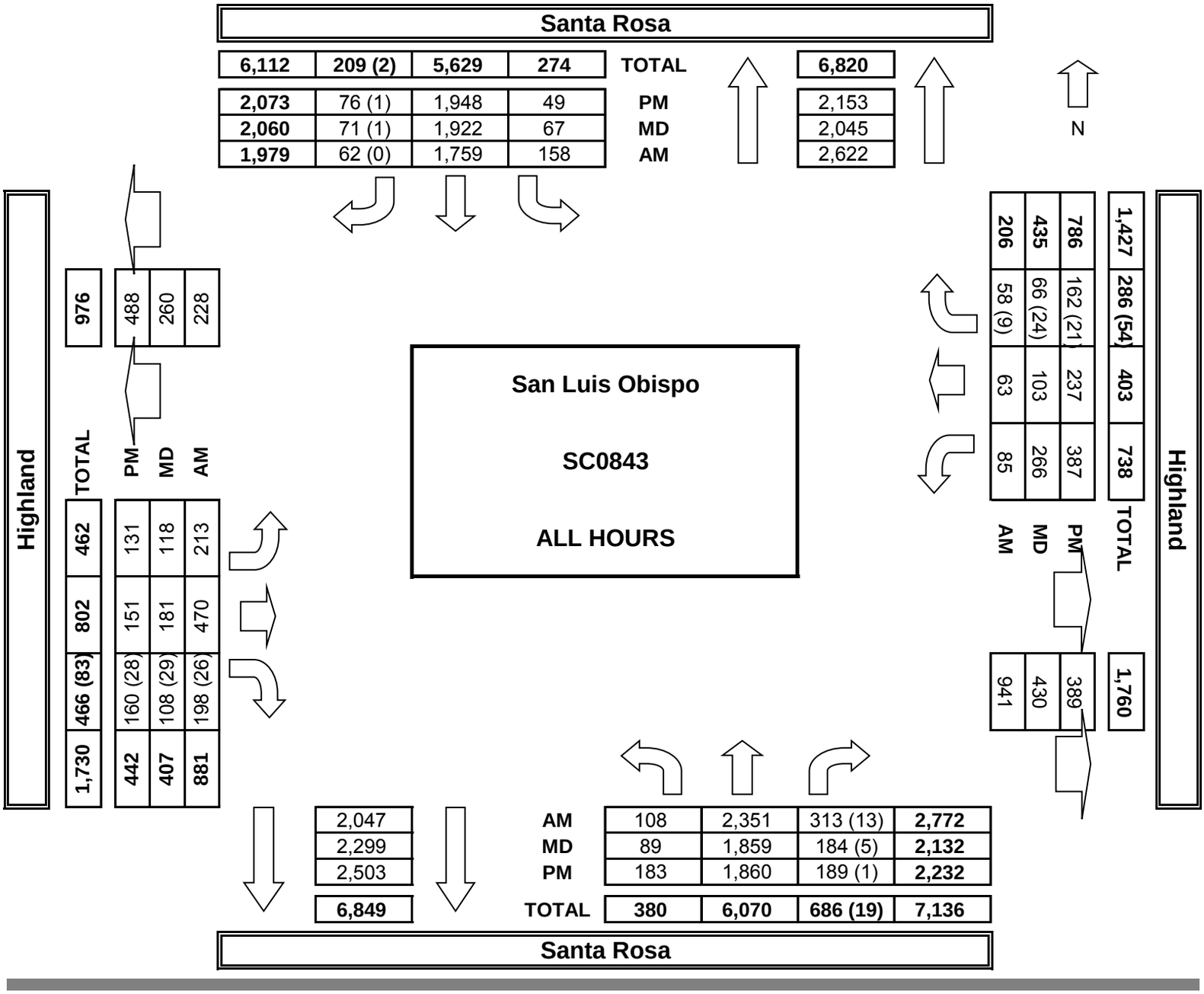
AM
PM
MD
OTHER
OTHER

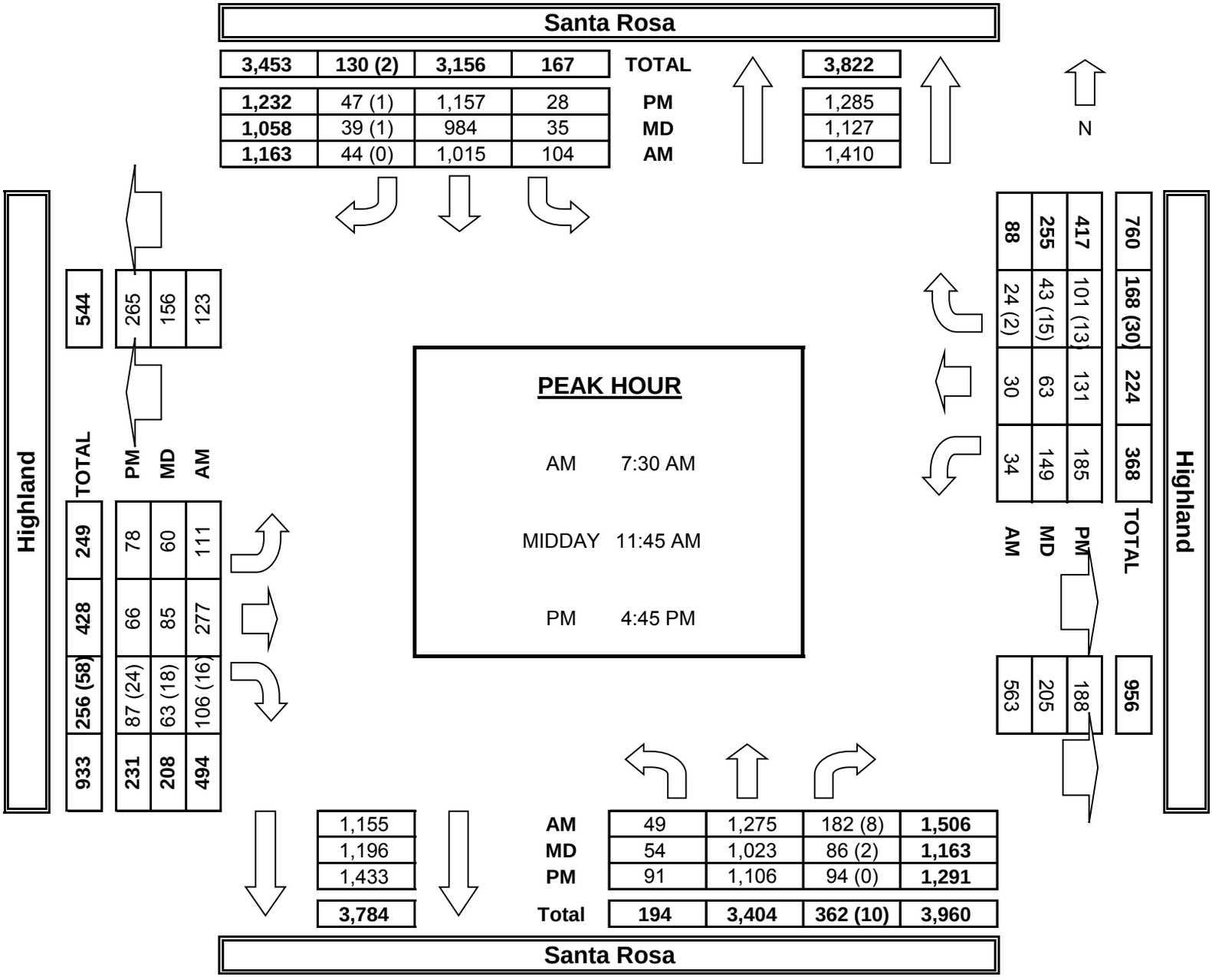
▲ N
◄ W
E ►
S ▼

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Highland			WESTBOUND Highland			
	LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1.5	ET 1	ER 0.5	WL 1.5	WT 0.5	WR 1	TOTAL
AM	7:30 AM	0	1	0	0	1	0	0	8	6	0	0	0	16
	7:45 AM	0	8	0	1	5	0	0	30	0	0	0	0	44
	8:00 AM	1	0	0	2	1	0	0	27	0	0	1	0	32
	8:15 AM	0	0	0	2	0	0	0	10	0	0	3	0	15
	8:30 AM	0	1	0	0	0	0	0	4	0	0	1	0	6
	8:45 AM	0	0	0	5	0	0	0	37	0	0	0	0	42
	9:00 AM	0	0	0	4	0	1	0	31	0	0	1	0	37
	9:15 AM	0	1	0	1	0	0	0	5	0	0	1	0	8
	VOLUMES	1	11	0	15	7	1	0	152	6	0	7	0	200
	APPROACH %	8%	92%	0%	65%	30%	4%	0%	96%	4%	0%	100%	0%	
	APP/DEPART	12	/	11	23	/	13	158	/	167	7	/	9	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	1	9	0	5	7	0	0	75	6	0	4	0	107
	APPROACH %	10%	90%	0%	42%	58%	0%	0%	93%	7%	0%	100%	0%	
	PEAK HR FACTOR		0.313			0.500			0.675			0.333		0.608
	APP/DEPART	10	/	9	12	/	13	81	/	80	4	/	5	0
MD	11:00 AM	0	0	0	2	1	1	0	3	0	0	9	0	16
	11:15 AM	0	1	0	0	4	0	0	4	0	0	6	0	15
	11:30 AM	0	0	1	0	0	1	0	6	0	0	1	1	10
	11:45 AM	0	0	0	6	0	0	0	18	0	0	6	0	30
	12:00 PM	0	0	0	0	1	0	0	13	0	0	14	2	30
	12:15 PM	0	0	0	0	1	0	0	2	0	0	8	0	11
	12:30 PM	0	0	0	0	1	0	0	4	0	0	1	0	6
	12:45 PM	0	0	0	2	0	0	0	9	0	0	2	0	13
	VOLUMES	0	1	1	10	8	2	0	59	0	0	47	3	131
	APPROACH %	0%	50%	50%	50%	40%	10%	0%	100%	0%	0%	94%	6%	
	APP/DEPART	2	/	4	20	/	8	59	/	70	50	/	49	0
	BEGIN PEAK HR		11:15 AM											
	VOLUMES	0	1	1	6	5	1	0	41	0	0	27	3	85
	APPROACH %	0%	50%	50%	50%	42%	8%	0%	100%	0%	0%	90%	10%	
	PEAK HR FACTOR		0.500			0.500			0.569			0.469		0.708
	APP/DEPART	2	/	4	12	/	5	41	/	48	30	/	28	0
PM	04:45 PM	0	0	0	0	3	0	0	4	2	0	7	0	16
	5:00 PM	0	0	0	0	0	0	0	2	0	2	11	0	15
	5:15 PM	0	0	0	0	1	0	0	1	0	0	14	0	16
	5:30 PM	0	0	0	0	0	0	0	3	0	0	16	0	19
	5:45 PM	0	1	0	1	0	0	0	6	0	0	10	0	18
	6:00 PM	1	0	0	1	1	1	0	4	0	0	9	1	18
	6:15 PM	0	1	0	1	1	0	0	5	0	0	10	0	18
	6:30 PM	0	0	0	0	1	0	0	2	0	0	7	1	11
	VOLUMES	1	2	0	3	7	1	0	27	2	2	84	2	131
	APPROACH %	33%	67%	0%	27%	64%	9%	0%	93%	7%	2%	95%	2%	
	APP/DEPART	3	/	4	11	/	11	29	/	30	88	/	86	0
	BEGIN PEAK HR		5:30 PM											
	VOLUMES	1	2	0	3	2	1	0	18	0	0	45	1	73
	APPROACH %	33%	67%	0%	50%	33%	17%	0%	100%	0%	0%	98%	2%	
	PEAK HR FACTOR		0.750			0.500			0.750			0.719		0.961
	APP/DEPART	3	/	3	6	/	2	18	/	21	46	/	47	0

AimTD LLC

TURNING MOVEMENT COUNTS




Santa Rosa
3,453
130 (2)
3,156
167
TOTAL
3,822
1,232
47 (1)
1,157
28
PM
1,285
1,058
39 (1)
984
35
MD
1,127
1,163
44 (0)
1,015
104
AM
1,410
N
Highland
544
265
156
123
TOTAL
PM
MD
AM
249
78
60
111
428
66
85
277
256 (58)
87 (24)
63 (18)
106 (16)
933
231
208
494
PEAK HOUR
AM 7:30 AM
MIDDAY 11:45 AM
PM 4:45 PM
88
24 (2)
30
34
255
43 (15)
63
149
417
101 (13)
131
185
760
168 (30)
224
368
AM
MD
PM
TOTAL
563
205
188
956
Highland
1,155
1,196
1,433
3,784
AM
MD
PM
Total
49
54
91
194
1,275
1,023
1,106
3,404
182 (8)
86 (2)
94 (0)
362 (10)
1,506
1,163
1,291
3,960
Santa Rosa

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Bishop
EAST & WEST: Highland

PROJECT #: SC0843
LOCATION #: 4
CONTROL: STOP S

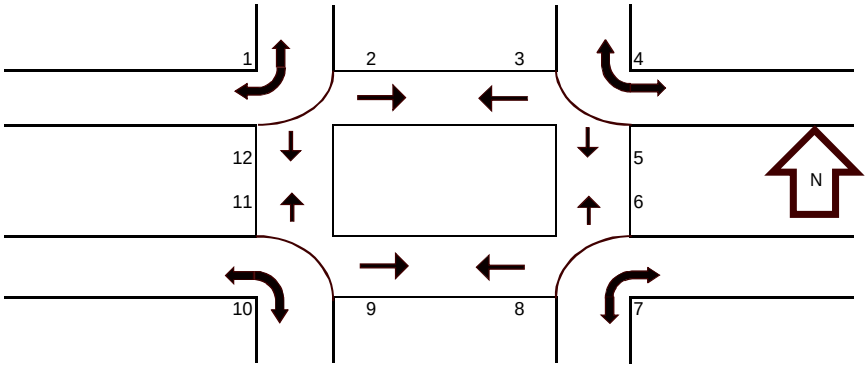
NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

Add U-Turns to Left Turns

		NORTHBOUND Bishop			SOUTHBOUND Bishop			EASTBOUND Highland			WESTBOUND Highland				U-TURNS				
	LANES:	NL X	NT X	NR X	SL 1	ST X	SR 1	EL 0	ET 1	ER X	WL X	WT 1	WR 0	TOTAL	NB X	SB 0	EB 0	WB 0	TTL
AM	7:30 AM	0	0	0	5	0	1	4	102	0	0	18	10	140	0	0	0	0	0
	7:45 AM	0	0	0	10	0	1	16	179	0	0	16	25	247	0	0	0	0	0
	8:00 AM	0	0	0	9	0	4	23	114	0	0	33	23	206	0	0	0	0	0
	8:15 AM	0	0	0	7	0	2	4	81	0	0	17	15	126	0	0	0	0	0
	8:30 AM	0	0	0	11	0	4	10	101	0	0	13	13	152	0	0	0	0	0
	8:45 AM	0	0	0	7	0	4	15	157	0	1	13	11	208	0	0	0	1	1
	9:00 AM	0	0	0	14	0	4	11	76	0	0	52	17	174	0	0	0	0	0
	9:15 AM	0	0	0	21	0	7	13	61	0	0	34	18	154	0	0	0	0	0
	VOLUMES	0	0	0	84	0	27	96	871	0	1	196	132	1,407	0	0	0	1	1
	APPROACH %	0%	0%	0%	76%	0%	24%	10%	90%	0%	0%	60%	40%						
	APP/DEPART	0	/	228	111	/	0	967	/	956	329	/	223	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	0	0	37	0	11	53	475	0	0	79	76	731					
	APPROACH %	0%	0%	0%	77%	0%	23%	10%	90%	0%	0%	51%	49%						
	PEAK HR FACTOR		0.000			0.800			0.677			0.692		0.740					
	APP/DEPART	0	/	129	48	/	0	528	/	512	155	/	90	0					
MD	11:00 AM	0	0	0	20	0	9	9	34	0	0	90	19	181	0	0	0	0	0
	11:15 AM	0	0	0	9	0	6	1	38	0	0	70	10	134	0	0	0	0	0
	11:30 AM	0	0	0	11	0	1	8	66	0	0	35	10	131	0	0	0	0	0
	11:45 AM	0	0	0	17	0	3	21	100	0	1	25	27	194	0	0	0	1	1
	12:00 PM	0	0	0	12	0	5	9	63	0	2	55	23	169	0	0	0	2	2
	12:15 PM	0	0	0	7	0	5	5	30	0	0	45	12	104	0	0	0	0	0
	12:30 PM	0	0	0	7	0	6	4	26	0	0	33	13	89	0	0	0	0	0
	12:45 PM	0	0	0	13	0	4	6	35	0	0	28	19	105	0	0	0	0	0
	VOLUMES	0	0	0	96	0	39	63	392	0	3	381	133	1,107	0	0	0	3	3
	APPROACH %	0%	0%	0%	71%	0%	29%	14%	86%	0%	1%	74%	26%						
	APP/DEPART	0	/	196	135	/	0	455	/	491	517	/	420	0					
	BEGIN PEAK HR		11:00 AM																
	VOLUMES	0	0	0	57	0	19	39	238	0	1	220	66	640					
	APPROACH %	0%	0%	0%	75%	0%	25%	14%	86%	0%	0%	77%	23%						
	PEAK HR FACTOR		0.000			0.655			0.572			0.658		0.825					
	APP/DEPART	0	/	105	76	/	0	277	/	296	287	/	239	0					
PM	05:00 PM	0	0	0	10	0	14	2	38	0	0	75	8	147	0	0	0	0	0
	5:15 PM	0	0	0	12	0	17	3	38	0	0	93	10	173	0	0	0	0	0
	5:30 PM	0	0	0	22	0	14	2	51	0	0	82	11	182	0	0	0	0	0
	5:45 PM	0	0	0	27	0	8	4	86	0	0	65	6	196	0	0	0	0	0
	6:00 PM	0	0	0	12	0	19	5	66	0	0	117	10	229	0	0	0	0	0
	6:15 PM	0	0	0	9	0	14	3	30	0	0	130	6	192	0	0	0	0	0
	6:30 PM	0	0	0	7	0	9	1	22	0	0	59	2	100	0	0	0	0	0
	6:45 PM	0	0	0	6	0	4	2	30	0	0	50	3	95	0	0	0	0	0
	VOLUMES	0	0	0	105	0	99	22	361	0	0	671	56	1,314	0	0	0	0	0
	APPROACH %	0%	0%	0%	51%	0%	49%	6%	94%	0%	0%	92%	8%						
	APP/DEPART	0	/	78	204	/	0	383	/	466	727	/	770	0					
	BEGIN PEAK HR		5:30 PM																
	VOLUMES	0	0	0	70	0	55	14	233	0	0	394	33	799					
	APPROACH %	0%	0%	0%	56%	0%	44%	6%	94%	0%	0%	92%	8%						
	PEAK HR FACTOR		0.000			0.868			0.686			0.785		0.872					
	APP/DEPART	0	/	47	125	/	0	247	/	303	427	/	449	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	1	2	1	0	0	0	1	7	0	0	0	12
	7:45 AM	0	4	3	2	0	1	0	1	17	0	1	0	29
	8:00 AM	0	6	1	5	0	0	0	1	8	0	0	0	21
	8:15 AM	1	1	0	5	0	0	0	0	7	0	0	0	14
	8:30 AM	0	0	0	1	0	0	0	2	6	0	0	0	9
	8:45 AM	0	0	1	4	0	0	0	1	16	0	0	0	22
	9:00 AM	1	2	4	14	0	2	0	1	19	0	1	0	44
	9:15 AM	1	5	8	9	0	0	0	0	7	0	0	0	30
	TOTAL	3	19	19	41	0	3	0	7	87	0	2	0	181
MD	11:00 AM	0	1	0	5	0	0	0	6	6	0	0	1	19
	11:15 AM	0	1	0	8	0	0	0	5	2	0	0	1	17
	11:30 AM	0	0	0	6	0	1	0	4	1	0	0	0	12
	11:45 AM	0	3	1	20	0	0	0	1	15	0	0	0	40
	12:00 PM	0	3	1	26	0	0	0	8	11	0	0	0	49
	12:15 PM	0	3	0	5	0	0	0	4	4	0	0	0	16
	12:30 PM	0	0	1	7	0	0	0	3	1	0	0	0	12
	12:45 PM	0	1	2	7	0	0	0	2	3	0	0	0	15
	TOTAL	0	12	5	84	0	1	0	33	43	0	0	2	180
PM	5:00 PM	0	2	7	10	0	1	0	10	0	0	1	0	31
	5:15 PM	0	3	12	13	0	0	0	8	0	0	0	0	36
	5:30 PM	0	1	4	10	0	0	0	4	4	0	1	0	24
	5:45 PM	0	6	0	16	0	0	0	4	2	0	0	0	28
	6:00 PM	1	1	2	29	0	0	0	11	3	0	0	0	47
	6:15 PM	0	5	0	6	1	0	0	3	1	0	0	0	16
	6:30 PM	0	2	0	4	0	0	0	0	2	0	0	0	8
	6:45 PM	0	3	0	4	0	0	0	2	1	0	0	0	10
	TOTAL	1	23	25	92	1	1	0	42	13	0	2	0	200



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
Tue, Feb 23, 16	NORTH & SOUTH:	Bishop	LOCATION #:	4
	EAST & WEST:	Highland	CONTROL:	STOP S

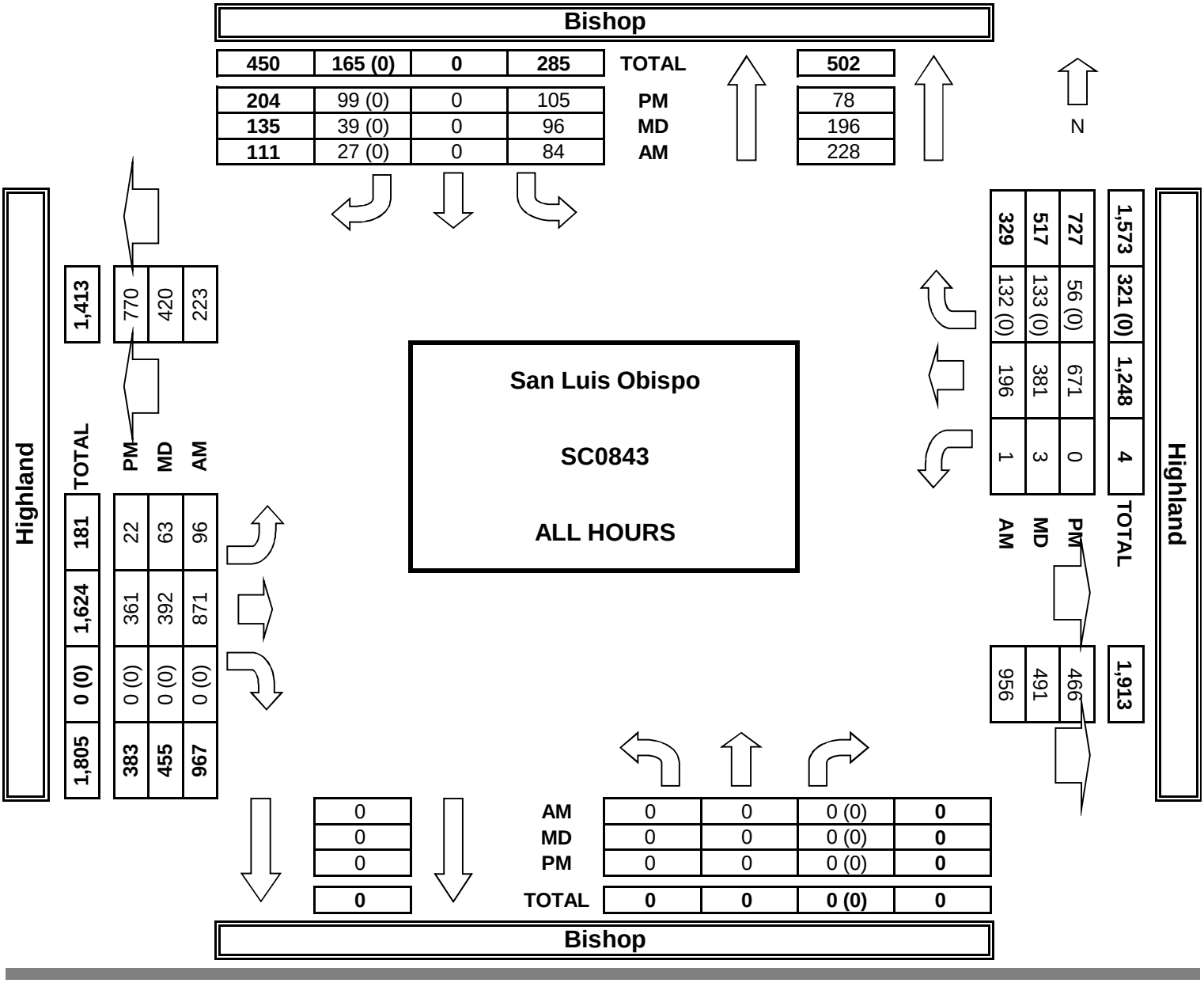
NOTES:

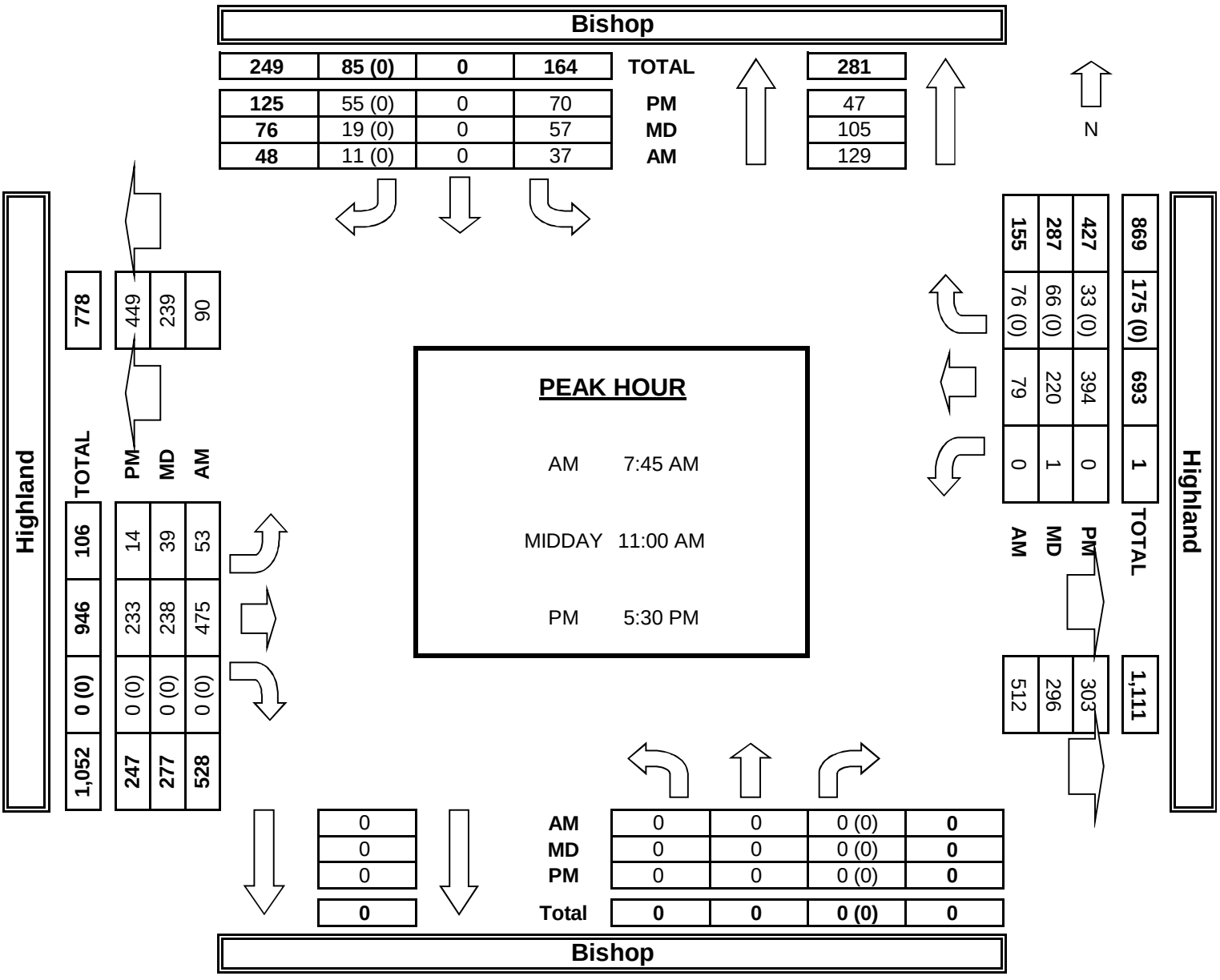
AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Bishop			SOUTHBOUND Bishop			EASTBOUND Highland			WESTBOUND Highland			
	LANES:	NL X	NT X	NR X	SL 1	ST X	SR 1	EL 0	ET 1	ER X	WL X	WT 1	WR 0	TOTAL
AM	7:30 AM	0	0	0	0	0	0	0	13	0	0	1	1	15
	7:45 AM	0	0	0	0	0	0	0	24	0	0	0	2	26
	8:00 AM	0	0	0	1	0	0	0	45	0	0	2	5	53
	8:15 AM	0	0	0	0	0	0	0	10	0	0	0	0	10
	8:30 AM	0	0	0	3	0	0	0	10	0	0	3	2	18
	8:45 AM	0	0	0	1	0	0	1	23	0	0	1	3	29
	9:00 AM	0	0	0	0	0	0	0	27	0	0	5	2	34
	9:15 AM	0	0	0	1	0	0	0	6	0	0	1	0	8
	VOLUMES	0	0	0	6	0	0	1	158	0	0	13	15	193
	APPROACH %	0%	0%	0%	100%	0%	0%	1%	99%	0%	0%	46%	54%	
	APP/DEPART	0	/	16	6	/	0	159	/	164	28	/	13	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	0	0	0	5	0	0	1	88	0	0	6	10	110
	APPROACH %	0%	0%	0%	100%	0%	0%	1%	99%	0%	0%	38%	63%	
	PEAK HR FACTOR		0.000			0.417			0.494			0.571		0.519
	APP/DEPART	0	/	11	5	/	0	89	/	93	16	/	6	0
MD	11:00 AM	0	0	0	2	0	0	0	11	0	0	15	2	30
	11:15 AM	0	0	0	2	0	0	0	5	0	0	6	0	13
	11:30 AM	0	0	0	1	0	0	0	3	0	0	1	1	6
	11:45 AM	0	0	0	1	0	0	0	20	0	0	4	2	27
	12:00 PM	0	0	0	4	0	0	0	28	0	0	11	3	46
	12:15 PM	0	0	0	1	0	0	0	3	0	0	8	2	14
	12:30 PM	0	0	0	1	0	0	0	4	0	0	5	0	10
	12:45 PM	0	0	0	2	0	1	0	5	0	0	1	1	10
	VOLUMES	0	0	0	14	0	1	0	79	0	0	51	11	156
	APPROACH %	0%	0%	0%	93%	0%	7%	0%	100%	0%	0%	82%	18%	
	APP/DEPART	0	/	11	15	/	0	79	/	93	62	/	52	0
	BEGIN PEAK HR		11:45 AM											
	VOLUMES	0	0	0	7	0	0	0	55	0	0	28	7	97
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	80%	20%	
	PEAK HR FACTOR		0.000			0.438			0.491			0.625		0.527
	APP/DEPART	0	/	7	7	/	0	55	/	62	35	/	28	0
PM	05:00 PM	0	0	0	1	0	0	0	4	0	0	14	0	19
	5:15 PM	0	0	0	1	0	0	0	1	0	0	10	0	12
	5:30 PM	0	0	0	0	0	0	0	2	0	0	6	1	9
	5:45 PM	0	0	0	0	0	0	0	9	0	0	10	3	22
	6:00 PM	0	0	0	0	0	0	0	6	0	0	27	4	37
	6:15 PM	0	0	0	0	0	0	0	2	0	0	10	0	12
	6:30 PM	0	0	0	0	0	0	0	1	0	0	4	0	5
	6:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	3
	VOLUMES	0	0	0	2	0	0	0	25	0	0	84	8	119
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	91%	9%	
	APP/DEPART	0	/	8	2	/	0	25	/	27	92	/	84	0
	BEGIN PEAK HR		5:15 PM											
	VOLUMES	0	0	0	0	0	0	0	19	0	0	53	8	80
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	87%	13%	
	PEAK HR FACTOR		0.000			0.000			0.528			0.492		0.541
	APP/DEPART	0	/	8	0	/	0	19	/	19	61	/	53	0

AimTD LLC

TURNING MOVEMENT COUNTS




Bishop
249
85 (0)
0
164
TOTAL
281
125
55 (0)
0
70
PM
47
76
19 (0)
0
57
MD
105
48
11 (0)
0
37
AM
129
N
Highland
778
449
239
90
TOTAL
PM
MD
AM
106
14
39
53
946
233
238
475
0 (0)
0 (0)
0 (0)
0 (0)
1,052
247
277
528
PEAK HOUR
AM 7:45 AM
MIDDAY 11:00 AM
PM 5:30 PM
869
175 (0)
693
1
TOTAL
Highland
155
76 (0)
79
0
287
66 (0)
220
1
427
33 (0)
394
0
PM
MD
AM
512
296
303
1,111
0
0
0
0
AM
MD
PM
Total
0
0
0
0
0 (0)
0 (0)
0 (0)
0 (0)
0
0
0
0
Bishop

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: California
EAST & WEST: Highland

PROJECT #: SC0843
LOCATION #: 5
CONTROL: STOP ALL

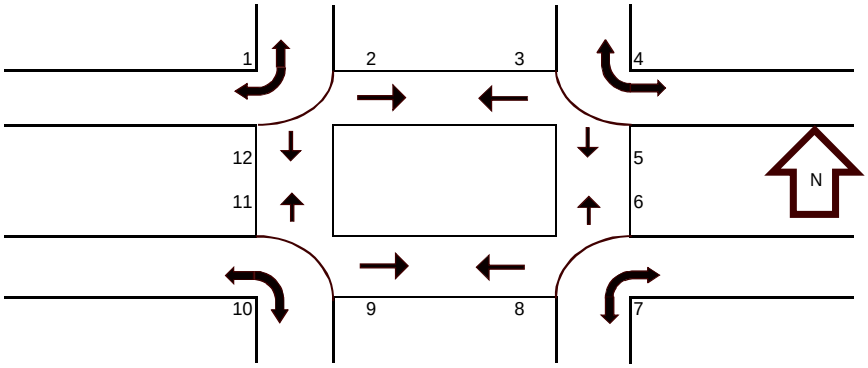
NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

Add U-Turns to Left Turns

		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Highland			WESTBOUND Highland				U-TURNS				
	LANES:	NL 1	NT 0	NR 1	SL 0	ST 0	SR 0	EL 0	ET 1.5	ER 0.5	WL 1	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:30 AM	8	0	68	0	0	0	0	88	15	11	19	1	210	0	0	0	0	0
	7:45 AM	16	0	83	0	0	0	0	144	30	12	22	0	307	0	0	0	0	0
	8:00 AM	15	0	78	0	0	0	0	116	40	20	36	0	305	0	0	0	0	0
	8:15 AM	10	0	45	0	0	0	0	86	27	14	17	0	199	0	0	0	0	0
	8:30 AM	12	0	68	0	0	0	1	89	25	8	15	0	218	0	0	0	0	0
	8:45 AM	15	0	111	0	0	0	1	117	33	10	10	0	297	0	0	0	0	0
	9:00 AM	18	0	73	0	0	0	0	66	27	41	51	0	276	0	0	0	0	0
	9:15 AM	18	0	62	0	0	0	0	80	20	27	31	0	238	0	0	0	1	1
	VOLUMES	112	0	588	0	0	0	2	786	217	143	201	1	2,050	0	0	0	1	1
	APPROACH %	16%	0%	84%	0%	0%	0%	0%	78%	22%	41%	58%	0%						
	APP/DEPART	700	/	3	0	/	359	1,005	/	1,375	345	/	313	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	63	0	314	0	0	0	2	352	105	86	107	0	1,029					
	APPROACH %	17%	0%	83%	0%	0%	0%	0%	77%	23%	45%	55%	0%						
	PEAK HR FACTOR		0.748			0.000			0.659			0.524		0.838					
	APP/DEPART	377	/	2	0	/	190	459	/	667	193	/	170	0					
MD	11:00 AM	12	0	49	0	0	0	0	40	17	46	90	0	254	0	0	0	0	0
	11:15 AM	8	0	39	0	0	0	0	45	9	50	80	0	231	0	0	0	0	0
	11:30 AM	11	0	58	0	0	0	0	70	9	35	40	0	223	0	0	0	0	0
	11:45 AM	21	0	64	0	0	0	0	89	10	34	30	0	248	0	0	0	0	0
	12:00 PM	25	0	50	0	0	0	0	49	16	44	51	0	235	0	0	0	0	0
	12:15 PM	7	0	30	0	0	0	0	34	10	38	45	0	164	0	0	0	1	1
	12:30 PM	7	0	29	0	0	0	0	33	8	33	42	0	152	0	0	0	0	0
	12:45 PM	17	0	49	0	0	0	0	35	10	29	32	0	172	0	0	0	0	0
	VOLUMES	108	0	368	0	0	0	0	395	89	309	410	0	1,679	0	0	0	1	1
	APPROACH %	23%	0%	77%	0%	0%	0%	0%	82%	18%	43%	57%	0%						
	APP/DEPART	476	/	0	0	/	397	484	/	764	719	/	518	0					
	BEGIN PEAK HR		11:00 AM																
	VOLUMES	52	0	210	0	0	0	0	244	45	165	240	0	956					
	APPROACH %	20%	0%	80%	0%	0%	0%	0%	84%	16%	41%	59%	0%						
	PEAK HR FACTOR		0.771			0.000			0.730			0.744		0.941					
	APP/DEPART	262	/	0	0	/	210	289	/	454	405	/	292	0					
PM	05:00 PM	27	0	34	0	0	0	0	38	11	58	69	0	237	0	0	0	0	0
	5:15 PM	28	0	27	0	0	0	0	31	22	61	77	0	246	0	0	0	0	0
	5:30 PM	22	0	42	0	0	0	0	48	24	55	81	0	272	0	0	0	0	0
	5:45 PM	22	0	68	0	0	0	0	88	25	50	66	0	319	0	0	0	0	0
	6:00 PM	38	0	61	0	0	0	1	53	20	60	99	0	332	0	0	0	0	0
	6:15 PM	18	0	33	0	0	0	0	33	7	91	122	0	304	0	0	0	0	0
	6:30 PM	9	0	29	0	0	0	0	22	8	65	57	0	190	0	0	0	1	1
	6:45 PM	8	0	29	0	0	0	0	34	6	44	51	0	172	0	0	0	0	0
	VOLUMES	172	0	323	0	0	0	1	347	123	484	622	0	2,072	0	0	0	1	1
	APPROACH %	35%	0%	65%	0%	0%	0%	0%	74%	26%	44%	56%	0%						
	APP/DEPART	495	/	1	0	/	606	471	/	671	1,106	/	794	0					
	BEGIN PEAK HR		5:30 PM																
	VOLUMES	100	0	204	0	0	0	1	222	76	256	368	0	1,227					
	APPROACH %	33%	0%	67%	0%	0%	0%	0%	74%	25%	41%	59%	0%						
	PEAK HR FACTOR		0.768			0.000			0.662			0.732		0.924					
	APP/DEPART	304	/	1	0	/	332	299	/	426	624	/	468	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	4	0	0	3	0	4	2	2	0	0	15
	7:45 AM	0	1	0	0	8	4	0	0	15	1	0	0	29
	8:00 AM	0	2	1	0	4	6	0	1	4	0	0	0	18
	8:15 AM	0	0	0	0	1	0	0	0	6	0	0	0	7
	8:30 AM	0	0	0	0	4	1	0	0	7	0	0	0	12
	8:45 AM	0	0	0	0	2	7	0	2	15	0	0	0	26
	9:00 AM	0	0	0	0	2	15	0	1	18	0	0	0	36
	9:15 AM	0	0	0	0	0	6	0	0	6	0	0	0	12
	TOTAL	0	3	5	0	21	42	0	8	73	3	0	0	155
MD	11:00 AM	0	0	0	0	8	9	0	5	2	0	1	0	25
	11:15 AM	0	0	0	0	3	1	0	4	3	0	0	0	11
	11:30 AM	0	0	0	0	7	3	0	4	2	0	0	0	16
	11:45 AM	0	0	0	0	2	20	0	3	11	2	0	0	38
	12:00 PM	0	0	0	0	5	17	0	5	9	2	0	0	38
	12:15 PM	0	0	0	0	3	0	0	3	4	1	0	0	11
	12:30 PM	0	0	0	0	3	4	0	3	1	1	0	0	12
	12:45 PM	0	0	0	0	3	1	0	1	2	1	0	0	8
	TOTAL	0	0	0	0	34	55	0	28	34	7	1	0	159
PM	5:00 PM	0	0	0	0	7	4	0	4	1	1	0	0	17
	5:15 PM	0	0	0	0	5	2	0	4	0	0	0	0	11
	5:30 PM	0	0	0	0	7	1	0	5	3	1	0	0	17
	5:45 PM	0	0	0	0	15	2	0	2	2	0	0	0	21
	6:00 PM	0	0	0	0	22	4	0	8	3	0	0	0	37
	6:15 PM	0	0	0	0	5	0	1	3	1	0	0	0	10
	6:30 PM	0	0	0	0	7	0	0	1	0	0	0	0	8
	6:45 PM	0	0	0	0	7	0	1	2	0	0	0	0	10
	TOTAL	0	0	0	0	75	13	2	29	10	2	0	0	131



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: California
EAST & WEST: Highland

PROJECT #: SC0843
LOCATION #: 5
CONTROL: STOP ALL

NOTES:

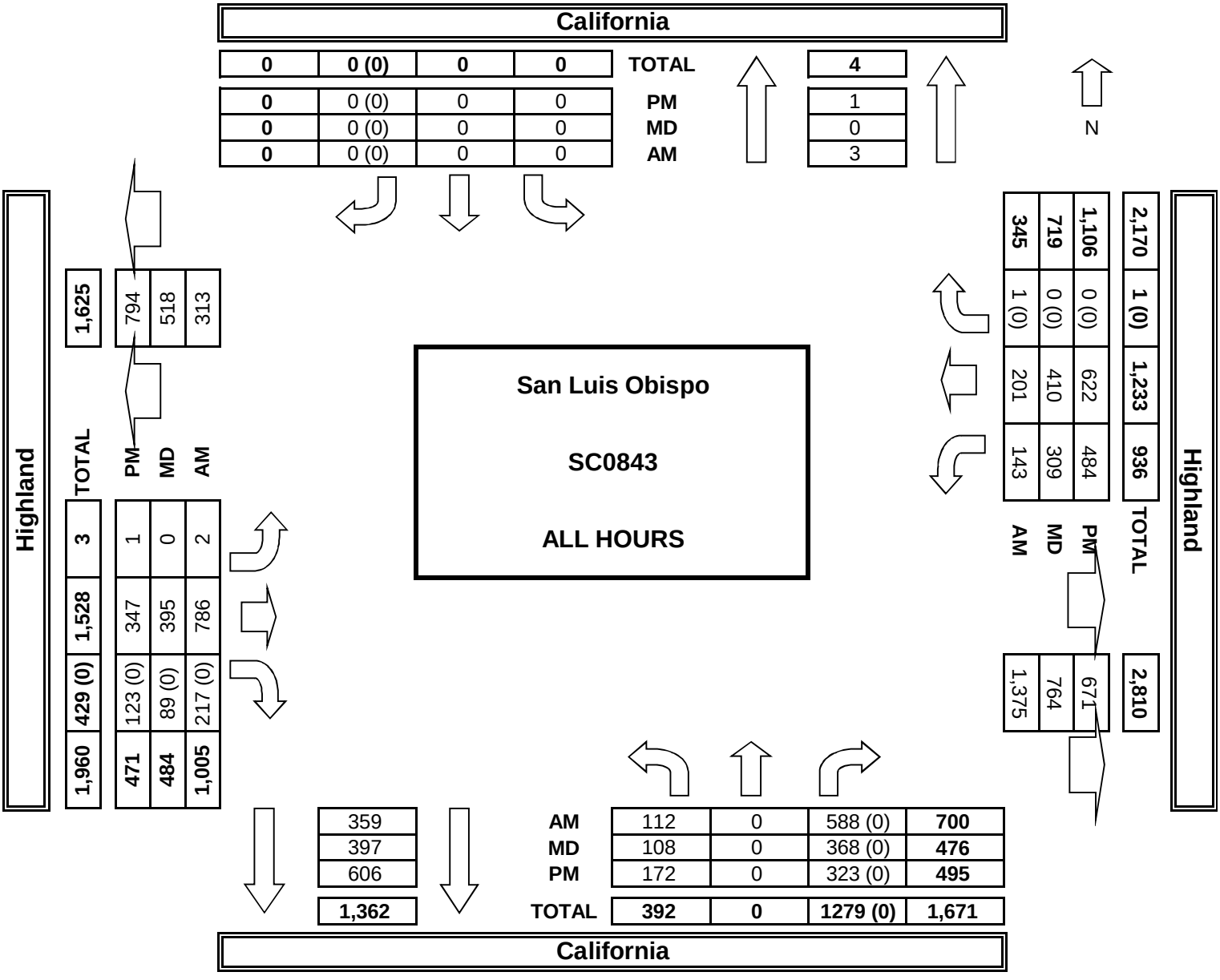
AM
PM
MD
OTHER
OTHER

◄ W N ▲ S ▼ E ►

		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Highland			WESTBOUND Highland			
	LANES:	NL 1	NT 0	NR 1	SL 0	ST 0	SR 0	EL 0	ET 1.5	ER 0.5	WL 1	WT 1	WR 0	TOTAL
AM	7:30 AM	2	0	0	0	0	0	0	11	2	0	1	0	16
	7:45 AM	3	0	0	0	0	0	0	24	0	0	3	0	30
	8:00 AM	4	0	0	0	1	0	0	44	3	0	3	0	55
	8:15 AM	4	0	0	0	0	0	0	12	1	1	1	0	19
	8:30 AM	3	0	0	0	0	0	0	11	0	1	0	0	15
	8:45 AM	1	0	0	0	0	0	0	23	1	0	3	0	28
	9:00 AM	6	0	1	0	0	0	0	27	2	0	1	0	37
	9:15 AM	1	0	0	0	0	0	0	6	1	0	0	0	8
	VOLUMES	24	0	1	0	1	0	0	158	10	2	12	0	208
	APPROACH %	96%	0%	4%	0%	100%	0%	0%	94%	6%	14%	86%	0%	
	APP/DEPART	25	/	0	1	/	13	168	/	159	14	/	36	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	13	0	0	0	1	0	0	91	6	1	8	0	120
	APPROACH %	100%	0%	0%	0%	100%	0%	0%	94%	6%	11%	89%	0%	
	PEAK HR FACTOR		0.813			0.250			0.516			0.750		0.545
	APP/DEPART	13	/	0	1	/	8	97	/	91	9	/	21	0
MD	11:00 AM	12	0	0	0	0	0	0	6	5	0	4	0	27
	11:15 AM	2	0	0	0	0	0	0	3	2	1	4	0	12
	11:30 AM	2	0	0	0	0	0	0	1	2	1	1	0	7
	11:45 AM	4	0	1	0	0	0	0	10	10	0	2	0	27
	12:00 PM	5	0	1	0	0	0	0	11	17	0	4	0	38
	12:15 PM	6	0	1	0	0	0	0	3	4	0	4	0	18
	12:30 PM	2	0	0	0	0	0	0	2	1	0	1	0	6
	12:45 PM	3	0	0	0	0	0	0	5	3	1	1	0	13
	VOLUMES	36	0	3	0	0	0	0	41	44	3	21	0	148
	APPROACH %	92%	0%	8%	0%	0%	0%	0%	48%	52%	13%	88%	0%	
	APP/DEPART	39	/	0	0	/	47	85	/	44	24	/	57	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	17	0	3	0	0	0	0	25	33	1	11	0	90
	APPROACH %	85%	0%	15%	0%	0%	0%	0%	43%	57%	8%	92%	0%	
	PEAK HR FACTOR		0.714			0.000			0.518			0.750		0.592
	APP/DEPART	20	/	0	0	/	34	58	/	28	12	/	28	0
PM	05:00 PM	1	0	0	0	0	0	0	1	4	9	4	0	19
	5:15 PM	0	0	1	0	0	0	0	0	1	5	6	0	13
	5:30 PM	0	0	0	0	0	0	0	1	1	6	1	0	9
	5:45 PM	1	0	0	0	0	0	0	5	5	15	3	0	29
	6:00 PM	1	0	1	0	0	0	0	2	4	20	5	0	33
	6:15 PM	1	0	1	0	0	0	0	0	0	7	5	0	14
	6:30 PM	0	0	0	0	0	0	0	0	0	3	1	0	4
	6:45 PM	1	0	0	0	0	0	0	0	0	3	2	0	6
	VOLUMES	5	0	3	0	0	0	0	9	15	68	27	0	127
	APPROACH %	63%	0%	38%	0%	0%	0%	0%	38%	63%	72%	28%	0%	
	APP/DEPART	8	/	0	0	/	83	24	/	12	95	/	32	0
	BEGIN PEAK HR		5:30 PM											
	VOLUMES	3	0	2	0	0	0	0	8	10	48	14	0	85
	APPROACH %	60%	0%	40%	0%	0%	0%	0%	44%	56%	77%	23%	0%	
	PEAK HR FACTOR		0.625			0.000			0.450			0.620		0.644
	APP/DEPART	5	/	0	0	/	58	18	/	10	62	/	17	0

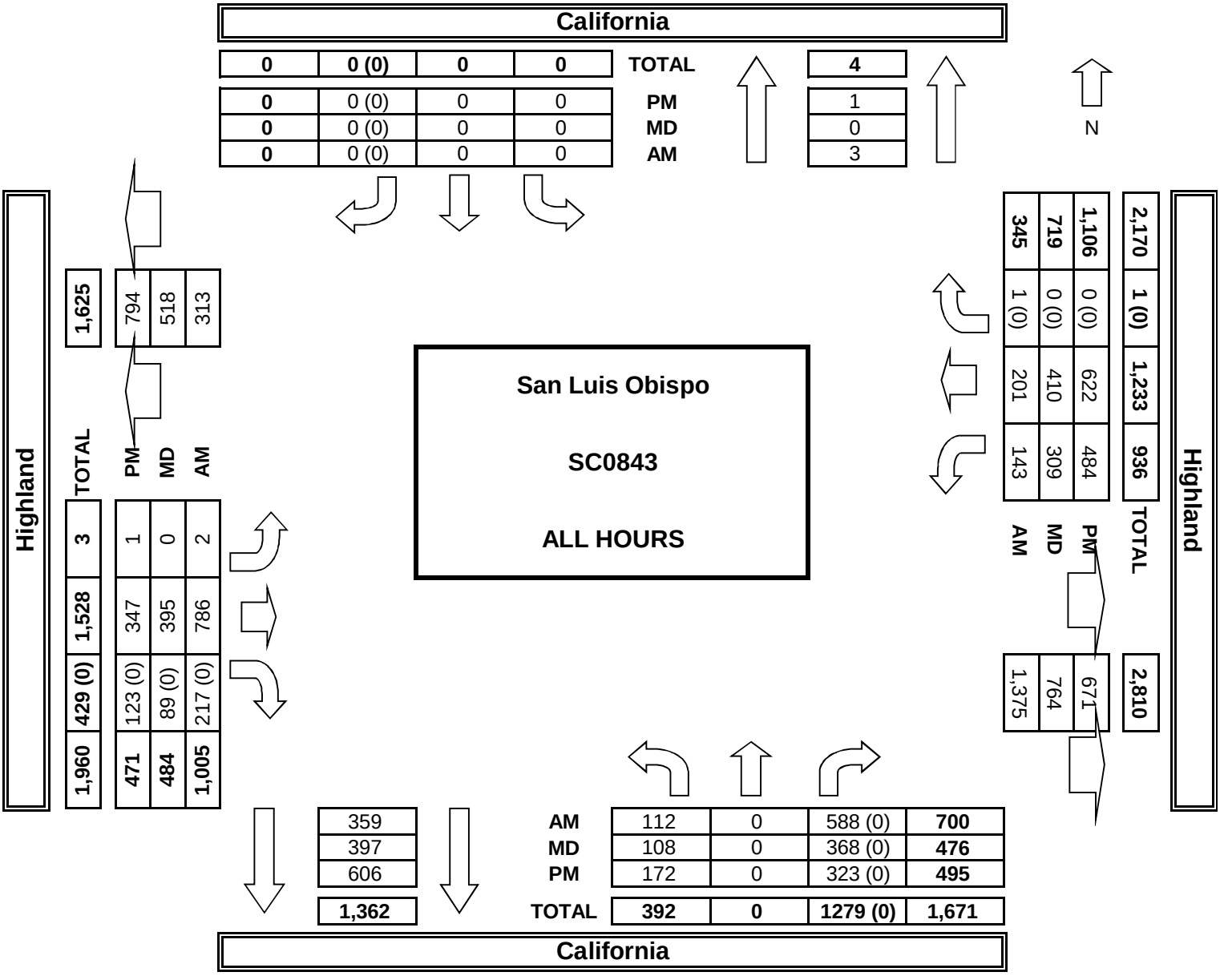
AimTD LLC

TURNING MOVEMENT COUNTS



AimTD LLC

TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Mar 16, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: California
EAST & WEST: Campus

PROJECT #: SC0843
LOCATION #: 1
CONTROL: STOP ALL

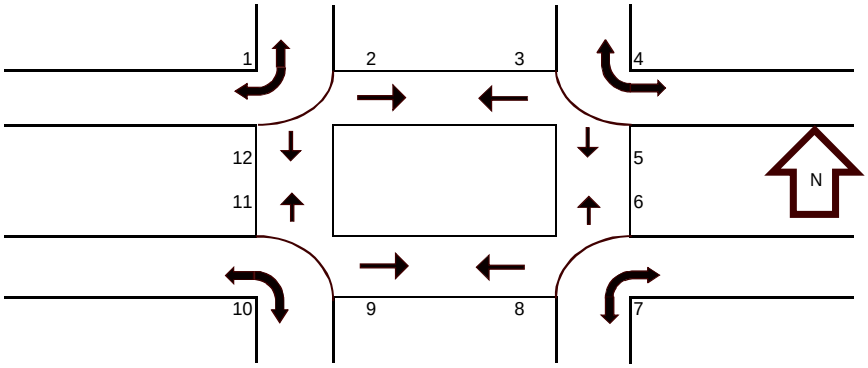
NOTES:

AM / PM / MD / OTHER / OTHER — N ▲ / ◄ W / E ► / S ▼

Add U-Turns to Left Turns

		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Campus			WESTBOUND Campus				U-TURNS				
	LANES:	NL X	NT 1	NR 0	SL 0	ST 1	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5	TOTAL	NB 0	SB 0	EB X	WB 0	TTL
AM	7:30 AM	0	69	59	8	23	0	0	0	0	1	0	3	163	0	0	0	0	0
	7:45 AM	0	89	82	10	26	0	0	0	0	3	0	7	217	0	0	0	0	0
	8:00 AM	0	83	74	7	20	0	0	0	0	7	0	8	199	0	0	0	0	0
	8:15 AM	0	83	55	6	30	0	0	0	0	5	0	9	188	0	0	0	0	0
	8:30 AM	0	82	64	10	31	0	0	0	0	4	0	10	201	0	0	0	0	0
	8:45 AM	0	87	45	9	32	0	0	0	0	10	0	6	189	0	0	0	0	0
	9:00 AM	0	83	27	6	39	0	0	0	0	7	0	5	167	0	0	0	0	0
	9:15 AM	0	73	28	5	26	0	0	0	0	6	0	6	144	0	0	0	0	0
	VOLUMES	0	649	434	61	227	0	0	0	0	43	0	54	1,468	0	0	0	0	0
	APPROACH %	0%	60%	40%	21%	79%	0%	0%	0%	0%	44%	0%	56%						
	APP/DEPART	1,083	/	703	288	/	270	0	/	495	97	/	0	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	337	275	33	107	0	0	0	0	19	0	34	805					
	APPROACH %	0%	55%	45%	24%	76%	0%	0%	0%	0%	36%	0%	64%						
	PEAK HR FACTOR		0.895			0.854			0.000			0.883		0.927					
	APP/DEPART	612	/	371	140	/	126	0	/	308	53	/	0	0					
MD	11:00 AM	0	35	7	5	27	0	0	0	0	8	0	6	88	0	0	0	0	0
	11:15 AM	0	46	23	5	47	0	0	0	0	12	0	10	143	0	0	0	0	0
	11:30 AM	0	44	14	4	45	0	0	0	0	16	0	10	133	0	0	0	0	0
	11:45 AM	0	56	29	8	29	0	0	0	0	19	0	4	145	0	0	0	0	0
	12:00 PM	0	43	20	2	54	0	0	0	0	25	0	14	158	0	0	0	0	0
	12:15 PM	0	57	14	9	46	0	0	0	1	12	0	4	143	0	0	0	0	0
	12:30 PM	0	73	21	9	44	0	0	0	0	18	0	10	175	0	0	0	0	0
	12:45 PM	0	78	18	15	49	0	0	0	0	24	0	8	192	0	0	0	0	0
	VOLUMES	0	432	146	57	341	0	0	0	1	134	0	66	1,177	0	0	0	0	0
	APPROACH %	0%	75%	25%	14%	86%	0%	0%	0%	100%	67%	0%	33%						
	APP/DEPART	578	/	498	398	/	476	1	/	203	200	/	0	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	0	251	73	35	193	0	0	0	1	79	0	36	668					
	APPROACH %	0%	77%	23%	15%	85%	0%	0%	0%	100%	69%	0%	31%						
	PEAK HR FACTOR		0.844			0.891			0.250			0.737		0.870					
	APP/DEPART	324	/	287	228	/	273	1	/	108	115	/	0	0					
PM	05:00 PM	0	61	32	6	93	0	0	0	0	54	0	11	257	0	0	0	0	0
	5:15 PM	0	59	33	10	103	0	0	0	0	53	0	12	270	0	0	0	0	0
	5:30 PM	0	41	27	2	81	0	0	0	0	32	0	7	190	0	0	0	0	0
	5:45 PM	0	43	27	2	83	0	0	0	0	28	0	7	190	0	0	0	0	0
	6:00 PM	1	47	15	2	70	0	0	0	0	24	0	5	164	1	0	0	0	1
	6:15 PM	0	42	16	2	80	0	0	0	0	22	0	3	165	0	0	0	0	0
	6:30 PM	0	50	12	2	61	0	0	0	0	20	0	2	147	0	0	0	0	0
	6:45 PM	0	46	10	6	74	0	0	0	0	18	0	7	161	0	0	0	0	0
	VOLUMES	1	389	172	32	645	0	0	0	0	251	0	54	1,544	1	0	0	0	1
	APPROACH %	0%	69%	31%	5%	95%	0%	0%	0%	0%	82%	0%	18%						
	APP/DEPART	562	/	443	677	/	897	0	/	204	305	/	0	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	0	204	119	20	360	0	0	0	0	167	0	37	907					
	APPROACH %	0%	63%	37%	5%	95%	0%	0%	0%	0%	82%	0%	18%						
	PEAK HR FACTOR		0.868			0.841			0.000			0.785		0.840					
	APP/DEPART	323	/	241	380	/	527	0	/	139	204	/	0	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	1	1	0	1	0	0	0	1	0	6	0	10
	7:45 AM	0	0	1	0	6	0	0	1	0	0	10	0	18
	8:00 AM	0	3	2	0	11	0	0	3	0	0	9	0	28
	8:15 AM	0	1	1	0	3	0	1	3	3	0	7	0	19
	8:30 AM	0	1	0	0	4	0	0	2	2	0	4	0	13
	8:45 AM	0	2	0	0	1	0	0	6	1	0	14	0	24
	9:00 AM	0	4	3	2	7	1	0	3	2	0	10	0	32
	9:15 AM	0	2	4	1	3	0	0	1	1	0	10	3	25
	TOTAL	0	14	12	3	36	1	1	19	10	0	70	3	169
MD	11:00 AM	0	5	2	0	3	1	0	2	3	0	17	9	42
	11:15 AM	0	2	2	0	7	4	0	9	3	0	5	9	41
	11:30 AM	0	2	2	2	6	6	0	0	5	0	7	5	35
	11:45 AM	0	0	5	0	2	2	0	4	2	0	7	15	37
	12:00 PM	0	0	5	0	0	0	0	1	8	0	9	9	32
	12:15 PM	0	6	7	0	5	4	0	3	2	0	3	17	47
	12:30 PM	0	5	3	0	0	3	3	1	8	0	14	18	55
	12:45 PM	0	9	1	1	6	5	0	6	2	0	11	14	55
	TOTAL	0	29	27	3	29	25	3	26	33	0	73	96	344
PM	5:00 PM	0	9	6	0	4	15	0	4	5	0	7	17	67
	5:15 PM	0	0	7	0	2	3	0	3	7	0	6	21	49
	5:30 PM	0	2	4	0	2	4	1	1	6	0	4	20	44
	5:45 PM	0	2	2	0	1	8	0	7	4	0	3	28	55
	6:00 PM	0	1	5	0	2	9	0	4	3	0	4	16	44
	6:15 PM	0	3	3	1	5	7	2	4	1	0	4	10	40
	6:30 PM	0	0	4	0	0	4	0	3	1	0	4	12	28
	6:45 PM	0	1	4	3	5	4	2	0	3	0	7	12	41
	TOTAL	0	18	35	4	21	54	5	26	30	0	39	136	368



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Mar 16, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: California
EAST & WEST: Campus

PROJECT #: SC0843
LOCATION #: 1
CONTROL: STOP ALL

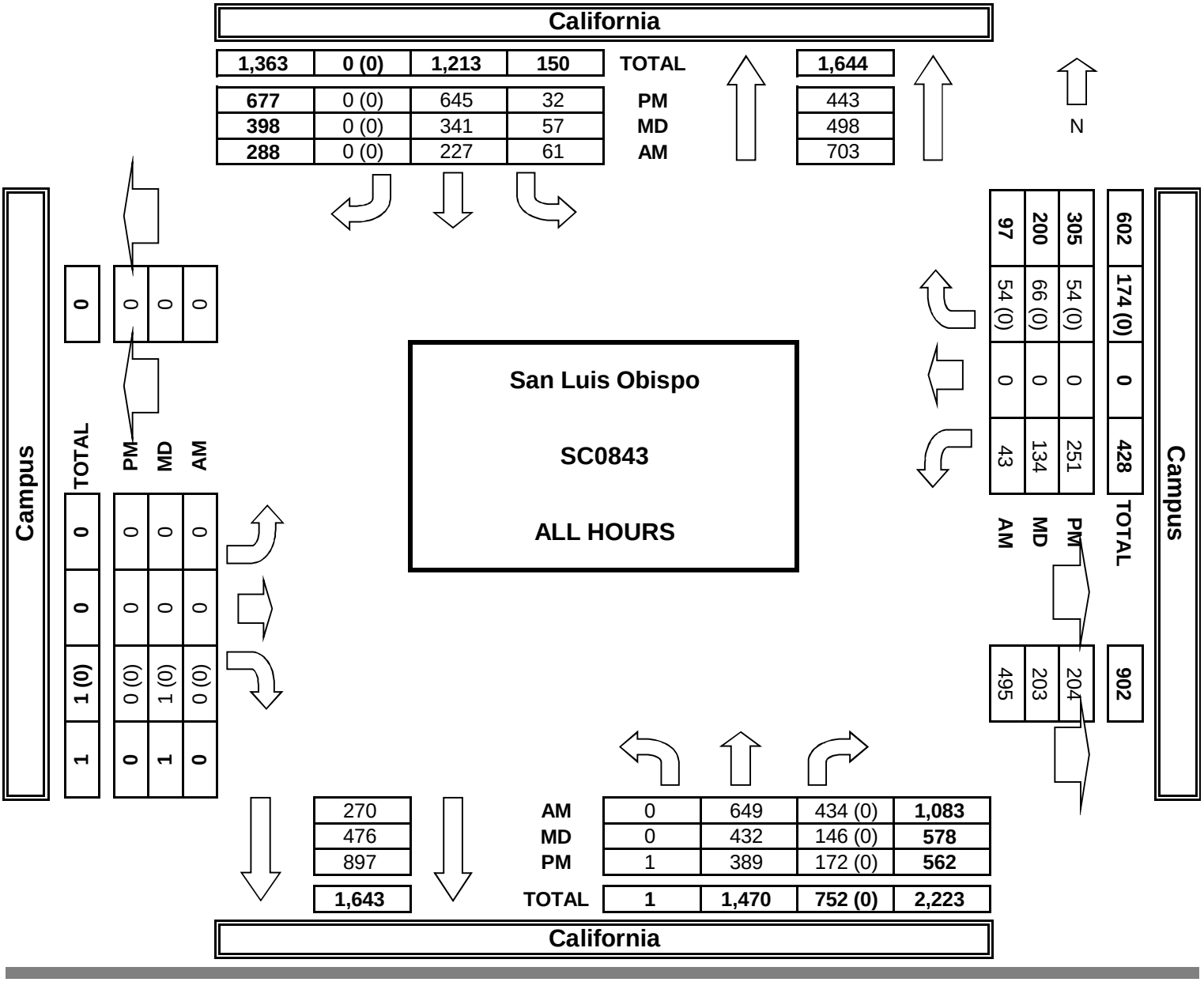
NOTES:

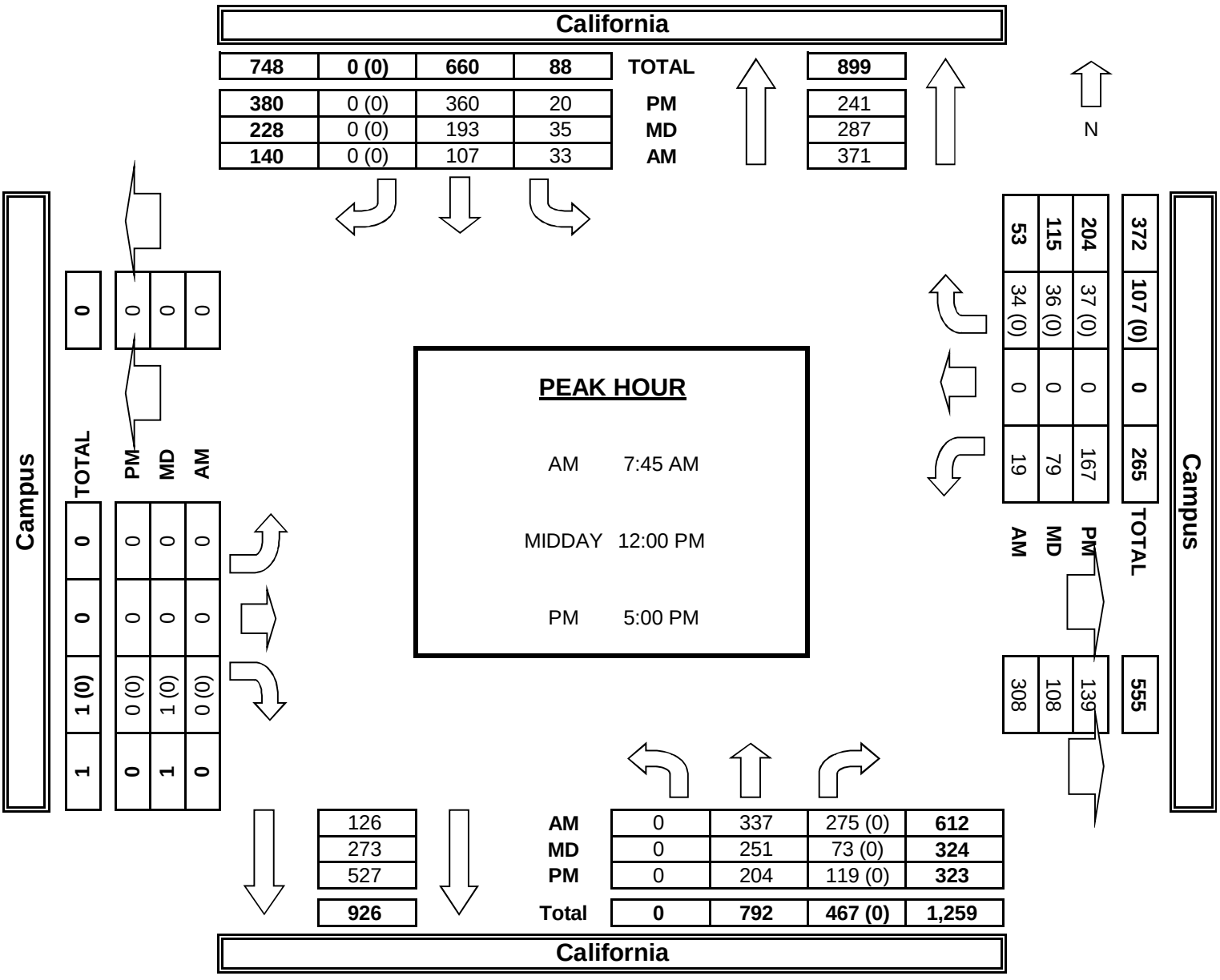
AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Campus			WESTBOUND Campus			
	LANES:	NL X	NT 1	NR 0	SL 0	ST 1	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5	TOTAL
AM	7:30 AM	0	2	1	0	0	0	0	0	0	0	0	0	3
	7:45 AM	0	5	1	0	0	0	0	0	0	1	0	0	7
	8:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	4
	8:15 AM	0	4	2	0	0	0	0	0	0	0	0	1	7
	8:30 AM	0	3	1	0	0	0	0	0	0	0	0	0	4
	8:45 AM	0	14	2	0	1	0	0	0	0	0	0	0	17
	9:00 AM	0	10	2	0	3	0	0	0	0	1	0	0	16
	9:15 AM	0	12	0	0	0	0	0	0	0	2	0	1	15
	VOLUMES	0	54	9	0	4	0	0	0	0	4	0	2	73
	APPROACH %	0%	86%	14%	0%	100%	0%	0%	0%	0%	67%	0%	33%	
	APP/DEPART	63	/	56	4	/	8	0	/	9	6	/	0	0
	BEGIN PEAK HR		8:30 AM											
	VOLUMES	0	39	5	0	4	0	0	0	0	3	0	1	52
	APPROACH %	0%	89%	11%	0%	100%	0%	0%	0%	0%	75%	0%	25%	
	PEAK HR FACTOR		0.688			0.333			0.000			0.333		0.765
	APP/DEPART	44	/	40	4	/	7	0	/	5	4	/	0	0
MD	11:00 AM	0	5	1	0	3	0	0	0	1	4	0	0	14
	11:15 AM	0	4	0	1	3	0	1	0	0	4	0	0	13
	11:30 AM	0	6	1	0	11	0	0	0	0	3	0	0	21
	11:45 AM	0	3	0	0	6	0	0	0	0	3	0	0	12
	12:00 PM	0	7	3	1	3	0	0	0	0	3	0	0	17
	12:15 PM	0	9	1	0	4	0	0	0	0	1	0	0	15
	12:30 PM	0	7	2	1	6	0	0	0	0	5	0	0	21
	12:45 PM	0	9	8	1	8	0	0	0	0	5	0	0	31
	VOLUMES	0	50	16	4	44	0	1	0	1	28	0	0	144
	APPROACH %	0%	76%	24%	8%	92%	0%	50%	0%	50%	100%	0%	0%	
	APP/DEPART	66	/	51	48	/	73	2	/	20	28	/	0	0
	BEGIN PEAK HR		12:00 PM											
	VOLUMES	0	32	14	3	21	0	0	0	0	14	0	0	84
	APPROACH %	0%	70%	30%	13%	88%	0%	0%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR		0.676			0.667			0.000			0.700		0.677
	APP/DEPART	46	/	32	24	/	35	0	/	17	14	/	0	0
PM	05:00 PM	0	3	0	0	6	0	0	0	0	3	0	0	12
	5:15 PM	0	2	3	0	12	0	0	0	0	4	0	0	21
	5:30 PM	0	1	1	0	9	0	0	0	0	4	0	0	15
	5:45 PM	0	2	1	0	3	0	0	0	0	2	0	0	8
	6:00 PM	0	1	2	0	10	0	0	0	0	5	0	0	18
	6:15 PM	0	2	3	0	9	0	0	0	0	9	0	0	23
	6:30 PM	0	1	1	1	10	0	0	0	0	4	0	0	17
	6:45 PM	1	3	1	0	7	0	0	0	0	4	0	0	16
	VOLUMES	1	15	12	1	66	0	0	0	0	35	0	0	130
	APPROACH %	4%	54%	43%	1%	99%	0%	0%	0%	0%	100%	0%	0%	
	APP/DEPART	28	/	15	67	/	101	0	/	13	35	/	1	0
	BEGIN PEAK HR		6:00 PM											
	VOLUMES	1	7	7	1	36	0	0	0	0	22	0	0	74
	APPROACH %	7%	47%	47%	3%	97%	0%	0%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR		0.750			0.841			0.000			0.611		0.804
	APP/DEPART	15	/	7	37	/	58	0	/	8	22	/	1	0

AimTD LLC

TURNING MOVEMENT COUNTS




California
748
0 (0)
660
88
TOTAL
899
380
0 (0)
360
20
PM
241
228
0 (0)
193
35
MD
287
140
0 (0)
107
33
AM
371
N
Campus
Campus
PEAK HOUR
AM 7:45 AM
MIDDAY 12:00 PM
PM 5:00 PM
TOTAL
PM
MD
AM
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
1 (0)
0 (0) 0
1 (0) 1
0 (0) 0
1
0
1
0
372
107 (0)
0
265
204
37 (0)
0
139
115
36 (0)
0
108
53
34 (0)
0
308
19
79
167
555
126
273
527
926
AM
MD
PM
Total
0
337
275 (0)
612
0
251
73 (0)
324
0
204
119 (0)
323
0
792
467 (0)
1,259
California

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Foothill

PROJECT #: SC0843
LOCATION #: 103
CONTROL: SIGNAL

NOTES:

AM PM MD OTHER OTHER

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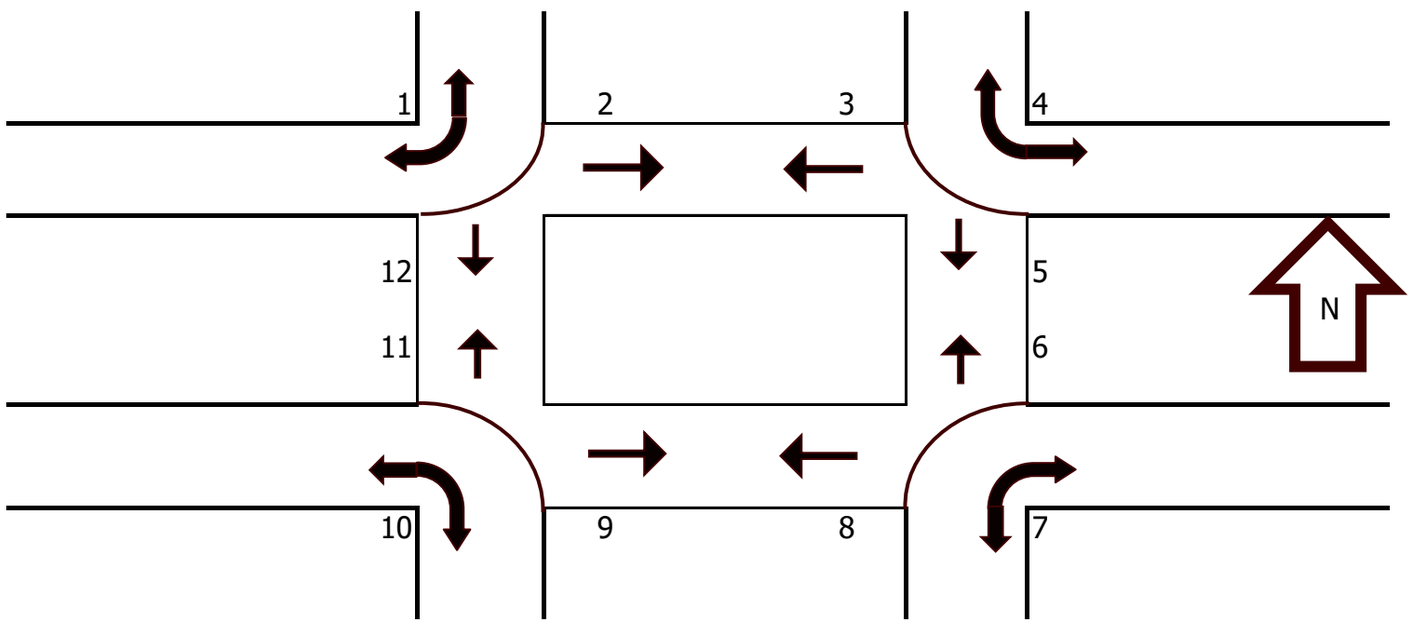
☑ Add U-Turns to Left Turns

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Foothill			WESTBOUND Foothill				U-TURNS				
	LANES:	NL 2	NT 2	NR 1	SL 2	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB X	WB X	TTL
AM	7:30 AM	33	268	10	40	203	9	33	138	51	14	56	71	926	2	3	0	0	5
	7:45 AM	25	307	15	60	253	10	50	159	64	5	50	102	1,100	3	6	0	0	9
	8:00 AM	86	284	11	52	230	12	26	118	54	19	61	63	1,016	1	5	0	0	6
	8:15 AM	62	228	10	44	243	9	32	127	80	11	74	81	1,001	4	0	0	0	4
	8:30 AM	55	206	17	48	227	15	37	102	65	12	39	78	901	6	3	0	0	9
	8:45 AM	37	212	18	45	235	9	52	97	63	10	36	74	888	8	1	0	0	9
	9:00 AM	38	198	10	20	136	18	42	61	44	17	47	61	692	1	1	0	0	2
	9:15 AM	28	181	13	50	195	22	26	52	40	19	39	87	752	1	13	0	0	14
	VOLUMES	364	1,884	104	359	1,722	104	298	854	461	107	402	617	7,276	26	32	0	0	58
	APPROACH %	15%	80%	4%	16%	79%	5%	18%	53%	29%	10%	36%	55%						
	APP/DEPART	2,352	/	2,831	2,185	/	2,316	1,613	/	1,285	1,126	/	844	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	206	1,087	46	196	929	40	141	542	249	49	241	317	4,043					
	APPROACH %	15%	81%	3%	17%	80%	3%	15%	58%	27%	8%	40%	52%						
	PEAK HR FACTOR		0.879			0.902			0.853			0.914		0.919					
	APP/DEPART	1,339	/	1,559	1,165	/	1,237	932	/	770	607	/	477	0					
MD	11:00 AM	49	158	13	46	208	39	27	46	47	16	56	34	739	1	9	0	0	10
	11:15 AM	41	174	13	30	182	22	18	43	47	22	62	39	693	5	2	0	0	7
	11:30 AM	61	155	24	60	195	28	29	57	48	20	48	44	769	1	11	0	0	12
	11:45 AM	40	183	13	46	197	31	33	68	39	17	55	50	772	0	6	0	0	6
	12:00 PM	60	199	19	47	230	41	44	55	42	19	92	62	910	5	5	0	0	10
	12:15 PM	52	194	20	67	259	43	16	67	51	31	71	57	928	2	13	0	0	15
	12:30 PM	45	180	14	52	229	36	38	54	56	19	56	55	834	2	8	0	0	10
	12:45 PM	53	179	21	36	221	33	26	80	66	17	44	48	824	4	7	0	0	11
	VOLUMES	401	1,422	137	384	1,721	273	231	470	396	161	484	389	6,469	20	61	0	0	81
	APPROACH %	20%	73%	7%	16%	72%	11%	21%	43%	36%	16%	47%	38%						
	APP/DEPART	1,960	/	2,103	2,378	/	2,298	1,097	/	930	1,034	/	1,138	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	210	752	74	202	939	153	124	256	215	86	263	222	3,496					
	APPROACH %	20%	73%	7%	16%	73%	12%	21%	43%	36%	15%	46%	39%						
	PEAK HR FACTOR		0.932			0.877			0.865			0.825		0.942					
	APP/DEPART	1,036	/	1,131	1,294	/	1,253	595	/	499	571	/	613	0					
PM	04:00 PM	70	181	16	80	325	36	23	67	43	22	58	28	949	3	4	0	0	7
	4:15 PM	69	176	16	66	302	45	27	72	50	34	97	42	996	3	3	0	0	6
	4:30 PM	65	190	16	72	256	41	25	75	48	32	78	37	935	2	5	0	0	7
	4:45 PM	77	222	18	77	261	28	29	75	42	22	106	38	995	2	10	0	0	12
	5:00 PM	83	261	20	77	288	39	26	72	46	21	89	55	1,077	1	11	0	0	12
	5:15 PM	87	276	22	64	267	30	20	73	54	38	93	55	1,079	1	7	0	0	8
	5:30 PM	65	247	18	70	214	31	32	68	38	25	96	71	975	1	4	0	0	5
	5:45 PM	80	181	18	80	188	46	39	87	59	17	110	49	954	0	13	0	0	13
	VOLUMES	596	1,734	144	586	2,101	296	221	589	380	211	727	375	7,960	13	57	0	0	70
	APPROACH %	24%	70%	6%	20%	70%	10%	19%	49%	32%	16%	55%	29%						
	APP/DEPART	2,474	/	2,387	2,983	/	2,705	1,190	/	1,262	1,313	/	1,606	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	312	1,006	78	288	1,030	128	107	288	180	106	384	219	4,126					
	APPROACH %	22%	72%	6%	20%	71%	9%	19%	50%	31%	15%	54%	31%						
	PEAK HR FACTOR		0.906			0.895			0.978			0.923		0.956					
	APP/DEPART	1,396	/	1,364	1,446	/	1,321	575	/	622	709	/	819	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	1	6	0	0	4	0	5	1	0	0	0	17
	7:45 AM	0	0	6	0	1	6	1	1	2	0	1	0	18
	8:00 AM	0	2	6	0	1	12	0	0	1	0	0	1	23
	8:15 AM	0	2	3	0	0	3	0	2	1	0	1	0	12
	8:30 AM	0	0	3	0	0	3	0	2	3	0	1	1	13
	8:45 AM	0	0	4	0	2	2	2	2	1	0	4	0	17
	9:00 AM	0	3	3	0	1	2	0	1	5	0	1	1	17
	9:15 AM	0	1	4	0	0	1	0	4	1	0	1	3	15
	TOTAL	0	9	35	0	5	33	3	17	15	0	9	6	132
MD	11:00 AM	0	0	1	0	0	1	0	4	3	0	0	0	9
	11:15 AM	0	3	2	0	1	2	1	5	5	0	6	1	26
	11:30 AM	0	1	1	0	2	0	0	4	6	0	1	0	15
	11:45 AM	0	0	7	0	1	1	0	7	5	0	0	0	21
	12:00 PM	0	2	2	0	3	0	1	8	5	0	0	0	21
	12:15 PM	0	2	0	0	6	7	0	12	5	0	2	0	34
	12:30 PM	0	0	3	0	7	6	1	2	2	0	1	1	23
	12:45 PM	0	0	1	0	1	3	0	5	6	0	2	2	20
	TOTAL	0	8	17	0	21	20	3	47	37	0	12	4	169
PM	4:00 PM	0	2	3	0	6	4	1	6	2	0	0	0	24
	4:15 PM	0	11	8	0	5	1	0	5	0	0	2	0	32
	4:30 PM	0	4	5	0	7	2	1	9	2	0	0	0	30
	4:45 PM	0	2	5	0	7	1	0	3	2	0	0	0	20
	5:00 PM	0	5	0	0	3	4	1	2	1	0	0	0	16
	5:15 PM	0	10	4	0	14	3	0	2	11	0	4	1	49
	5:30 PM	0	4	3	0	8	1	1	1	3	0	0	0	21
	5:45 PM	0	4	6	0	1	2	0	5	0	0	0	0	18
	TOTAL	0	42	34	0	51	18	4	33	21	0	6	1	210



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:				
Wed, Jan 27, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
	NORTH & SOUTH:	Santa Rosa	LOCATION #:	103
	EAST & WEST:	Foothill	CONTROL:	SIGNAL

NOTES:

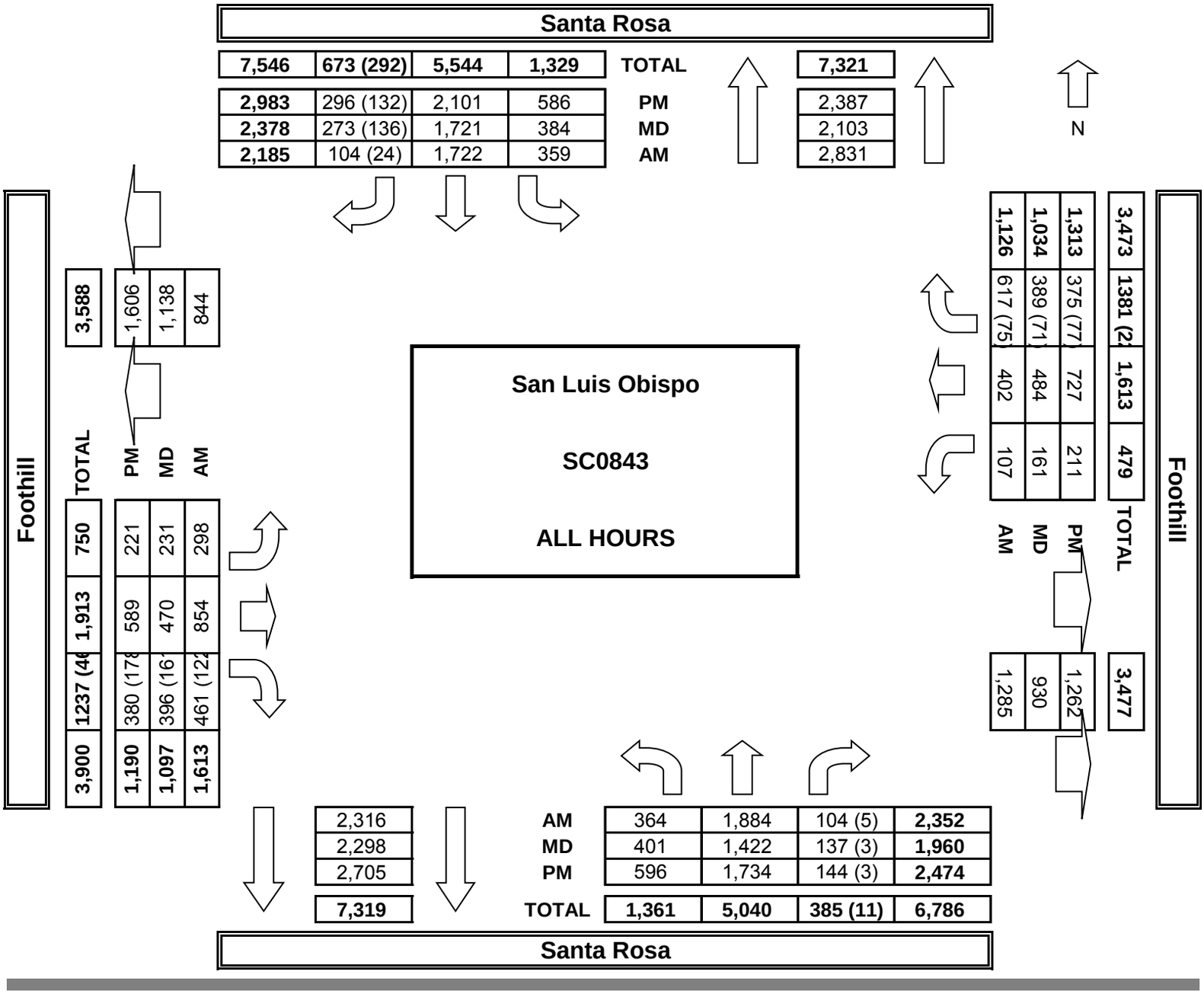
AM
PM
MD
OTHER
OTHER

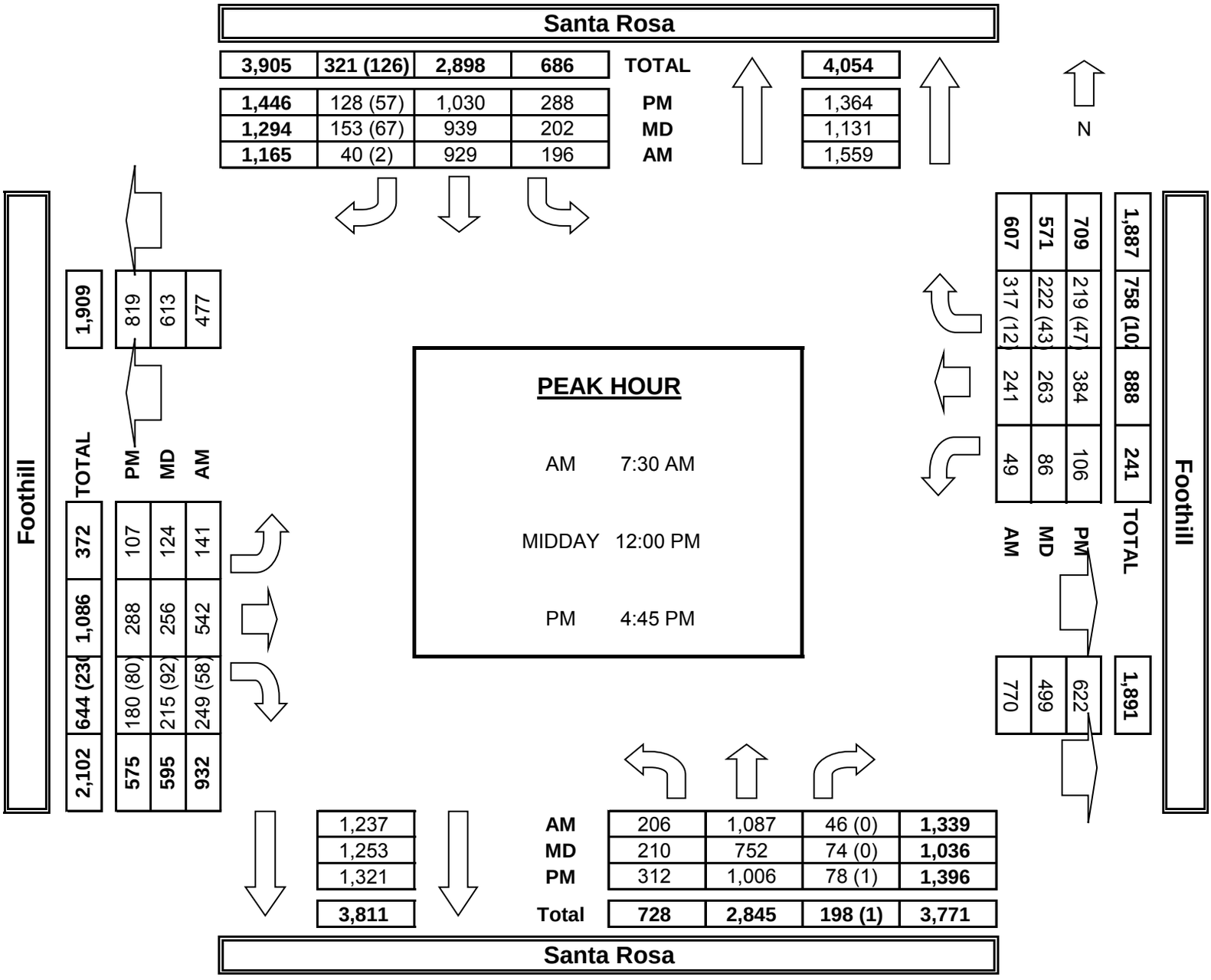
▲ N
◄ W E ►
S ▼

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Foothill			WESTBOUND Foothill			
	LANES:	NL 2	NT 2	NR 1	SL 2	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 2	WR 0	TOTAL
AM	7:30 AM	0	1	1	5	0	0	0	11	0	0	1	0	19
	7:45 AM	0	11	3	1	0	0	0	29	0	1	1	0	46
	8:00 AM	0	0	3	0	0	0	0	18	0	0	2	0	23
	8:15 AM	0	0	1	0	0	0	0	5	0	0	3	0	9
	8:30 AM	0	2	0	0	0	0	1	6	0	0	1	1	11
	8:45 AM	0	1	2	0	0	0	0	17	0	0	0	0	20
	9:00 AM	0	1	7	0	1	0	0	14	0	1	1	0	25
	9:15 AM	0	1	1	0	0	0	0	8	0	0	4	0	14
	VOLUMES	0	17	18	6	1	0	1	108	0	2	13	1	167
	APPROACH %	0%	49%	51%	86%	14%	0%	1%	99%	0%	13%	81%	6%	
	APP/DEPART	35	/	19	7	/	3	109	/	132	16	/	13	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	12	8	6	0	0	0	63	0	1	7	0	97
	APPROACH %	0%	60%	40%	100%	0%	0%	0%	100%	0%	13%	88%	0%	
	PEAK HR FACTOR		0.357			0.300			0.543			0.667		0.527
	APP/DEPART	20	/	12	6	/	1	63	/	77	8	/	7	0
MD	11:00 AM	0	1	0	0	0	1	0	5	0	1	5	0	13
	11:15 AM	0	0	0	0	0	0	0	6	0	0	6	0	12
	11:30 AM	0	0	1	0	4	0	0	3	0	0	4	0	12
	11:45 AM	0	0	4	0	0	0	0	14	0	0	2	0	20
	12:00 PM	0	0	4	0	1	0	0	17	0	0	18	0	40
	12:15 PM	0	0	0	0	1	0	0	6	0	4	0	0	11
	12:30 PM	0	0	0	0	0	0	0	0	0	0	4	0	4
	12:45 PM	0	0	1	0	1	0	0	2	0	0	1	0	5
	VOLUMES	0	1	10	0	7	1	0	53	0	5	40	0	117
	APPROACH %	0%	9%	91%	0%	88%	13%	0%	100%	0%	11%	89%	0%	
	APP/DEPART	11	/	1	8	/	12	53	/	63	45	/	41	0
	BEGIN PEAK HR		11:15 AM											
	VOLUMES	0	0	9	0	5	0	0	40	0	0	30	0	84
	APPROACH %	0%	0%	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.563			0.313			0.588			0.417		0.525
	APP/DEPART	9	/	0	5	/	5	40	/	49	30	/	30	0
PM	04:00 PM	0	0	1	0	0	0	0	10	0	2	14	0	27
	4:15 PM	0	3	0	0	0	0	0	2	0	1	7	0	13
	4:30 PM	0	0	0	0	0	0	0	3	0	1	11	1	16
	4:45 PM	0	0	0	0	2	0	0	3	0	1	7	0	13
	5:00 PM	0	0	0	0	0	0	0	2	0	2	23	0	27
	5:15 PM	2	0	0	0	0	0	0	2	0	3	9	0	16
	5:30 PM	0	0	0	0	0	0	0	5	0	0	9	0	14
	5:45 PM	0	0	0	0	2	0	0	7	1	3	13	0	26
	VOLUMES	2	3	1	0	4	0	0	34	1	13	93	1	152
	APPROACH %	33%	50%	17%	0%	100%	0%	0%	97%	3%	12%	87%	1%	
	APP/DEPART	6	/	4	4	/	18	35	/	35	107	/	95	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	2	0	0	0	2	0	0	16	1	8	54	0	83
	APPROACH %	100%	0%	0%	0%	100%	0%	0%	94%	6%	13%	87%	0%	
	PEAK HR FACTOR		0.250			0.250			0.531			0.620		0.769
	APP/DEPART	2	/	0	2	/	11	17	/	16	62	/	56	0

AimTD LLC

TURNING MOVEMENT COUNTS




Santa Rosa
3,905
321 (126)
2,898
686
TOTAL
4,054
1,446
128 (57)
1,030
288
PM
1,364
1,294
153 (67)
939
202
MD
1,131
1,165
40 (2)
929
196
AM
1,559
N
Foothill
1,909
819
613
477
TOTAL
PM
MD
AM
372
1,086
644 (230)
2,102
107
124
141
288
256
542
180 (80)
215 (92)
249 (58)
575
595
932
PEAK HOUR
AM 7:30 AM
MIDDAY 12:00 PM
PM 4:45 PM
1,887
758 (101)
888
241
709
571
607
219 (47)
222 (43)
317 (12)
384
263
241
106
86
49
TOTAL
PM
MD
AM
1,891
622
499
770
Foothill
1,237
1,253
1,321
3,811
AM
MD
PM
Total
206
210
312
728
1,087
752
1,006
2,845
46 (0)
74 (0)
78 (1)
198 (1)
1,339
1,036
1,396
3,771
Santa Rosa

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: California
EAST & WEST: Foothill

PROJECT #: SC0843
LOCATION #: 32
CONTROL: SIGNAL

NOTES:

AM PM MD OTHER OTHER

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☑ Add U-Turns to Left Turns

		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Foothill			WESTBOUND Foothill				U-TURNS				
	LANES:	NL 2	NT 1.5	NR 0.5	SL 1	ST 1	SR 1	EL 1.5	ET 0.5	ER 1	WL 1	WT 0.5	WR 0.5	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:30 AM	97	119	6	1	12	11	51	50	82	2	13	4	448	0	0	0	0	0
	7:45 AM	123	155	9	2	14	4	105	78	89	10	19	7	615	0	0	0	0	0
	8:00 AM	105	129	4	2	25	16	82	56	59	11	19	4	512	0	0	0	0	0
	8:15 AM	113	81	7	5	12	10	52	55	65	12	21	1	434	0	0	0	0	0
	8:30 AM	111	107	5	1	14	7	27	48	75	9	14	2	420	0	0	0	0	0
	8:45 AM	127	128	7	5	10	10	40	48	74	2	11	4	466	0	0	0	0	0
	9:00 AM	98	78	4	5	40	25	35	22	58	14	30	3	412	0	0	0	0	0
	9:15 AM	75	68	3	5	27	14	18	21	48	3	27	5	314	0	0	0	0	0
	VOLUMES	849	865	45	26	154	97	410	378	550	63	154	30	3,621	0	0	0	0	0
	APPROACH %	48%	49%	3%	9%	56%	35%	31%	28%	41%	26%	62%	12%						
	APP/DEPART	1,759	/	1,305	277	/	767	1,338	/	449	247	/	1,100	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	438	484	26	10	63	41	290	239	295	35	72	16	2,009					
	APPROACH %	46%	51%	3%	9%	55%	36%	35%	29%	36%	28%	59%	13%						
	PEAK HR FACTOR		0.826			0.663			0.757			0.854		0.817					
	APP/DEPART	948	/	790	114	/	393	824	/	275	123	/	551	0					
MD	11:15 AM	63	41	5	4	51	15	17	29	71	6	27	5	334	0	0	0	0	0
	11:30 AM	75	54	13	2	32	14	13	30	78	8	13	6	338	0	0	0	0	0
	11:45 AM	88	91	8	5	23	22	35	30	65	7	19	9	402	0	0	0	0	0
	12:00 PM	97	54	8	8	62	27	36	26	78	12	32	6	446	0	0	0	0	0
	12:15 PM	69	38	7	3	38	22	14	13	90	9	16	2	321	0	0	0	0	0
	12:30 PM	73	33	11	1	31	13	18	26	88	4	22	1	321	0	0	0	0	0
	12:45 PM	100	54	7	2	27	12	28	22	82	7	15	6	362	0	0	0	0	0
	1:00 PM	100	37	6	1	43	21	19	23	87	7	12	2	358	0	0	0	0	0
	VOLUMES	665	402	65	26	307	146	180	199	639	60	156	37	2,882	0	0	0	0	0
	APPROACH %	59%	36%	6%	5%	64%	30%	18%	20%	63%	24%	62%	15%						
	APP/DEPART	1,132	/	619	479	/	1,006	1,018	/	290	253	/	967	0					
	BEGIN PEAK HR		11:15 AM																
	VOLUMES	323	240	34	19	168	78	101	115	292	33	91	26	1,520					
	APPROACH %	54%	40%	6%	7%	63%	29%	20%	23%	57%	22%	61%	17%						
	PEAK HR FACTOR		0.798			0.683			0.907			0.750		0.852					
	APP/DEPART	597	/	367	265	/	493	508	/	168	150	/	492	0					
PM	05:00 PM	108	37	2	4	91	26	27	32	103	16	26	6	478	0	0	0	0	0
	5:15 PM	109	40	11	4	92	26	26	33	107	27	26	5	506	0	0	0	0	0
	5:30 PM	84	52	8	6	89	33	25	34	90	14	43	2	480	0	0	0	0	0
	5:45 PM	94	84	12	3	77	39	66	41	99	18	25	4	562	0	0	0	0	0
	6:00 PM	74	47	8	7	89	46	30	41	84	14	46	7	493	0	0	0	0	0
	6:15 PM	99	23	11	6	98	35	18	22	80	11	50	2	455	0	0	0	0	0
	6:30 PM	76	25	7	3	55	23	19	35	82	8	33	4	370	0	0	0	0	0
	6:45 PM	94	25	4	4	35	14	19	37	82	10	27	6	357	0	0	0	0	0
	VOLUMES	738	333	63	37	626	242	230	275	727	118	276	36	3,701	0	0	0	0	0
	APPROACH %	65%	29%	6%	4%	69%	27%	19%	22%	59%	27%	64%	8%						
	APP/DEPART	1,134	/	599	905	/	1,471	1,232	/	375	430	/	1,256	0					
	BEGIN PEAK HR		5:15 PM																
	VOLUMES	361	223	39	20	347	144	147	149	380	73	140	18	2,041					
	APPROACH %	58%	36%	6%	4%	68%	28%	22%	22%	56%	32%	61%	8%						
	PEAK HR FACTOR		0.820			0.900			0.820			0.862		0.908					
	APP/DEPART	623	/	388	511	/	800	676	/	208	231	/	645	0					

California

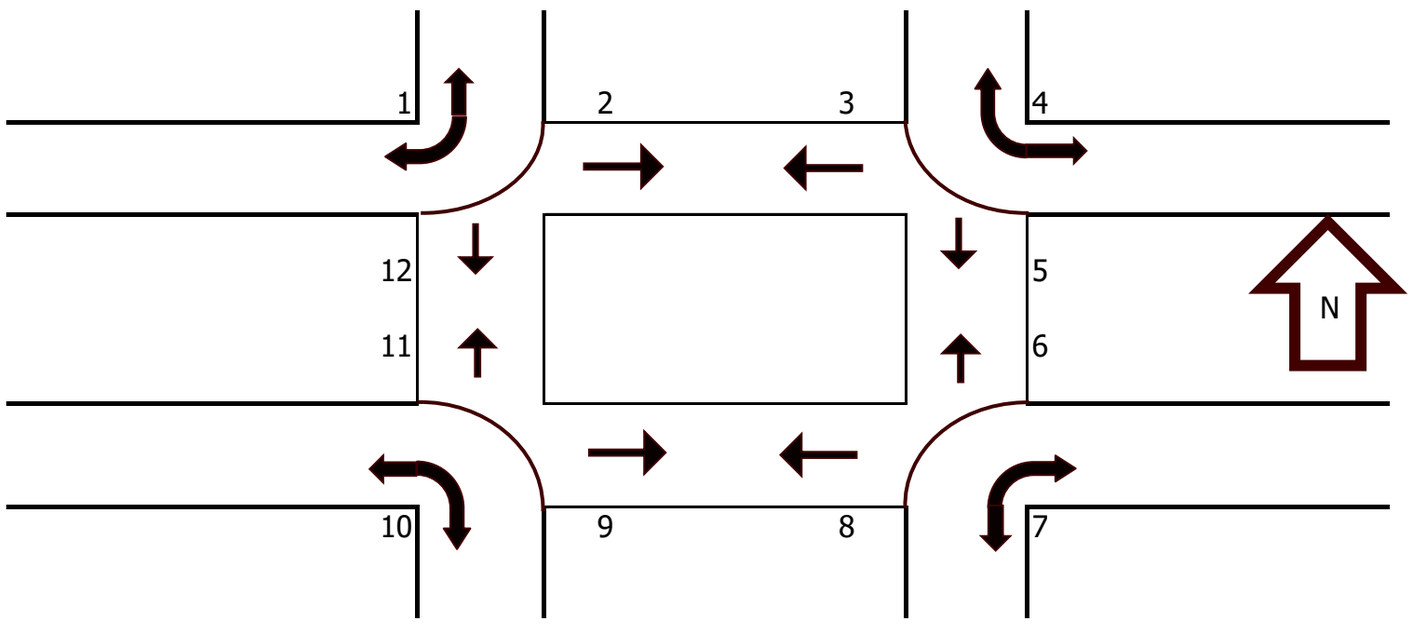
NORTH SIDE

Foothill WEST SIDE EAST SIDE **Foothill**

SOUTH SIDE

California

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	4	0	0	2	5	0	1	2	8	0	6	4	32
	7:45 AM	6	0	0	0	13	0	1	2	51	0	40	4	117
	8:00 AM	2	0	0	0	4	0	0	1	14	0	28	6	55
	8:15 AM	2	0	0	0	1	0	0	0	14	0	9	5	31
	8:30 AM	2	0	0	0	2	0	2	3	14	0	11	3	37
	8:45 AM	6	0	0	0	24	1	1	2	54	3	35	6	132
	9:00 AM	4	0	0	4	19	2	1	4	20	0	32	8	94
	9:15 AM	3	0	0	1	19	1	2	10	24	0	26	5	91
	TOTAL	29	0	0	7	87	4	8	24	199	3	187	41	589
MD	11:15 AM	3	0	0	0	0	4	0	30	10	0	13	10	70
	11:30 AM	2	0	0	0	1	1	0	12	18	0	9	4	47
	11:45 AM	5	0	0	1	1	0	5	10	54	0	46	6	128
	12:00 PM	4	0	0	0	1	0	5	20	13	0	21	23	87
	12:15 PM	12	0	0	0	0	0	2	11	6	4	5	5	45
	12:30 PM	4	0	0	0	1	1	1	15	11	2	4	5	44
	12:45 PM	4	0	0	0	0	0	0	11	12	2	11	7	47
	1:00 PM	9	0	0	0	0	4	1	14	5	2	5	12	52
	TOTAL	43	0	0	1	4	10	14	123	129	10	114	72	520
PM	5:00 PM	0	0	0	0	3	0	0	21	9	0	3	17	53
	5:15 PM	3	0	0	0	1	2	1	20	14	0	1	11	53
	5:30 PM	7	0	0	0	2	2	2	17	7	1	7	15	60
	5:45 PM	1	0	0	0	6	6	4	18	16	0	10	28	89
	6:00 PM	5	1	0	0	4	6	0	36	21	0	6	64	143
	6:15 PM	0	0	0	0	0	8	0	32	7	0	2	22	71
	6:30 PM	0	0	0	0	1	2	0	12	7	0	0	12	34
	6:45 PM	0	0	0	0	3	8	0	14	17	0	12	12	66
	TOTAL	16	1	0	0	20	34	7	170	98	1	41	181	569



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:				
Tue, Feb 23, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
	NORTH & SOUTH:	California	LOCATION #:	32
	EAST & WEST:	Foothill	CONTROL:	SIGNAL

NOTES:

AM PM MD OTHER OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Foothill			WESTBOUND Foothill			
	LANES:	NL 2	NT 1.5	NR 0.5	SL 1	ST 1	SR 1	EL 1.5	ET 0.5	ER 1	WL 1	WT 0.5	WR 0.5	TOTAL
AM	7:30 AM	0	2	0	0	0	0	6	7	2	0	0	0	17
	7:45 AM	0	6	2	0	1	0	4	8	0	0	0	2	23
	8:00 AM	0	10	1	0	0	0	9	10	0	0	2	1	33
	8:15 AM	0	12	0	0	0	2	7	0	1	0	0	0	22
	8:30 AM	1	13	1	0	0	0	4	0	0	0	2	0	21
	8:45 AM	0	17	4	0	0	0	9	4	0	1	1	0	36
	9:00 AM	1	7	2	0	6	8	10	11	1	1	1	0	48
	9:15 AM	1	6	3	0	2	2	12	3	0	1	1	1	32
	VOLUMES	3	73	13	0	9	12	61	43	4	3	7	4	232
	APPROACH %	3%	82%	15%	0%	43%	57%	56%	40%	4%	21%	50%	29%	
	APP/DEPART	89	/	138	21	/	16	108	/	56	14	/	22	0
	BEGIN PEAK HR		8:30 AM											
	VOLUMES	3	43	10	0	8	10	35	18	1	3	5	1	137
	APPROACH %	5%	77%	18%	0%	44%	56%	65%	33%	2%	33%	56%	11%	
	PEAK HR FACTOR		0.667			0.321			0.614			0.750		0.714
	APP/DEPART	56	/	79	18	/	12	54	/	28	9	/	18	0
MD	11:15 AM	0	3	0	0	3	9	2	5	2	0	3	1	28
	11:30 AM	0	5	1	0	7	6	3	2	0	0	3	0	27
	11:45 AM	0	7	0	0	7	8	7	2	0	0	2	0	33
	12:00 PM	0	9	2	0	2	6	14	7	1	0	2	0	43
	12:15 PM	0	7	0	0	1	1	7	1	0	0	3	0	20
	12:30 PM	0	1	1	0	2	4	5	1	0	0	5	1	20
	12:45 PM	1	3	1	0	1	4	4	2	0	1	0	0	17
	1:00 PM	1	5	0	0	5	11	6	3	1	0	2	0	34
	VOLUMES	2	40	5	0	28	49	48	23	4	1	20	2	222
	APPROACH %	4%	85%	11%	0%	36%	64%	64%	31%	5%	4%	87%	9%	
	APP/DEPART	47	/	90	77	/	33	75	/	28	23	/	71	0
	BEGIN PEAK HR		11:15 AM											
	VOLUMES	0	24	3	0	19	29	26	16	3	0	10	1	131
	APPROACH %	0%	89%	11%	0%	40%	60%	58%	36%	7%	0%	91%	9%	
	PEAK HR FACTOR		0.614			0.800			0.511			0.688		0.762
	APP/DEPART	27	/	51	48	/	22	45	/	19	11	/	39	0
PM	05:00 PM	1	4	1	0	7	2	2	2	0	1	4	0	24
	5:15 PM	2	2	2	0	11	5	0	0	0	4	3	0	29
	5:30 PM	0	2	2	0	20	3	3	0	1	1	5	0	37
	5:45 PM	2	1	3	0	9	5	1	2	0	1	11	0	35
	6:00 PM	0	2	0	0	20	4	2	0	0	5	11	0	44
	6:15 PM	0	2	3	0	11	3	0	1	0	2	7	0	29
	6:30 PM	0	3	0	0	3	7	1	0	0	0	2	0	16
	6:45 PM	0	0	0	0	9	1	1	0	0	0	0	0	11
	VOLUMES	5	16	11	0	90	30	10	5	1	14	43	0	225
	APPROACH %	16%	50%	34%	0%	75%	25%	63%	31%	6%	25%	75%	0%	
	APP/DEPART	32	/	26	120	/	105	16	/	16	57	/	78	0
	BEGIN PEAK HR		5:15 PM											
	VOLUMES	2	7	8	0	60	15	6	3	1	9	34	0	145
	APPROACH %	12%	41%	47%	0%	80%	20%	60%	30%	10%	21%	79%	0%	
	PEAK HR FACTOR		0.708			0.781			0.625			0.672		0.824
	APP/DEPART	17	/	13	75	/	70	10	/	11	43	/	51	0

California

NORTH SIDE

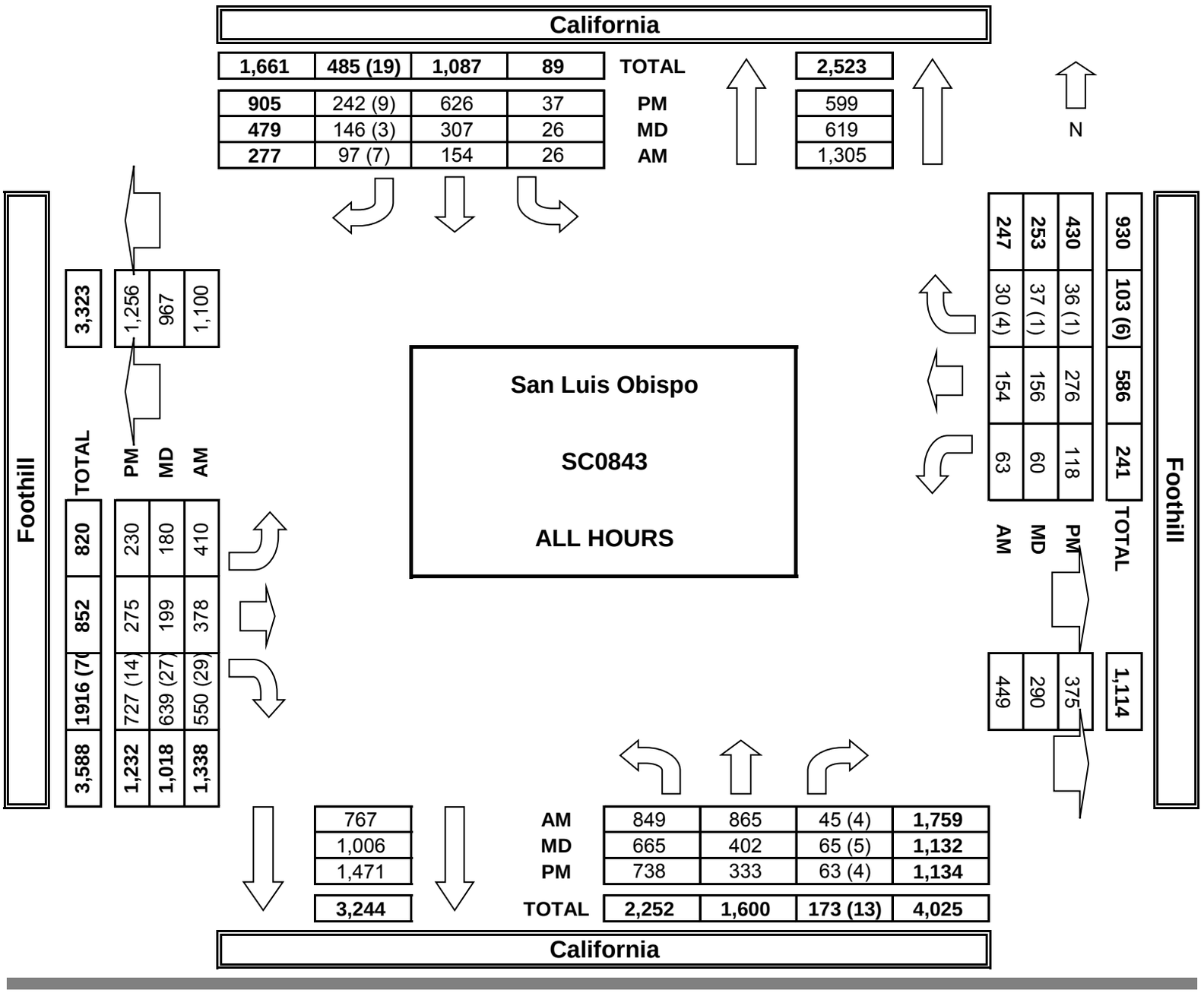
Foothill WEST SIDE EAST SIDE **Foothill**

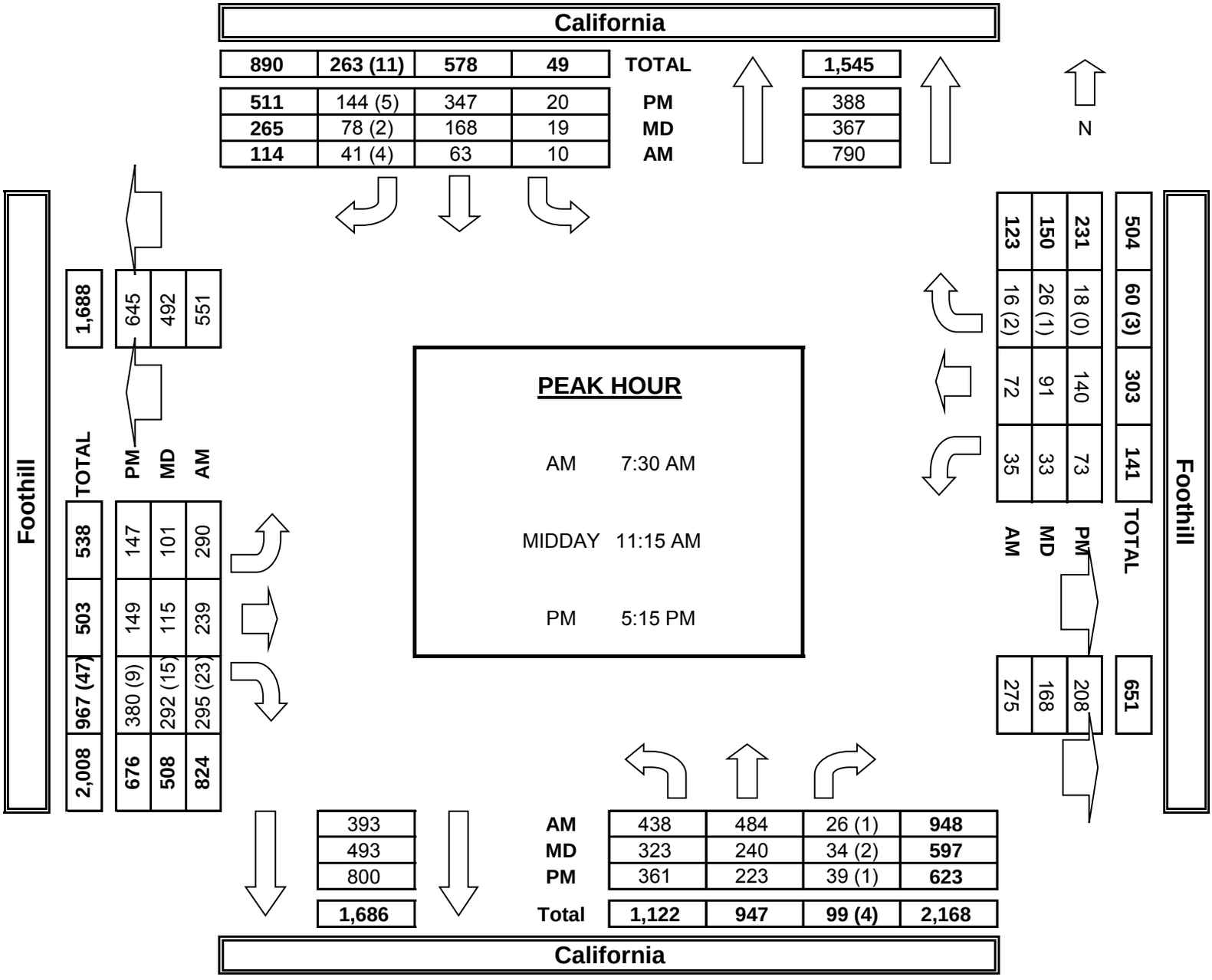
SOUTH SIDE

California

AimTD LLC

TURNING MOVEMENT COUNTS




California
890
263 (11)
578
49
TOTAL
1,545
511
144 (5)
347
20
PM
388
265
78 (2)
168
19
MD
367
114
41 (4)
63
10
AM
790
N
Foothill
1,688
645
492
551
TOTAL
PM
MD
AM
538
503
967 (47)
2,008
147
149
380 (9)
676
101
115
292 (15)
508
290
239
295 (23)
824
PEAK HOUR
AM 7:30 AM
MIDDAY 11:15 AM
PM 5:15 PM
504
60 (3)
303
141
TOTAL
123
150
231
16 (2)
26 (1)
18 (0)
72
91
140
35
33
73
AM
MD
PM
275
168
208
651
Foothill
393
493
800
1,686
AM
MD
PM
Total
438
484
26 (1)
948
323
240
34 (2)
597
361
223
39 (1)
623
1,122
947
99 (4)
2,168
California

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Carpenter
EAST & WEST: Foothill

PROJECT #: SC0843
LOCATION #: 2
CONTROL: STOP N

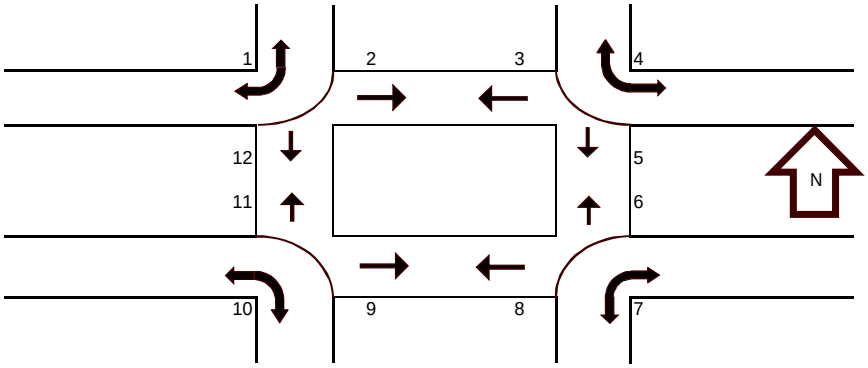
NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

Add U-Turns to Left Turns

		NORTHBOUND Carpenter			SOUTHBOUND Carpenter			EASTBOUND Foothill			WESTBOUND Foothill				U-TURNS				
	LANES:	NL 0.5	NT X	NR 0.5	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL	NB 0	SB X	EB 0	WB 0	TTL
AM	7:30 AM	17	0	4	0	0	0	0	9	58	2	6	0	96	0	0	0	0	0
	7:45 AM	25	0	16	0	0	0	0	8	73	3	12	0	137	0	0	0	0	0
	8:00 AM	20	0	19	0	0	0	0	8	50	8	14	0	119	0	0	0	0	0
	8:15 AM	19	0	6	0	0	0	0	11	52	5	12	0	105	0	0	0	0	0
	8:30 AM	9	0	3	0	0	0	0	14	37	3	15	0	81	0	0	0	0	0
	8:45 AM	9	0	8	0	0	0	0	15	53	7	8	0	100	0	0	0	0	0
	9:00 AM	32	0	4	0	0	0	0	9	18	4	15	0	82	0	0	0	0	0
	9:15 AM	17	0	3	0	0	0	0	6	27	2	11	0	66	0	0	0	0	0
	VOLUMES	148	0	63	0	0	0	0	80	368	34	93	0	786	0	0	0	0	0
	APPROACH %	70%	0%	30%	0%	0%	0%	0%	18%	82%	27%	73%	0%						
	APP/DEPART	211	/	0	0	/	402	448	/	143	127	/	241	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	81	0	45	0	0	0	0	36	233	18	44	0	457					
	APPROACH %	64%	0%	36%	0%	0%	0%	0%	13%	87%	29%	71%	0%						
	PEAK HR FACTOR		0.768			0.000			0.830			0.705		0.834					
	APP/DEPART	126	/	0	0	/	251	269	/	81	62	/	125	0					
MD	11:00 AM	21	0	2	0	0	0	0	11	38	2	10	0	84	0	0	0	0	0
	11:15 AM	24	0	5	0	0	0	0	10	35	7	8	0	89	0	0	0	0	0
	11:30 AM	17	1	6	0	0	0	0	12	36	3	8	1	84	0	0	0	0	0
	11:45 AM	20	0	2	0	0	0	0	9	27	4	12	0	74	0	0	0	0	0
	12:00 PM	39	0	8	0	0	0	1	9	24	0	13	0	94	0	0	0	0	0
	12:15 PM	16	0	4	0	0	0	0	5	13	4	5	0	47	0	0	0	0	0
	12:30 PM	17	1	5	0	0	0	1	7	23	3	6	0	63	0	0	0	0	0
	12:45 PM	15	0	5	0	0	0	0	9	16	6	11	0	62	0	0	0	0	0
	VOLUMES	169	2	37	0	0	0	2	72	212	29	73	1	597	0	0	0	0	0
	APPROACH %	81%	1%	18%	0%	0%	0%	1%	25%	74%	28%	71%	1%						
	APP/DEPART	208	/	5	0	/	241	286	/	109	103	/	242	0					
	BEGIN PEAK HR		11:15 AM																
	VOLUMES	100	1	21	0	0	0	1	40	122	14	41	1	341					
	APPROACH %	82%	1%	17%	0%	0%	0%	1%	25%	75%	25%	73%	2%						
	PEAK HR FACTOR		0.649			0.000			0.849			0.875		0.907					
	APP/DEPART	122	/	3	0	/	136	163	/	61	56	/	141	0					
PM	05:00 PM	25	0	8	0	0	0	0	4	36	11	31	0	115	0	0	0	0	0
	5:15 PM	18	0	7	0	0	0	0	12	38	2	30	1	108	0	0	0	0	0
	5:30 PM	37	0	6	0	0	0	0	9	45	5	18	0	120	0	0	0	0	0
	5:45 PM	28	0	3	0	0	0	0	11	49	6	20	0	117	0	0	0	0	0
	6:00 PM	45	0	8	0	0	0	2	11	30	2	23	0	121	0	0	1	0	1
	6:15 PM	39	1	5	0	0	1	0	13	20	6	16	0	101	0	0	0	0	0
	6:30 PM	20	0	3	0	0	0	0	10	26	1	16	0	76	0	0	0	0	0
	6:45 PM	25	0	6	0	0	0	0	13	24	6	12	0	86	0	0	0	0	0
	VOLUMES	237	1	46	0	0	1	2	83	268	39	166	1	844	0	0	1	0	1
	APPROACH %	83%	0%	16%	0%	0%	100%	1%	24%	76%	19%	81%	0%						
	APP/DEPART	284	/	3	1	/	307	353	/	129	206	/	405	0					
	BEGIN PEAK HR		5:15 PM																
	VOLUMES	128	0	24	0	0	0	2	43	162	15	91	1	466					
	APPROACH %	84%	0%	16%	0%	0%	0%	1%	21%	78%	14%	85%	1%						
	PEAK HR FACTOR		0.717			0.000			0.863			0.811		0.963					
	APP/DEPART	152	/	2	0	/	177	207	/	67	107	/	220	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	1	0	0	0	0	1	2	7	1	0	0	12
	7:45 AM	0	0	5	0	0	0	0	2	60	1	0	0	68
	8:00 AM	0	0	4	0	0	0	0	1	28	1	0	0	34
	8:15 AM	0	0	0	0	0	0	0	0	13	0	0	0	13
	8:30 AM	0	1	0	0	0	0	0	3	13	1	0	0	18
	8:45 AM	0	0	1	0	0	0	1	3	60	0	0	1	66
	9:00 AM	0	0	0	0	0	0	3	9	28	0	0	0	40
	9:15 AM	0	0	0	0	0	0	0	6	36	0	0	0	42
	TOTAL	0	2	10	0	0	0	5	26	245	4	0	1	293
MD	11:00 AM	0	0	0	0	0	0	2	36	16	1	0	0	55
	11:15 AM	0	0	0	0	0	0	1	23	12	0	0	0	36
	11:30 AM	0	0	0	0	0	0	3	9	18	0	0	0	30
	11:45 AM	0	0	0	0	0	0	1	15	68	3	0	0	87
	12:00 PM	0	0	0	0	0	0	3	19	32	0	0	0	54
	12:15 PM	0	0	0	0	0	0	0	10	4	0	0	0	14
	12:30 PM	0	0	0	0	0	0	0	15	9	1	0	0	25
	12:45 PM	0	0	0	0	0	0	1	7	16	0	0	0	24
	TOTAL	0	0	0	0	0	0	11	134	175	5	0	0	325
PM	5:00 PM	0	0	0	0	0	0	1	34	9	0	0	0	44
	5:15 PM	0	0	0	1	0	0	1	15	12	2	0	0	31
	5:30 PM	0	0	0	0	2	0	1	28	5	0	0	0	36
	5:45 PM	0	0	0	0	0	0	2	14	27	1	0	0	44
	6:00 PM	0	0	0	0	0	0	0	44	17	0	0	0	61
	6:15 PM	0	0	0	0	0	0	0	26	11	0	0	0	37
	6:30 PM	0	0	0	0	0	0	0	21	5	2	0	0	28
	6:45 PM	0	0	0	0	0	2	0	17	13	2	0	2	36
	TOTAL	0	0	0	1	2	2	5	199	99	7	0	2	317



INTERSECTION TURNING MOVEMENT COUNTS

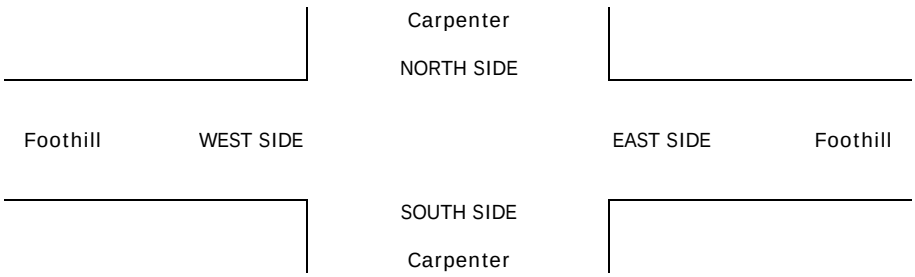
PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
Tue, Feb 23, 16	NORTH & SOUTH:	Carpenter	LOCATION #:	2
	EAST & WEST:	Foothill	CONTROL:	STOP N

NOTES:

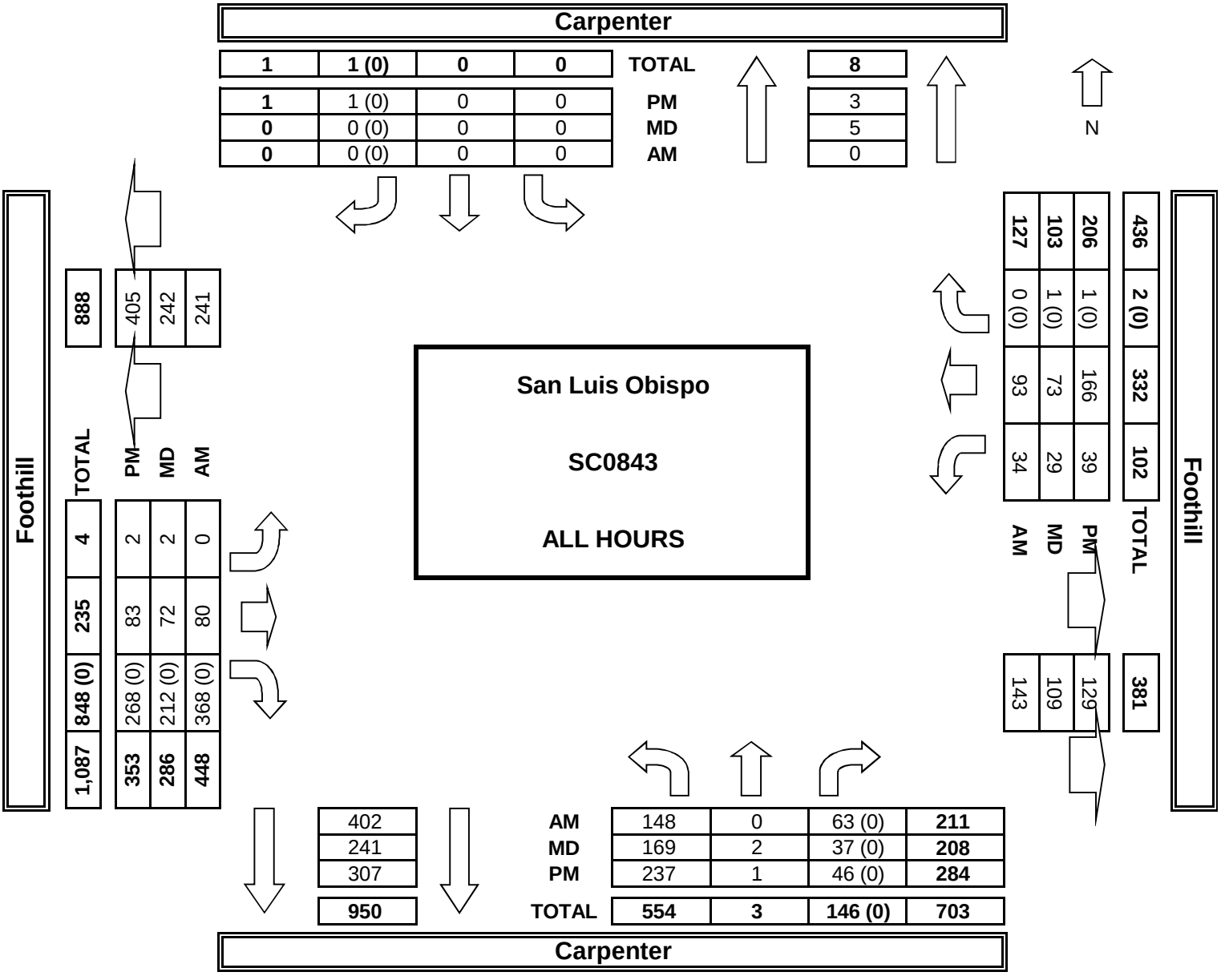
AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

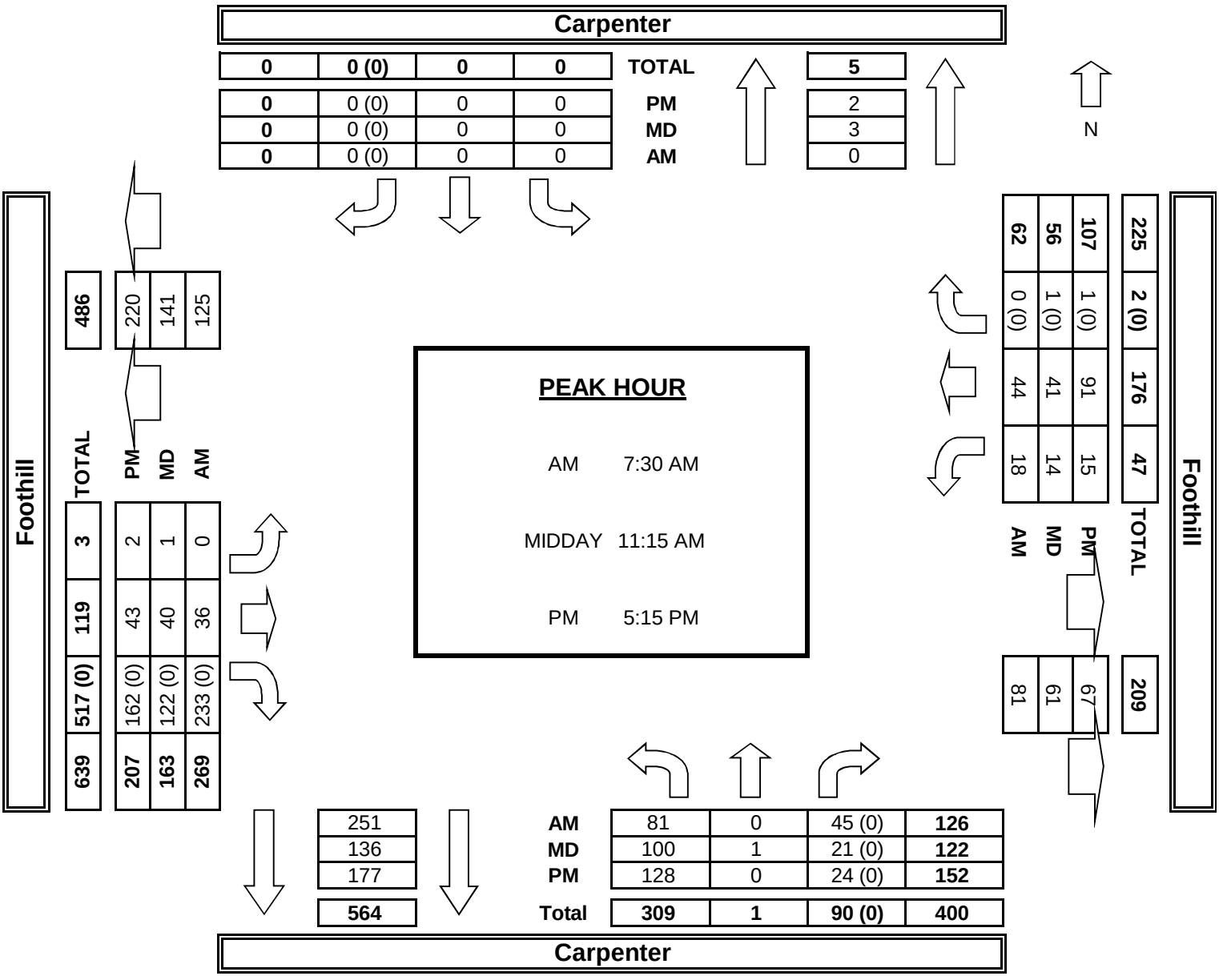
		NORTHBOUND Carpenter			SOUTHBOUND Carpenter			EASTBOUND Foothill			WESTBOUND Foothill			
	LANES:	NL 0.5	NT X	NR 0.5	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL
AM	7:30 AM	0	0	0	0	0	0	0	5	0	0	0	0	5
	7:45 AM	0	0	0	0	0	0	0	6	0	0	1	0	7
	8:00 AM	1	0	0	0	0	0	0	9	0	0	1	0	11
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	1	1	0	1	0	3
	8:45 AM	0	0	0	0	0	0	0	4	1	0	1	0	6
	9:00 AM	0	0	0	0	0	0	0	11	3	1	2	0	17
	9:15 AM	1	0	0	0	0	0	0	3	2	0	1	0	7
	VOLUMES	2	0	0	0	0	0	0	39	7	1	7	0	56
	APPROACH %	100%	0%	0%	0%	0%	0%	0%	85%	15%	13%	88%	0%	
	APP/DEPART	2	/	0	0	/	8	46	/	39	8	/	9	0
	BEGIN PEAK HR		8:30 AM											
	VOLUMES	1	0	0	0	0	0	0	19	7	1	5	0	33
	APPROACH %	100%	0%	0%	0%	0%	0%	0%	73%	27%	17%	83%	0%	
	PEAK HR FACTOR		0.250			0.000			0.464			0.500		0.485
	APP/DEPART	1	/	0	0	/	8	26	/	19	6	/	6	0
MD	11:00 AM	0	0	0	0	0	0	0	7	0	0	6	0	13
	11:15 AM	0	0	0	0	0	0	0	4	0	1	3	0	8
	11:30 AM	0	0	0	0	0	0	0	1	2	0	4	0	7
	11:45 AM	1	0	0	0	0	0	0	1	1	0	1	0	4
	12:00 PM	1	0	0	0	0	0	0	8	0	0	1	0	10
	12:15 PM	2	0	0	0	0	0	0	2	0	0	1	0	5
	12:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
	12:45 PM	0	0	0	0	0	0	0	3	2	1	3	0	9
	VOLUMES	4	0	0	0	0	0	0	26	5	2	21	0	58
	APPROACH %	100%	0%	0%	0%	0%	0%	0%	84%	16%	9%	91%	0%	
	APP/DEPART	4	/	0	0	/	7	31	/	26	23	/	25	0
	BEGIN PEAK HR		11:00 AM											
	VOLUMES	1	0	0	0	0	0	0	13	3	1	14	0	32
	APPROACH %	100%	0%	0%	0%	0%	0%	0%	81%	19%	7%	93%	0%	
	PEAK HR FACTOR		0.250			0.000			0.571			0.625		0.615
	APP/DEPART	1	/	0	0	/	4	16	/	13	15	/	15	0
PM	05:00 PM	1	0	0	0	0	0	0	0	1	0	4	0	6
	5:15 PM	1	0	0	0	0	0	0	0	0	0	6	0	7
	5:30 PM	1	0	0	0	0	0	0	1	0	0	8	0	10
	5:45 PM	2	0	0	0	0	0	0	2	0	0	7	0	11
	6:00 PM	2	0	0	0	0	0	0	2	0	0	9	0	13
	6:15 PM	1	0	0	0	0	0	0	3	1	0	5	0	10
	6:30 PM	0	0	0	0	0	0	0	0	0	0	4	0	4
	6:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	3
	VOLUMES	8	0	0	0	0	0	0	8	2	0	46	0	64
	APPROACH %	100%	0%	0%	0%	0%	0%	0%	80%	20%	0%	100%	0%	
	APP/DEPART	8	/	0	0	/	2	10	/	8	46	/	54	0
	BEGIN PEAK HR		5:30 PM											
	VOLUMES	6	0	0	0	0	0	0	8	1	0	29	0	44
	APPROACH %	100%	0%	0%	0%	0%	0%	0%	89%	11%	0%	100%	0%	
	PEAK HR FACTOR		0.750			0.000			0.563			0.806		0.846
	APP/DEPART	6	/	0	0	/	1	9	/	8	29	/	35	0



AimTD LLC

TURNING MOVEMENT COUNTS




Carpenter
0
0 (0)
0
0
TOTAL
5
0
0 (0)
0
0
PM
2
0
0 (0)
0
0
MD
3
0
0 (0)
0
0
AM
0
N
Foothill
486
220
141
125
TOTAL
PM
MD
AM
3
2
1
0
119
43
40
36
517 (0)
162 (0)
122 (0)
233 (0)
639
207
163
269
PEAK HOUR
AM 7:30 AM
MIDDAY 11:15 AM
PM 5:15 PM
225
2 (0)
176
47
107
1 (0)
91
15
56
1 (0)
41
14
62
0 (0)
44
18
TOTAL
PM
MD
AM
209
67
61
81
Foothill
251
136
177
564
AM
MD
PM
Total
81
100
128
309
0
1
0
1
45 (0)
21 (0)
24 (0)
90 (0)
126
122
152
400
Carpenter

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Grand
EAST & WEST: Slack

PROJECT #: SC0843
LOCATION #: 38
CONTROL: STOP ALL

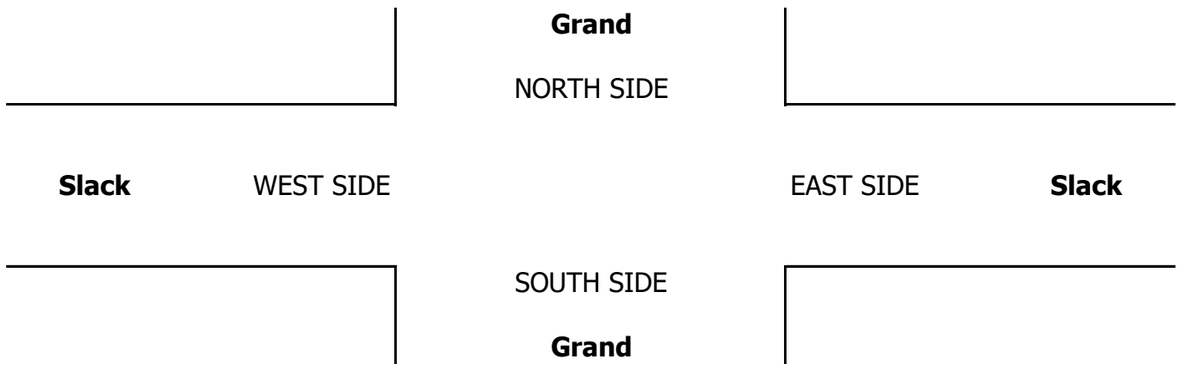
NOTES:

AM PM MD OTHER OTHER

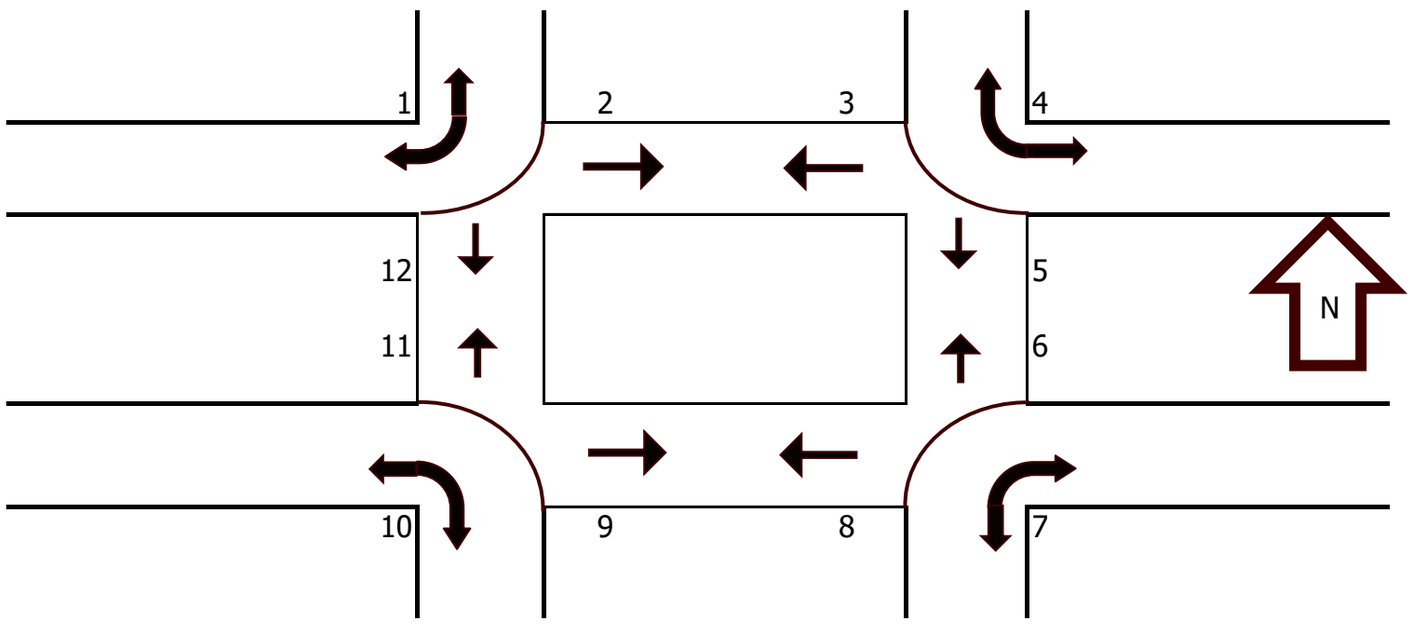
▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

	NORTHBOUND Grand			SOUTHBOUND Grand			EASTBOUND Slack			WESTBOUND Slack				U-TURNS				
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM																		
7:30 AM	14	140	0	0	25	2	13	0	4	1	0	1	200	0	0	0	0	0
7:45 AM	39	227	0	1	8	5	36	0	13	0	0	2	331	1	1	0	0	2
8:00 AM	13	166	0	3	25	6	33	2	22	3	2	3	278	0	3	0	0	3
8:15 AM	20	106	0	1	18	3	20	0	31	2	0	1	202	0	1	0	0	1
8:30 AM	11	120	1	1	29	3	23	1	15	1	2	0	207	0	1	0	0	1
8:45 AM	18	120	1	0	23	5	41	0	10	1	0	5	224	0	0	0	0	0
9:00 AM	13	86	1	0	39	13	16	0	17	2	1	2	190	0	0	0	0	0
9:15 AM	13	79	1	1	27	7	21	1	14	1	1	0	166	0	0	0	0	0
VOLUMES	141	1,044	4	7	194	44	203	4	126	11	6	14	1,798	1	6	0	0	7
APPROACH %	12%	88%	0%	3%	79%	18%	61%	1%	38%	35%	19%	45%						
APP/DEPART	1,189	/	1,267	245	/	332	333	/	9	31	/	190	0					
BEGIN PEAK HR		7:45 AM																
VOLUMES	83	619	1	6	80	17	112	3	81	6	4	6	1,018					
APPROACH %	12%	88%	0%	6%	78%	17%	57%	2%	41%	38%	25%	38%						
PEAK HR FACTOR		0.661			0.757			0.860			0.500		0.769					
APP/DEPART	703	/	743	103	/	168	196	/	4	16	/	103	0					
MD																		
11:30 AM	14	57	0	0	70	8	15	0	14	1	0	2	181	0	0	0	0	0
11:45 AM	20	92	0	0	69	10	29	0	9	1	1	0	231	1	0	0	0	1
12:00 PM	19	49	4	0	88	14	16	3	8	1	0	0	202	0	0	0	0	0
12:15 PM	9	50	0	1	63	8	5	0	10	4	0	1	151	0	1	0	0	1
12:30 PM	10	42	1	4	57	4	10	0	10	0	1	0	139	0	3	0	0	3
12:45 PM	10	63	0	1	39	10	9	1	10	1	0	0	144	0	1	0	0	1
1:00 PM	5	52	0	0	43	11	8	0	3	1	1	0	124	1	0	0	0	1
1:15 PM	11	62	1	1	38	9	8	1	13	1	1	0	146	0	0	1	0	1
VOLUMES	98	467	6	7	467	74	100	5	77	10	4	3	1,318	2	5	1	0	8
APPROACH %	17%	82%	1%	1%	85%	14%	55%	3%	42%	59%	24%	18%						
APP/DEPART	571	/	574	548	/	556	182	/	13	17	/	175	0					
BEGIN PEAK HR		11:30 AM																
VOLUMES	62	248	4	1	290	40	65	3	41	7	1	3	765					
APPROACH %	20%	79%	1%	0%	88%	12%	60%	3%	38%	64%	9%	27%						
PEAK HR FACTOR		0.701			0.811			0.717			0.550		0.828					
APP/DEPART	314	/	317	331	/	339	109	/	7	11	/	102	0					
PM																		
04:30 PM	23	45	3	3	121	15	8	2	17	1	1	0	239	0	1	0	0	1
4:45 PM	16	51	0	0	77	11	13	0	17	1	1	0	187	0	0	2	0	2
5:00 PM	27	35	2	4	138	18	12	2	13	1	0	0	252	0	0	1	0	1
5:15 PM	21	46	3	0	146	15	8	2	19	2	3	0	265	0	0	0	0	0
5:30 PM	25	66	1	3	107	18	13	1	20	2	1	2	259	1	2	0	0	3
5:45 PM	22	62	2	1	116	12	21	3	18	2	1	0	260	0	0	0	0	0
6:00 PM	12	40	0	1	151	26	15	1	23	2	0	1	272	1	0	0	0	1
6:15 PM	15	45	1	1	155	20	4	2	27	1	0	0	271	1	0	0	0	1
VOLUMES	161	390	12	13	1,011	135	94	13	154	12	7	3	2,005	3	3	3	0	9
APPROACH %	29%	69%	2%	1%	87%	12%	36%	5%	59%	55%	32%	14%						
APP/DEPART	563	/	487	1,159	/	1,180	261	/	35	22	/	303	0					
BEGIN PEAK HR		5:30 PM																
VOLUMES	74	213	4	6	529	76	53	7	88	7	2	3	1,062					
APPROACH %	25%	73%	1%	1%	87%	12%	36%	5%	59%	58%	17%	25%						
PEAK HR FACTOR		0.791			0.858			0.881			0.600		0.976					
APP/DEPART	291	/	271	611	/	627	148	/	15	12	/	149	0					



		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	0	1	1	0	0	0	2	0	1	1	6
	7:45 AM	0	2	0	5	4	0	0	2	8	3	2	0	26
	8:00 AM	0	1	1	3	2	1	0	0	4	1	1	1	15
	8:15 AM	0	1	0	0	0	1	0	0	2	2	1	0	7
	8:30 AM	0	0	0	1	4	0	0	0	0	2	0	1	8
	8:45 AM	0	2	0	5	1	2	0	1	12	4	1	0	28
	9:00 AM	0	0	1	3	3	3	0	3	7	2	0	0	22
	9:15 AM	0	2	1	1	4	1	0	2	2	2	3	1	19
	TOTAL	0	8	3	19	19	8	0	8	37	16	9	4	131
MD	11:30 AM	0	1	0	1	6	2	0	2	0	4	1	0	17
	11:45 AM	0	0	1	3	4	0	2	0	4	4	1	1	20
	12:00 PM	1	0	1	3	2	1	0	4	0	0	0	1	13
	12:15 PM	0	1	1	2	1	1	0	2	1	3	0	2	14
	12:30 PM	0	1	2	0	4	2	0	4	1	4	0	0	18
	12:45 PM	0	0	0	4	4	4	0	6	1	0	0	1	20
	1:00 PM	0	1	2	0	0	1	0	0	2	2	1	0	9
	1:15 PM	0	1	0	2	2	1	0	3	2	0	1	0	12
	TOTAL	1	5	7	15	23	12	2	21	11	17	4	5	123
PM	4:30 PM	0	1	2	0	1	15	0	1	0	3	2	0	25
	4:45 PM	2	2	0	0	0	0	0	4	2	4	1	0	15
	5:00 PM	0	1	0	1	0	9	0	2	4	1	0	2	20
	5:15 PM	0	0	4	0	0	5	0	7	0	1	0	2	19
	5:30 PM	0	2	1	3	1	2	0	4	5	3	2	3	26
	5:45 PM	1	0	2	3	0	2	0	3	6	1	0	2	20
	6:00 PM	1	0	4	1	1	4	0	8	2	4	0	1	26
	6:15 PM	0	1	3	0	2	12	0	8	4	2	1	1	34
	TOTAL	4	7	16	8	5	49	0	37	23	19	6	11	185



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Grand
EAST & WEST: Slack

PROJECT #: SC0843
LOCATION #: 38
CONTROL: STOP ALL

NOTES:

AM
PM
MD
OTHER
OTHER

N
W
E
S

	NORTHBOUND Grand			SOUTHBOUND Grand			EASTBOUND Slack			WESTBOUND Slack			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM													
7:30 AM	5	1	0	0	1	0	0	0	0	0	1	0	8
7:45 AM	3	4	0	0	0	0	0	0	0	0	5	0	12
8:00 AM	17	2	0	0	0	0	0	0	1	0	16	3	39
8:15 AM	2	1	0	0	2	0	0	1	1	0	1	0	8
8:30 AM	5	4	0	1	0	0	0	1	0	0	3	2	16
8:45 AM	3	1	0	1	0	0	0	0	0	0	7	3	15
9:00 AM	10	0	0	0	0	0	0	0	3	0	4	2	19
9:15 AM	2	0	0	0	0	1	1	0	4	0	4	0	12
VOLUMES	47	13	0	2	3	1	1	2	9	0	41	10	129
APPROACH %	78%	22%	0%	33%	50%	17%	8%	17%	75%	0%	80%	20%	
APP/DEPART	60	/	24	6	/	12	12	/	4	51	/	89	0
BEGIN PEAK HR		8:00 AM											
VOLUMES	27	8	0	2	2	0	0	2	2	0	27	8	78
APPROACH %	77%	23%	0%	50%	50%	0%	0%	50%	50%	0%	77%	23%	
PEAK HR FACTOR		0.461			0.500			0.500			0.461		0.500
APP/DEPART	35	/	16	4	/	4	4	/	4	35	/	54	0
MD													
11:30 AM	1	2	0	0	1	0	0	2	0	0	0	0	6
11:45 AM	3	3	0	0	0	0	0	0	4	0	7	1	18
12:00 PM	7	2	0	0	1	0	0	4	1	0	1	3	19
12:15 PM	6	1	0	0	1	0	0	1	1	0	1	0	11
12:30 PM	1	1	0	1	0	0	0	1	0	0	1	0	5
12:45 PM	0	5	0	0	0	0	0	0	6	0	1	0	12
1:00 PM	0	0	0	0	2	0	0	1	2	0	2	0	7
1:15 PM	1	0	0	0	1	0	1	2	0	0	1	0	6
VOLUMES	19	14	0	1	6	0	1	11	14	0	14	4	84
APPROACH %	58%	42%	0%	14%	86%	0%	4%	42%	54%	0%	78%	22%	
APP/DEPART	33	/	19	7	/	20	26	/	12	18	/	33	0
BEGIN PEAK HR		11:30 AM											
VOLUMES	17	8	0	0	3	0	0	7	6	0	9	4	54
APPROACH %	68%	32%	0%	0%	100%	0%	0%	54%	46%	0%	69%	31%	
PEAK HR FACTOR		0.694			0.750			0.650			0.406		0.711
APP/DEPART	25	/	12	3	/	9	13	/	7	13	/	26	0
PM													
04:30 PM	1	0	0	0	3	0	0	3	9	0	0	1	17
4:45 PM	1	1	0	2	3	0	0	2	2	0	1	0	12
5:00 PM	2	4	0	0	0	0	0	5	5	0	1	0	17
5:15 PM	0	1	0	0	1	0	0	3	5	0	0	0	10
5:30 PM	0	0	0	0	3	0	0	1	5	0	1	0	10
5:45 PM	4	2	0	1	6	0	0	5	2	0	1	3	24
6:00 PM	6	3	0	1	6	0	0	7	7	0	1	0	31
6:15 PM	0	0	0	0	5	0	1	0	7	0	0	0	13
VOLUMES	14	11	0	4	27	0	1	26	42	0	5	4	134
APPROACH %	56%	44%	0%	13%	87%	0%	1%	38%	61%	0%	56%	44%	
APP/DEPART	25	/	16	31	/	69	69	/	30	9	/	19	0
BEGIN PEAK HR		5:30 PM											
VOLUMES	10	5	0	2	20	0	1	13	21	0	3	3	78
APPROACH %	67%	33%	0%	9%	91%	0%	3%	37%	60%	0%	50%	50%	
PEAK HR FACTOR		0.417			0.786			0.625			0.375		0.629
APP/DEPART	15	/	9	22	/	41	35	/	15	6	/	13	0

Grand

NORTH SIDE

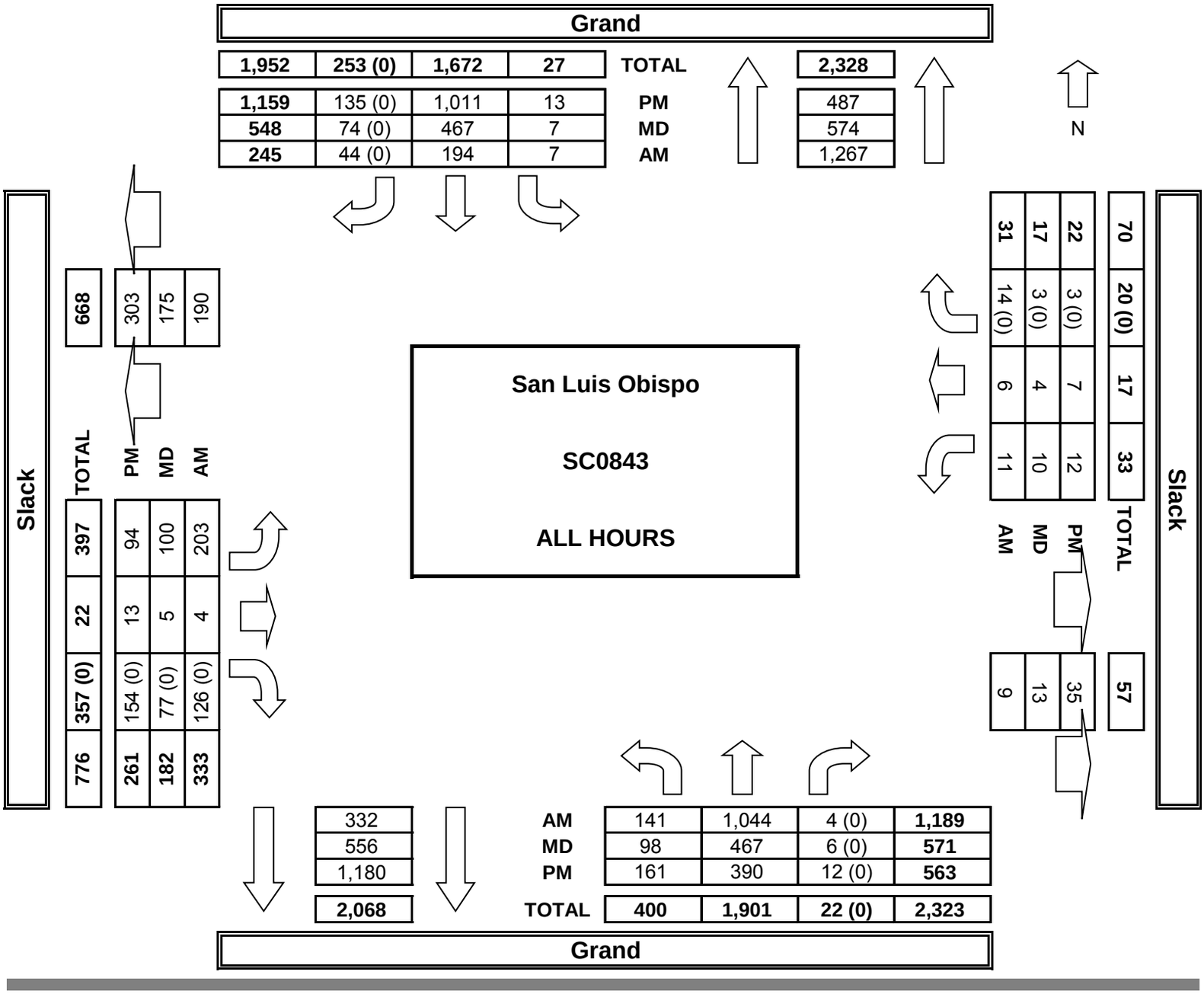
Slack WEST SIDE EAST SIDE **Slack**

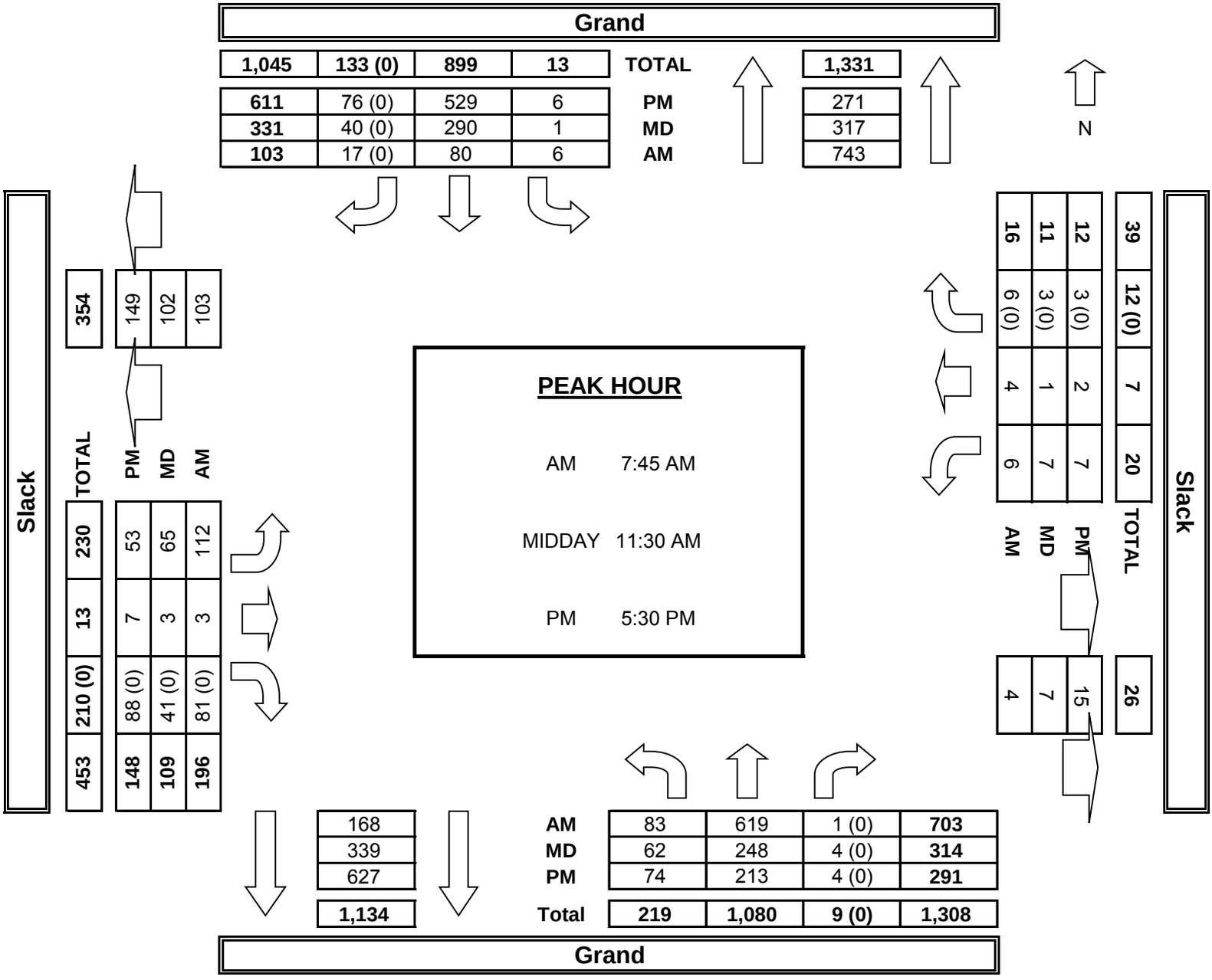
SOUTH SIDE

Grand

AimTD LLC

TURNING MOVEMENT COUNTS




Grand
1,045
133 (0)
899
13
TOTAL
1,331
611
76 (0)
529
6
PM
271
331
40 (0)
290
1
MD
317
103
17 (0)
80
6
AM
743
N
Slack
354
149
102
103
TOTAL
PM
MD
AM
230
53
65
112
13
7
3
3
210 (0)
88 (0)
41 (0)
81 (0)
453
148
109
196
PEAK HOUR
AM 7:45 AM
MIDDAY 11:30 AM
PM 5:30 PM
16
11
12
39
6 (0)
3 (0)
3 (0)
12 (0)
4
1
2
7
6
7
7
20
AM
MD
PM
TOTAL
4
7
15
26
Slack
168
339
627
1,134
AM
MD
PM
Total
83
619
1 (0)
703
62
248
4 (0)
314
74
213
4 (0)
291
219
1,080
9 (0)
1,308
Grand

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Grand
EAST & WEST: Fredericks

PROJECT #: SC0843
LOCATION #: 39
CONTROL: STOP E/W

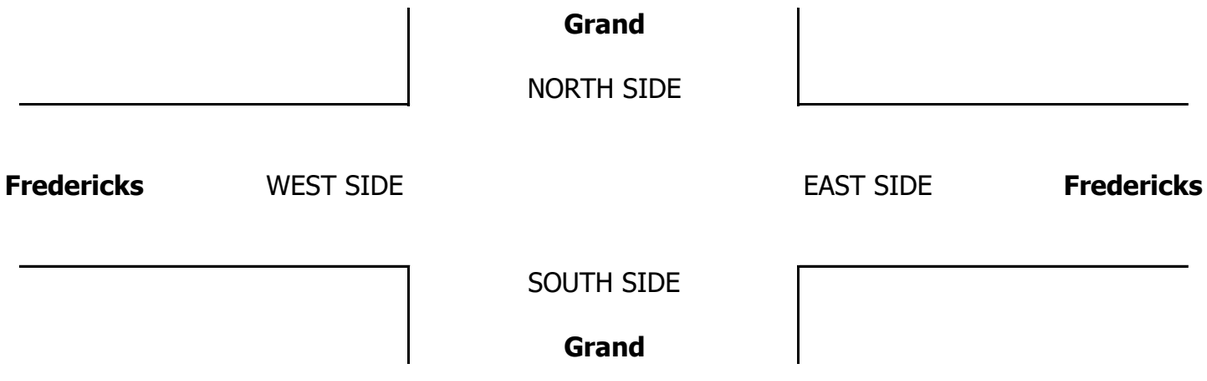
NOTES:

AM PM MD OTHER OTHER

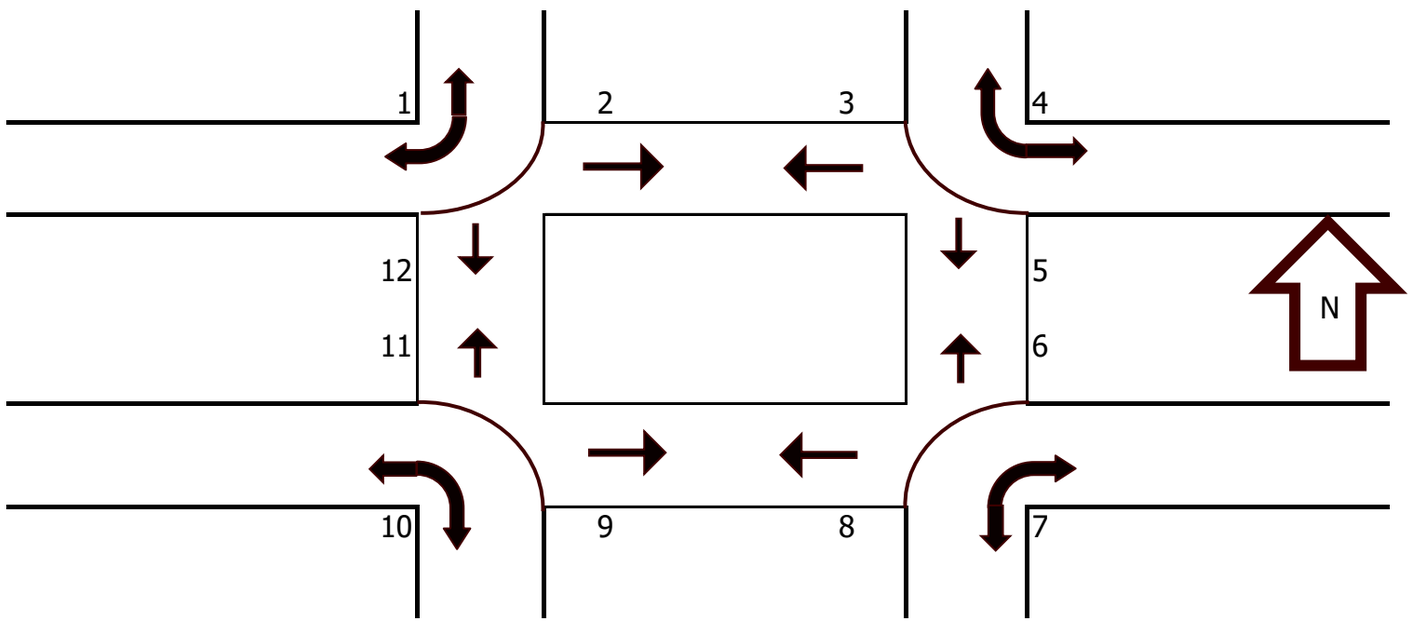
▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Grand			SOUTHBOUND Grand			EASTBOUND Fredericks			WESTBOUND Fredericks				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:30 AM	4	137	0	0	30	0	2	0	4	1	0	0	178	0	0	0	0	0
	7:45 AM	10	242	1	0	39	2	2	0	8	4	0	2	310	0	0	0	0	0
	8:00 AM	13	200	0	0	43	3	2	0	10	5	2	0	278	0	0	0	0	0
	8:15 AM	8	179	1	2	77	2	3	0	7	4	1	1	285	0	1	0	0	1
	8:30 AM	11	144	0	0	88	1	2	0	9	4	0	1	260	0	0	0	0	0
	8:45 AM	19	132	2	1	52	2	3	0	8	0	1	1	221	0	0	0	0	0
	9:00 AM	14	120	1	0	55	3	2	1	25	1	1	1	224	0	0	0	0	0
	9:15 AM	4	87	1	2	60	1	0	0	11	3	0	1	170	0	2	0	0	2
	VOLUMES	83	1,241	6	5	444	14	16	1	82	22	5	7	1,926	0	3	0	0	3
	APPROACH %	6%	93%	0%	1%	96%	3%	16%	1%	83%	65%	15%	21%						
	APP/DEPART	1,330	/	1,267	463	/	548	99	/	9	34	/	102	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	42	765	2	2	247	8	9	0	34	17	3	4	1,133					
	APPROACH %	5%	95%	0%	1%	96%	3%	21%	0%	79%	71%	13%	17%						
	PEAK HR FACTOR		0.799			0.722			0.896			0.857		0.914					
	APP/DEPART	809	/	779	257	/	298	43	/	3	24	/	53	0					
MD	11:30 AM	7	70	4	3	80	4	2	1	5	1	0	2	179	1	0	0	0	1
	11:45 AM	13	106	1	1	73	1	2	1	3	2	1	0	204	1	0	0	0	1
	12:00 PM	9	80	2	1	95	2	2	0	15	2	0	3	211	2	0	0	0	2
	12:15 PM	5	58	2	0	81	1	1	1	3	0	0	0	152	0	0	0	0	0
	12:30 PM	4	58	1	0	69	1	2	0	5	1	1	1	143	0	0	0	0	0
	12:45 PM	6	72	0	1	59	3	2	0	4	1	0	1	149	1	0	0	0	1
	1:00 PM	4	59	0	1	47	1	1	0	10	1	0	0	124	0	0	0	0	0
	1:15 PM	7	83	0	0	56	1	1	0	14	2	1	0	165	0	0	0	0	0
	VOLUMES	55	586	10	7	560	14	13	3	59	10	3	7	1,327	5	0	0	0	5
	APPROACH %	8%	90%	2%	1%	96%	2%	17%	4%	79%	50%	15%	35%						
	APP/DEPART	651	/	606	581	/	634	75	/	20	20	/	67	0					
	BEGIN PEAK HR		11:30 AM																
	VOLUMES	34	314	9	5	329	8	7	3	26	5	1	5	746					
	APPROACH %	10%	88%	3%	1%	96%	2%	19%	8%	72%	45%	9%	45%						
	PEAK HR FACTOR		0.744			0.872			0.529			0.550		0.884					
	APP/DEPART	357	/	326	342	/	364	36	/	17	11	/	39	0					
PM	04:30 PM	7	64	1	0	128	2	1	1	6	0	0	2	212	1	0	0	0	1
	4:45 PM	6	71	3	2	100	0	0	0	7	1	0	0	190	1	0	0	0	1
	5:00 PM	10	59	0	2	118	3	1	0	15	1	0	3	212	0	0	0	0	0
	5:15 PM	17	65	1	1	174	1	1	0	15	4	0	0	279	1	0	0	0	1
	5:30 PM	8	67	0	1	119	5	1	0	20	0	2	3	226	0	1	0	0	1
	5:45 PM	4	95	4	1	148	2	8	0	14	0	0	0	276	0	0	0	0	0
	6:00 PM	12	61	1	1	147	1	4	2	8	1	0	0	238	1	0	0	0	1
	6:15 PM	14	60	1	0	201	3	3	0	12	0	1	0	295	2	0	0	0	2
	VOLUMES	78	542	11	8	1,135	17	19	3	97	7	3	8	1,928	6	1	0	0	7
	APPROACH %	12%	86%	2%	1%	98%	1%	16%	3%	82%	39%	17%	44%						
	APP/DEPART	631	/	570	1,160	/	1,245	119	/	21	18	/	92	0					
	BEGIN PEAK HR		5:30 PM																
	VOLUMES	38	283	6	3	615	11	16	2	54	1	3	3	1,035					
	APPROACH %	12%	87%	2%	0%	98%	2%	22%	3%	75%	14%	43%	43%						
	PEAK HR FACTOR		0.794			0.771			0.818			0.350		0.877					
	APP/DEPART	327	/	303	629	/	673	72	/	10	7	/	49	0					



		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	2	0	0	0	0	0	0	0	0	0	0	0	2
	7:45 AM	2	0	0	0	1	1	0	0	0	0	1	0	5
	8:00 AM	0	0	0	0	0	0	0	0	1	1	3	1	6
	8:15 AM	0	0	0	0	0	0	0	0	0	0	5	0	5
	8:30 AM	2	0	0	0	0	0	0	0	0	0	1	0	3
	8:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	3
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	3	2	5
	TOTAL	6	0	0	0	1	1	0	0	1	1	16	3	29
MD	11:30 AM	0	0	0	0	0	0	0	0	0	0	2	2	4
	11:45 AM	0	0	0	0	0	0	0	0	0	1	3	2	6
	12:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	12:30 PM	1	0	0	0	0	0	0	0	0	0	2	1	4
	12:45 PM	0	0	0	0	0	0	0	0	0	0	1	2	3
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	1	0	0	0	0	0	0	0	0	1	10	7	19
PM	4:30 PM	0	0	0	0	0	0	0	0	2	0	1	0	3
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
	5:00 PM	1	0	0	0	0	0	0	1	0	0	0	2	4
	5:15 PM	1	0	0	0	0	0	0	2	0	0	0	3	6
	5:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	2
	5:45 PM	0	0	0	0	0	0	0	0	0	0	1	4	5
	6:00 PM	0	0	0	0	0	0	0	0	0	0	1	4	5
	6:15 PM	0	0	0	0	0	0	0	0	2	0	0	0	2
	TOTAL	2	0	0	0	0	0	0	3	4	0	4	15	28



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Grand
EAST & WEST: Fredericks

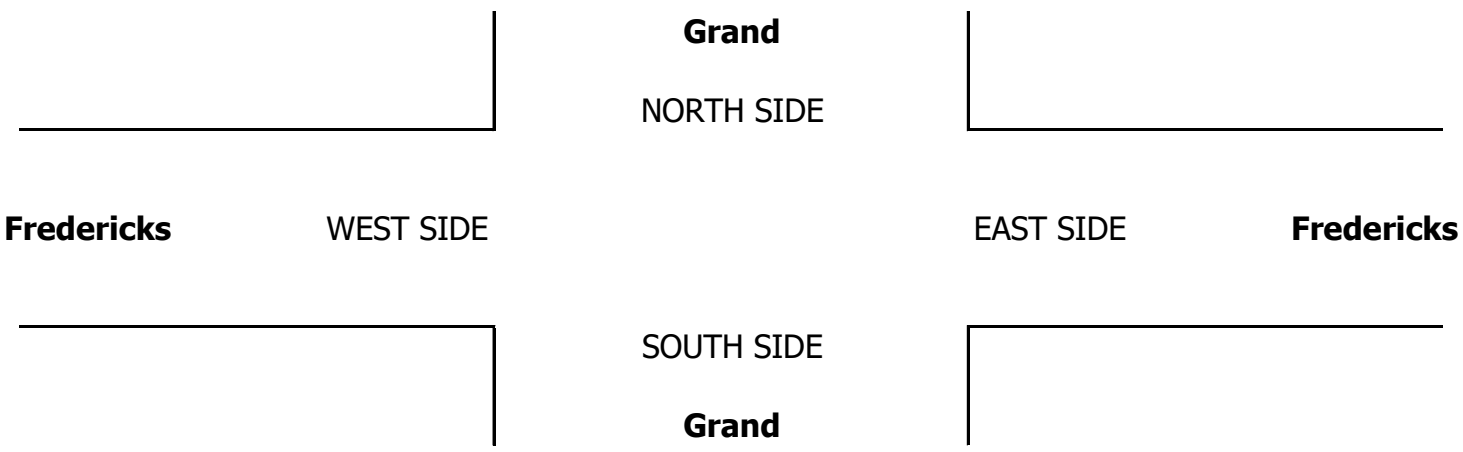
PROJECT #: SC0843
LOCATION #: 39
CONTROL: STOP E/W

NOTES:

AM
PM
MD
OTHER
OTHER

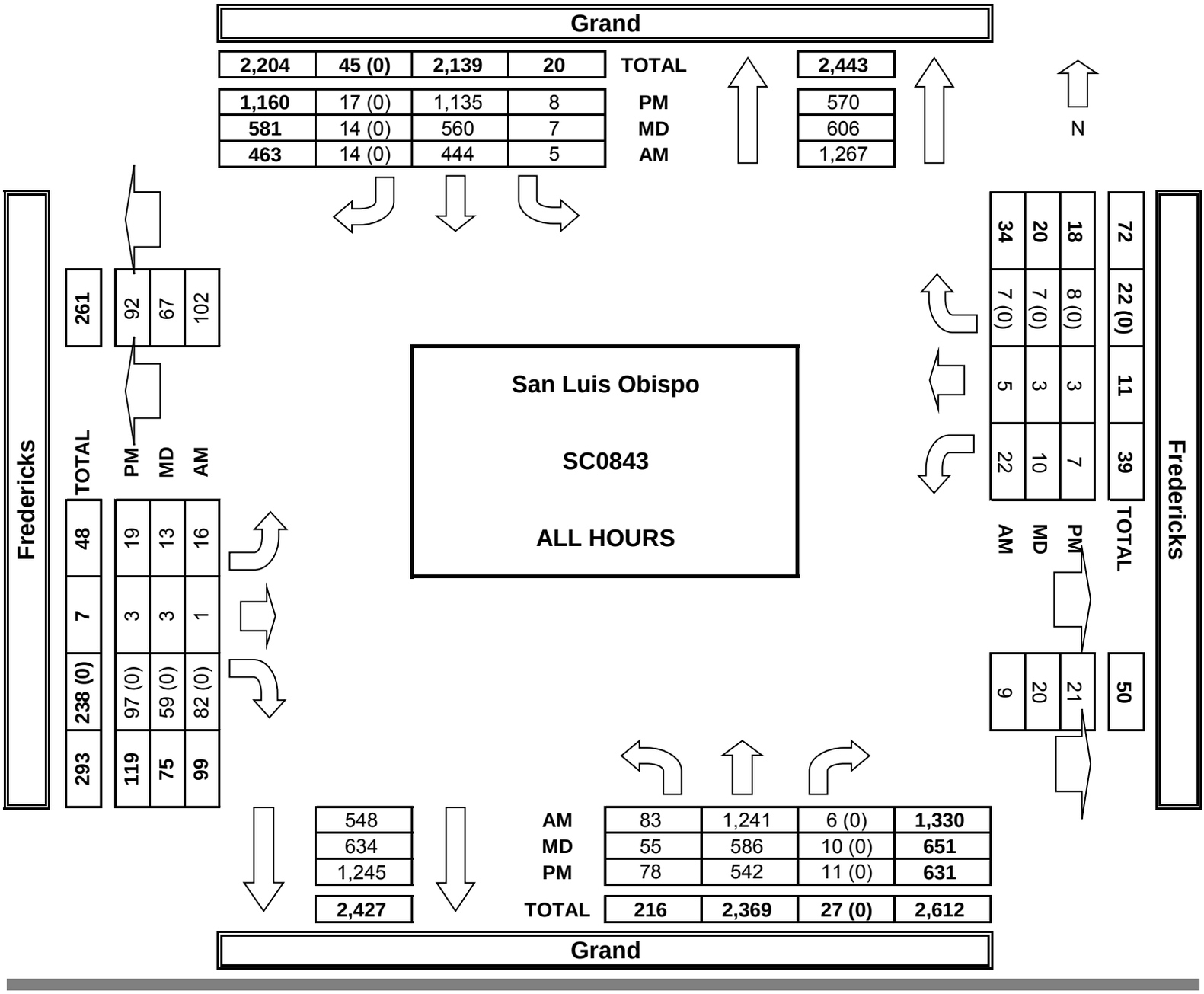
N
W
E
S

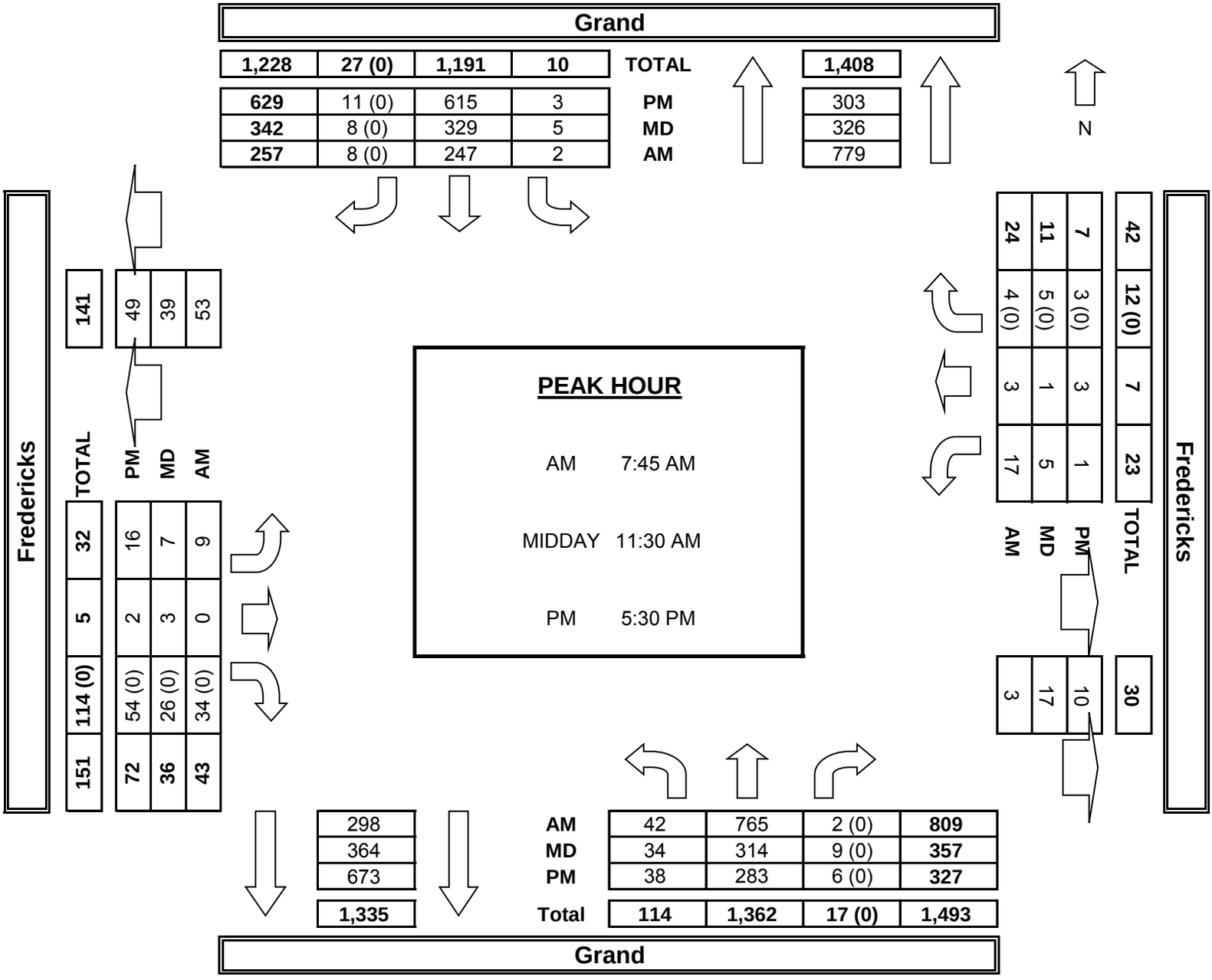
		NORTHBOUND Grand			SOUTHBOUND Grand			EASTBOUND Fredericks			WESTBOUND Fredericks			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:30 AM	0	3	0	0	1	0	0	0	0	0	0	0	4
	7:45 AM	0	4	0	0	0	0	0	0	0	0	0	0	4
	8:00 AM	0	9	0	0	1	0	0	0	0	0	0	0	10
	8:15 AM	0	4	0	0	2	0	0	0	0	0	0	0	6
	8:30 AM	0	5	0	0	2	0	1	0	0	0	0	0	8
	8:45 AM	0	3	0	0	0	0	0	0	0	0	0	0	3
	9:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	5
	9:15 AM	0	0	0	0	3	0	0	0	0	0	0	0	3
	VOLUMES	0	33	0	0	9	0	1	0	0	0	0	0	43
	APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	0%	0%	0%	
	APP/DEPART	33	/	34	9	/	9	1	/	0	0	/	0	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	0	22	0	0	5	0	1	0	0	0	0	0	28
	APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.611			0.625			0.250			0.000		0.700
	APP/DEPART	22	/	23	5	/	5	1	/	0	0	/	0	0
MD	11:30 AM	0	1	0	0	1	0	1	0	0	0	0	0	3
	11:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	12:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	6
	12:15 PM	0	4	0	0	0	0	0	0	0	0	0	0	4
	12:30 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
	12:45 PM	0	4	0	1	0	0	0	0	0	0	0	0	5
	1:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	16	0	1	6	0	1	0	0	0	0	0	24
	APPROACH %	0%	100%	0%	14%	86%	0%	100%	0%	0%	0%	0%	0%	
	APP/DEPART	16	/	17	7	/	6	1	/	1	0	/	0	0
	BEGIN PEAK HR		12:00 PM											
	VOLUMES	0	14	0	1	3	0	0	0	0	0	0	0	18
	APPROACH %	0%	100%	0%	25%	75%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.875			0.333			0.000			0.000		0.750
	APP/DEPART	14	/	14	4	/	3	0	/	1	0	/	0	0
PM	04:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
	4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	5:00 PM	0	4	0	0	4	0	0	0	0	0	0	0	8
	5:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	4
	5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	5:45 PM	0	2	0	0	4	0	0	0	0	0	0	0	6
	6:00 PM	0	7	0	0	6	0	0	0	0	0	0	0	13
	6:15 PM	0	1	0	0	4	0	0	0	0	0	0	0	5
	VOLUMES	0	18	0	0	23	0	0	0	0	0	0	0	41
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	18	/	18	23	/	23	0	/	0	0	/	0	0
	BEGIN PEAK HR		5:30 PM											
	VOLUMES	0	10	0	0	16	0	0	0	0	0	0	0	26
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.357			0.667			0.000			0.000		0.500
	APP/DEPART	10	/	10	16	/	16	0	/	0	0	/	0	0



AimTD LLC

TURNING MOVEMENT COUNTS




Grand
1,228
27 (0)
1,191
10
TOTAL
1,408
629
11 (0)
615
3
PM
303
342
8 (0)
329
5
MD
326
257
8 (0)
247
2
AM
779
N
Fredericks
141
49
39
53
TOTAL
PM
MD
AM
32
16
7
9
5
2
3
0
114 (0)
54 (0)
26 (0)
34 (0)
151
72
36
43
PEAK HOUR
AM 7:45 AM
MIDDAY 11:30 AM
PM 5:30 PM
24
11
7
4 (0)
5 (0)
3 (0)
3
1
3
17
5
1
42
12 (0)
7
23
TOTAL
AM
MD
PM
3
17
10
30
Fredericks
298
364
673
1,335
AM
MD
PM
Total
42
765
2 (0)
809
34
314
9 (0)
357
38
283
6 (0)
327
114
1,362
17 (0)
1,493
Grand

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Grand
EAST & WEST: Hwy 101 SB

PROJECT #: SC0843
LOCATION #: 40
CONTROL: STOP W

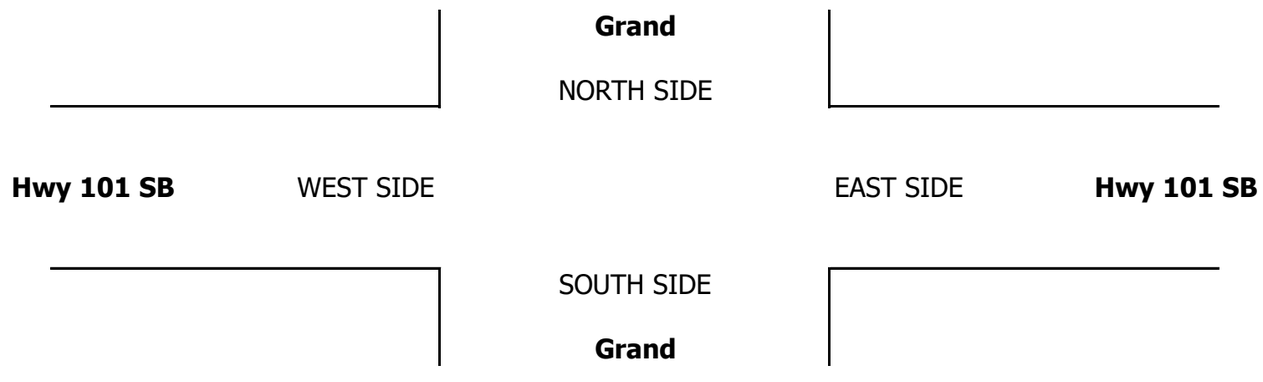
NOTES:

AM PM MD OTHER OTHER

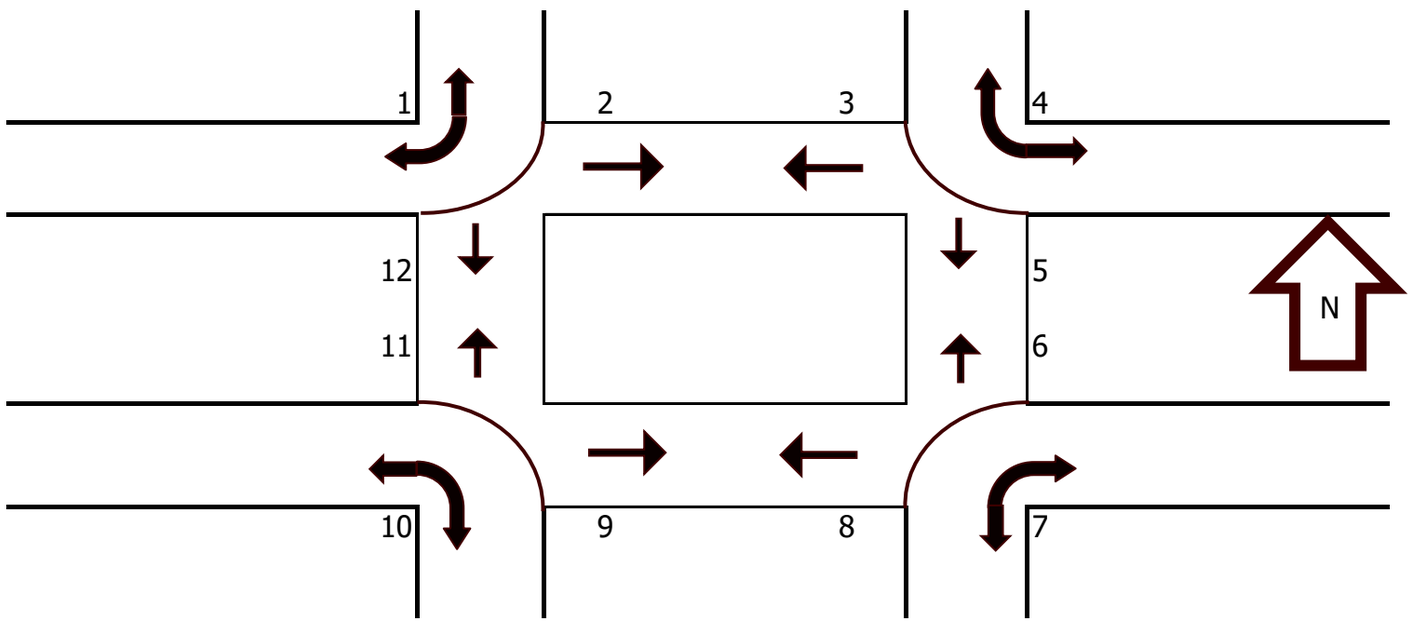
▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Grand			SOUTHBOUND Grand			EASTBOUND Hwy 101 SB			WESTBOUND Hwy 101 SB				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL X	ET X	ER X	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB X	WB 0	TTL
AM	7:30 AM	21	190	1	2	26	21	0	0	0	1	5	38	305	0	0	0	0	0
	7:45 AM	17	216	1	0	13	33	0	0	0	0	9	37	326	0	0	0	0	0
	8:00 AM	16	157	2	2	46	40	0	0	0	1	7	30	301	0	0	0	0	0
	8:15 AM	16	118	5	11	51	61	0	0	0	0	9	37	308	0	0	0	0	0
	8:30 AM	13	129	2	4	26	34	0	0	0	0	9	32	249	0	1	0	0	1
	8:45 AM	23	128	2	4	31	34	0	0	0	5	5	31	263	1	0	0	0	1
	9:00 AM	16	70	4	1	35	38	0	0	0	0	6	9	179	0	0	0	0	0
	9:15 AM	13	87	4	4	27	16	0	0	0	2	6	11	170	0	0	0	0	0
	VOLUMES	135	1,095	21	28	255	277	0	0	0	9	56	225	2,101	1	1	0	0	2
	APPROACH %	11%	88%	2%	5%	46%	49%	0%	0%	0%	3%	19%	78%						
	APP/DEPART	1,251	/	1,321	560	/	265	0	/	48	290	/	467	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	70	681	9	15	136	155	0	0	0	2	30	142	1,240					
	APPROACH %	9%	90%	1%	5%	44%	51%	0%	0%	0%	1%	17%	82%						
	PEAK HR FACTOR		0.812			0.622			0.000			0.946		0.951					
	APP/DEPART	760	/	823	306	/	138	0	/	24	174	/	255	0					
MD	11:30 AM	18	101	6	4	41	30	0	0	0	2	5	16	223	1	0	0	0	1
	11:45 AM	16	75	3	7	56	38	0	0	0	0	7	11	213	0	1	0	0	1
	12:00 PM	20	69	3	7	47	51	0	0	0	2	4	7	210	0	0	0	0	0
	12:15 PM	14	59	2	4	39	34	0	0	0	1	2	11	166	0	0	0	0	0
	12:30 PM	13	63	4	1	34	38	0	0	0	4	7	6	170	0	0	0	0	0
	12:45 PM	17	64	3	4	38	27	0	0	0	0	8	5	166	0	0	0	0	0
	1:00 PM	15	79	3	8	30	29	0	0	0	3	5	11	183	0	0	0	0	0
	1:15 PM	18	66	4	4	22	34	0	0	0	3	6	11	168	0	0	0	0	0
	VOLUMES	131	576	28	39	307	281	0	0	0	15	44	78	1,499	1	1	0	0	2
	APPROACH %	18%	78%	4%	6%	49%	45%	0%	0%	0%	11%	32%	57%						
	APP/DEPART	735	/	655	627	/	323	0	/	66	137	/	455	0					
	BEGIN PEAK HR		11:30 AM																
	VOLUMES	68	304	14	22	183	153	0	0	0	5	18	45	812					
	APPROACH %	18%	79%	4%	6%	51%	43%	0%	0%	0%	7%	26%	66%						
	PEAK HR FACTOR		0.772			0.852			0.000			0.739		0.910					
	APP/DEPART	386	/	350	358	/	189	0	/	35	68	/	238	0					
PM	04:30 PM	25	68	2	7	54	61	0	0	0	0	12	8	237	1	0	0	0	1
	4:45 PM	19	56	3	7	57	52	0	0	0	1	8	7	210	0	0	0	0	0
	5:00 PM	34	68	5	15	85	102	0	0	0	2	2	5	318	2	1	0	0	3
	5:15 PM	26	75	1	4	75	62	0	0	0	0	5	9	257	0	0	0	0	0
	5:30 PM	10	93	3	11	79	73	0	0	0	1	6	9	285	0	1	0	0	1
	5:45 PM	25	59	7	12	69	67	0	0	0	0	10	14	263	0	1	0	0	1
	6:00 PM	28	78	8	12	104	99	0	0	0	2	6	7	344	0	0	0	0	0
	6:15 PM	10	52	8	5	54	68	0	0	0	3	4	7	211	0	0	0	0	0
	VOLUMES	177	549	37	73	577	584	0	0	0	9	53	66	2,125	3	3	0	0	6
	APPROACH %	23%	72%	5%	6%	47%	47%	0%	0%	0%	7%	41%	52%						
	APP/DEPART	763	/	618	1,234	/	589	0	/	107	128	/	811	0					
	BEGIN PEAK HR		5:15 PM																
	VOLUMES	89	305	19	39	327	301	0	0	0	3	27	39	1,149					
	APPROACH %	22%	74%	5%	6%	49%	45%	0%	0%	0%	4%	39%	57%						
	PEAK HR FACTOR		0.906			0.776			0.000			0.719		0.835					
	APP/DEPART	413	/	346	667	/	330	0	/	56	69	/	417	0					



		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	0	1	1	1	0	0	0	0	2	0	5
	7:45 AM	0	0	0	3	0	1	4	0	0	0	1	1	10
	8:00 AM	0	0	0	0	1	1	0	0	0	0	2	0	4
	8:15 AM	0	0	0	2	0	0	0	0	0	0	2	0	4
	8:30 AM	0	0	0	2	0	0	0	0	0	0	3	0	5
	8:45 AM	0	0	0	0	2	2	5	0	0	0	0	0	9
	9:00 AM	0	0	0	0	4	1	0	0	0	0	4	2	11
	9:15 AM	0	0	0	1	0	0	1	0	0	0	1	1	4
	TOTAL	0	0	0	9	8	6	10	0	0	0	15	4	52
MD	11:30 AM	0	0	0	1	3	3	1	0	0	0	2	3	13
	11:45 AM	0	0	0	1	1	0	3	0	0	0	3	0	8
	12:00 PM	0	0	0	1	1	2	0	0	0	0	1	0	5
	12:15 PM	0	0	0	0	3	0	1	0	0	0	3	1	8
	12:30 PM	0	0	0	0	3	2	0	0	0	0	1	1	7
	12:45 PM	0	0	0	0	0	4	0	0	0	0	0	0	4
	1:00 PM	0	0	0	2	1	0	1	0	0	0	0	0	4
	1:15 PM	0	0	0	2	2	0	0	0	0	0	0	0	4
	TOTAL	0	0	0	7	14	11	6	0	0	0	10	5	53
PM	4:30 PM	0	0	0	0	0	4	1	0	0	0	0	4	9
	4:45 PM	0	0	0	1	1	0	0	0	0	0	0	2	4
	5:00 PM	0	0	0	3	1	3	0	0	0	0	1	1	9
	5:15 PM	0	0	0	3	2	2	0	0	0	0	1	0	8
	5:30 PM	0	0	0	1	3	4	0	0	0	0	0	2	10
	5:45 PM	0	0	0	0	0	2	1	0	0	0	0	5	8
	6:00 PM	0	0	0	2	3	8	0	0	0	0	0	1	14
	6:15 PM	0	0	0	1	3	1	0	0	0	0	0	2	7
	TOTAL	0	0	0	11	13	24	2	0	0	0	2	17	69



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Grand
EAST & WEST: Hwy 101 SB

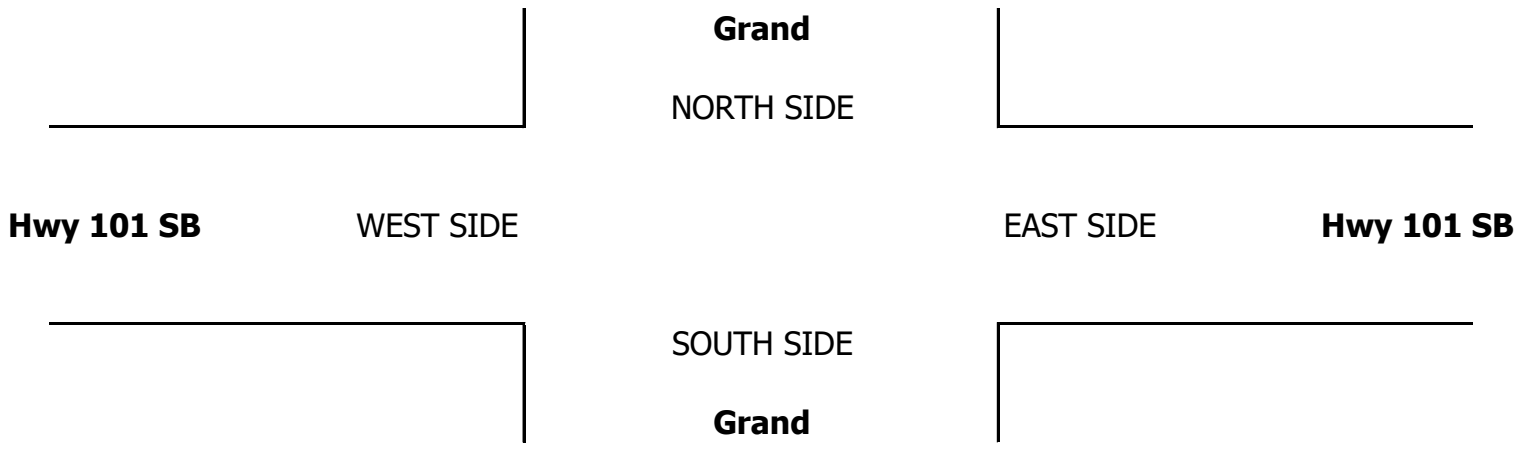
PROJECT #: SC0843
LOCATION #: 40
CONTROL: STOP W

NOTES:

AM
PM
MD
OTHER
OTHER

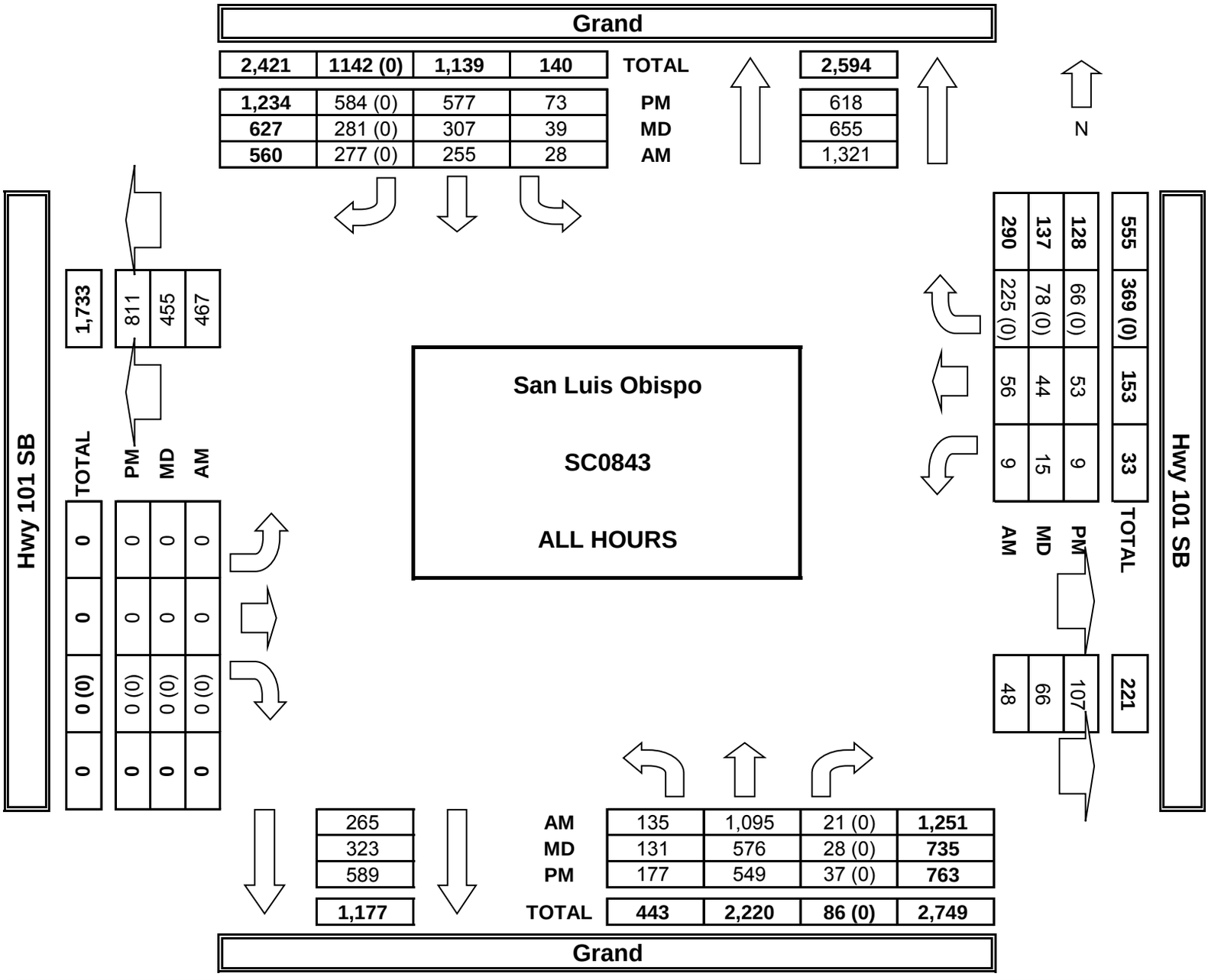
N
W
E
S

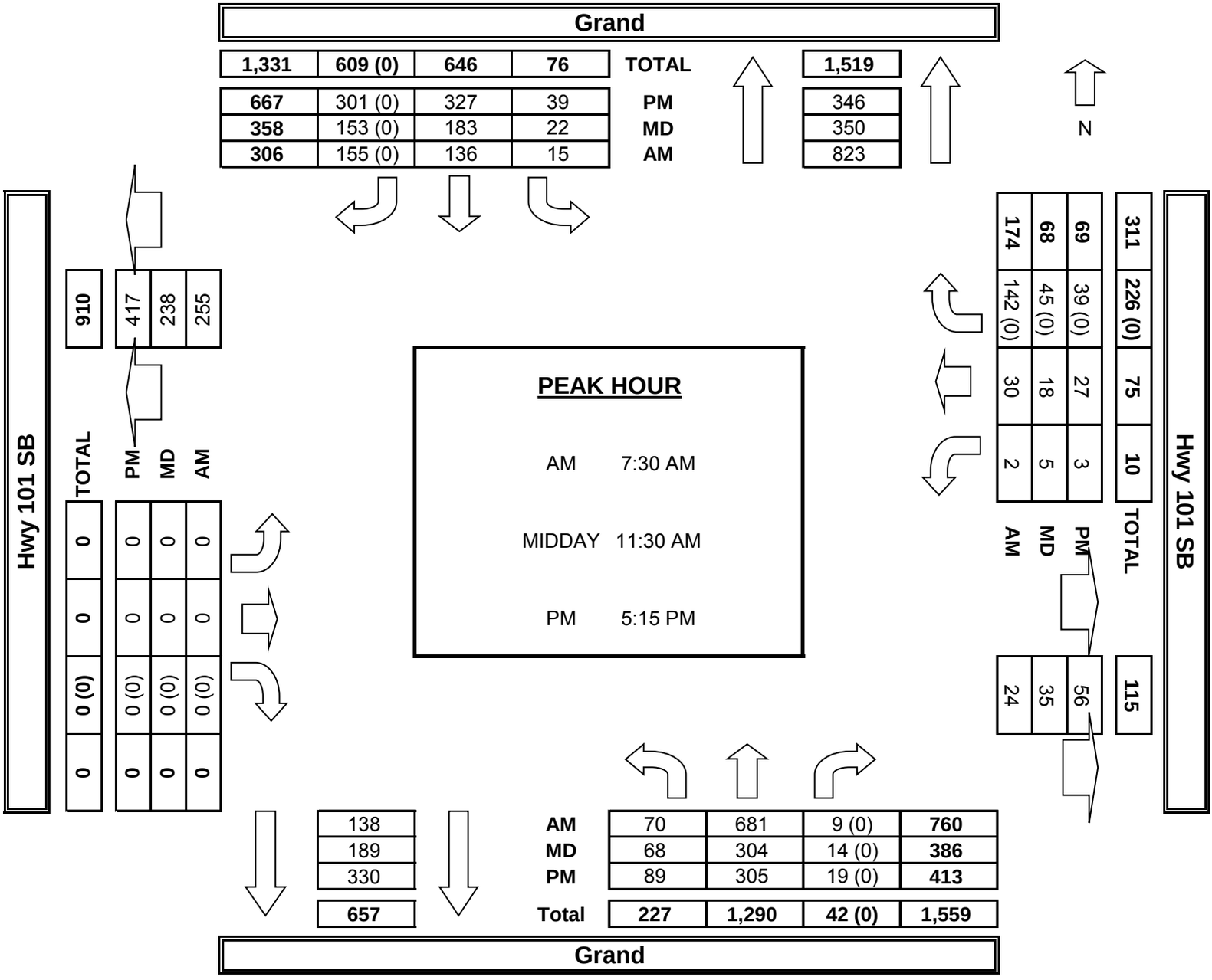
		NORTHBOUND Grand			SOUTHBOUND Grand			EASTBOUND Hwy 101 SB			WESTBOUND Hwy 101 SB			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL X	ET X	ER X	WL 0	WT 1	WR 0	TOTAL
AM	7:30 AM	0	5	0	0	2	0	0	0	0	0	0	0	7
	7:45 AM	0	4	0	0	1	0	0	0	0	0	0	1	6
	8:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	7
	8:15 AM	0	5	0	0	2	0	0	0	0	0	0	0	7
	8:30 AM	0	4	0	0	2	0	0	0	0	0	0	0	6
	8:45 AM	0	6	0	1	0	0	0	0	0	0	0	0	7
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	2	0	1	2	0	0	0	0	0	0	1	6
	VOLUMES	0	33	0	2	9	0	0	0	0	0	0	2	46
	APPROACH %	0%	100%	0%	18%	82%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	33	/	35	11	/	9	0	/	2	2	/	0	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	22	0	1	4	0	0	0	0	0	0	0	27
	APPROACH %	0%	100%	0%	20%	80%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.786			0.625			0.000			0.000		0.964
	APP/DEPART	22	/	22	5	/	4	0	/	1	0	/	0	0
MD	11:30 AM	0	2	0	0	2	0	0	0	0	0	0	0	4
	11:45 AM	0	5	0	1	2	0	0	0	0	0	0	0	8
	12:00 PM	0	4	0	0	0	0	0	0	0	0	0	0	4
	12:15 PM	0	2	0	0	0	0	0	0	0	0	0	1	3
	12:30 PM	0	2	0	0	1	0	0	0	0	0	0	1	4
	12:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
	1:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	1:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	VOLUMES	0	18	0	1	7	0	0	0	0	0	0	2	28
	APPROACH %	0%	100%	0%	13%	88%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	18	/	20	8	/	7	0	/	1	2	/	0	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	0	13	0	1	3	0	0	0	0	0	0	2	19
	APPROACH %	0%	100%	0%	25%	75%	0%	0%	0%	0%	0%	0%	100%	
	PEAK HR FACTOR		0.650			0.333			0.000			0.500		0.594
	APP/DEPART	13	/	15	4	/	3	0	/	1	2	/	0	0
PM	04:30 PM	0	1	0	0	4	0	0	0	0	0	0	0	5
	4:45 PM	0	2	0	0	4	0	0	0	0	0	0	0	6
	5:00 PM	0	3	0	0	6	0	0	0	0	0	0	0	9
	5:15 PM	0	0	0	0	3	0	0	0	0	0	0	0	3
	5:30 PM	0	4	0	4	0	0	0	0	0	0	0	0	8
	5:45 PM	0	4	0	0	2	0	0	0	0	1	0	0	7
	6:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
	6:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	VOLUMES	0	15	0	4	21	0	0	0	0	1	0	0	41
	APPROACH %	0%	100%	0%	16%	84%	0%	0%	0%	0%	100%	0%	0%	
	APP/DEPART	15	/	15	25	/	22	0	/	4	1	/	0	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	0	11	0	4	11	0	0	0	0	1	0	0	27
	APPROACH %	0%	100%	0%	27%	73%	0%	0%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR		0.688			0.625			0.000			0.250		0.750
	APP/DEPART	11	/	11	15	/	12	0	/	4	1	/	0	0



AimTD LLC

TURNING MOVEMENT COUNTS




Grand
1,331
609 (0)
646
76
TOTAL
1,519
667
301 (0)
327
39
PM
346
358
153 (0)
183
22
MD
350
306
155 (0)
136
15
AM
823
N
Hwy 101 SB
910
417
238
255
TOTAL
PM
MD
AM
0
0
0
0
0
0
0
0
0
0 (0)
0 (0)
0 (0)
0 (0)
0
0
0
0
PEAK HOUR
AM 7:30 AM
MIDDAY 11:30 AM
PM 5:15 PM
174
68
69
311
142 (0)
45 (0)
39 (0)
226 (0)
30
18
27
75
2
5
3
10
AM
MD
PM
TOTAL
24
35
56
115
Hwy 101 SB
138
189
330
657
AM
MD
PM
Total
70
681
9 (0)
760
68
304
14 (0)
386
89
305
19 (0)
413
227
1,290
42 (0)
1,559
Grand

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Grand
EAST & WEST: Hwy 101 NB

PROJECT #: SC0843
LOCATION #: 41
CONTROL: SIGNAL

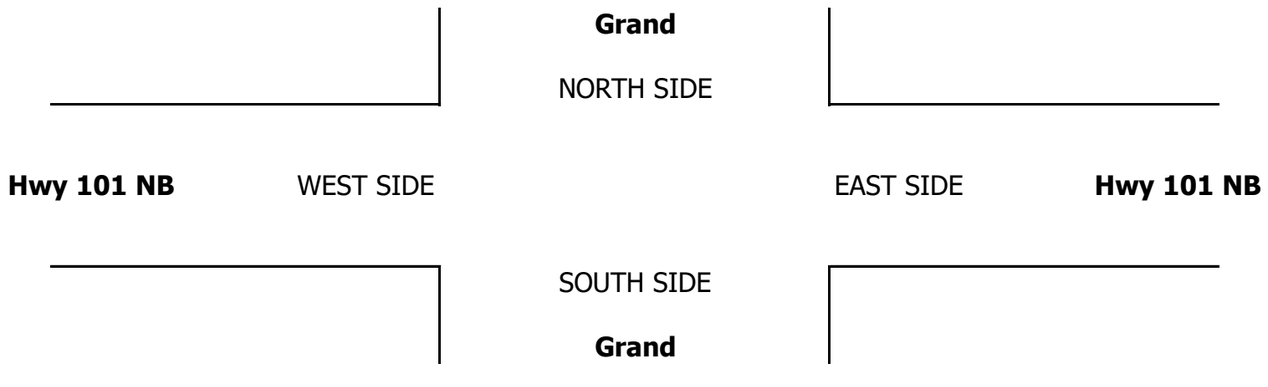
NOTES:

AM PM MD OTHER OTHER

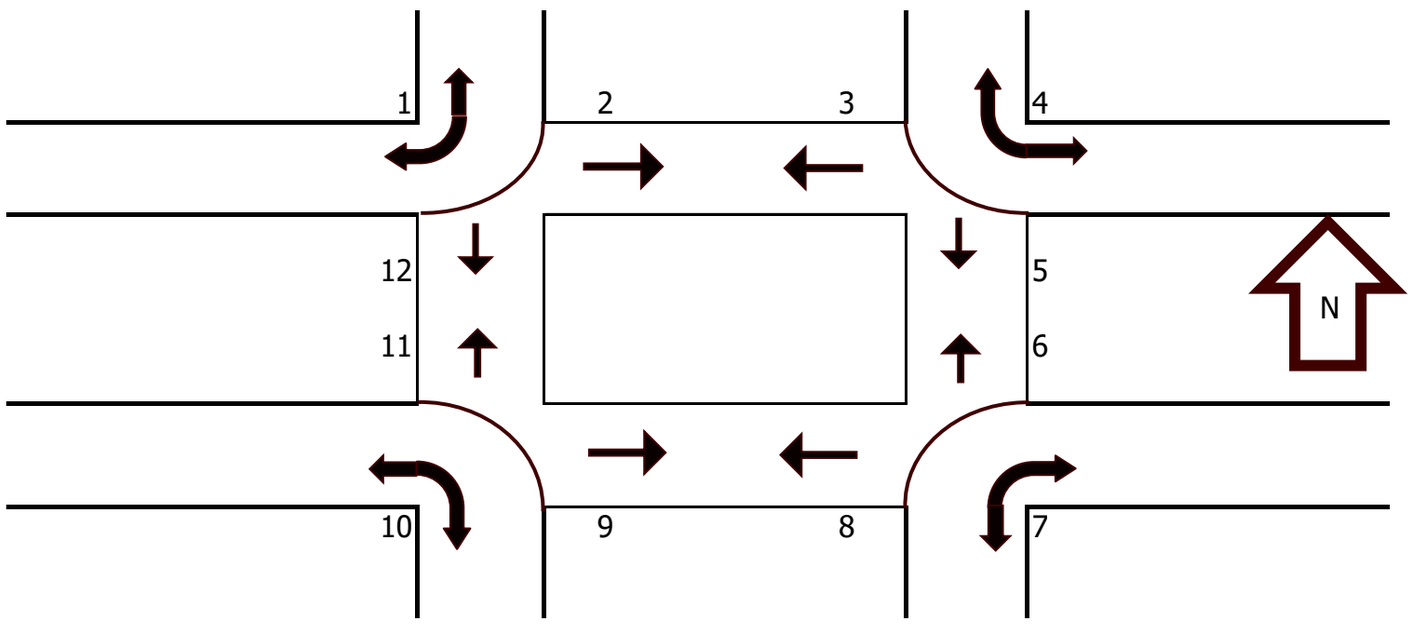
▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Grand			SOUTHBOUND Grand			EASTBOUND Hwy 101 NB			WESTBOUND Hwy 101 NB				U-TURNS				
	LANES:	NL X	NT 2	NR 0	SL 1	ST 2	SR X	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB X	SB X	EB X	WB 0	TTL
AM	7:30 AM	0	67	0	1	20	0	75	1	13	0	0	3	180	0	0	0	0	0
	7:45 AM	0	107	2	0	20	0	142	0	21	2	0	5	299	0	0	0	0	0
	8:00 AM	0	94	1	1	25	0	94	3	25	0	0	1	244	0	0	0	0	0
	8:15 AM	0	80	3	0	45	0	94	3	19	0	0	1	245	0	0	0	0	0
	8:30 AM	0	58	0	0	41	0	78	4	10	0	0	2	193	0	0	0	0	0
	8:45 AM	0	81	2	2	23	0	70	4	10	0	0	1	193	0	0	0	0	0
	9:00 AM	0	61	1	5	44	0	55	3	9	3	0	3	184	0	0	0	0	0
	9:15 AM	0	52	0	2	34	0	43	2	9	0	0	2	144	0	1	0	0	1
	VOLUMES	0	600	9	11	252	0	651	20	116	5	0	18	1,682	0	1	0	0	1
	APPROACH %	0%	99%	1%	4%	96%	0%	83%	3%	15%	22%	0%	78%						
	APP/DEPART	609	/	1,270	263	/	373	787	/	39	23	/	0	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	339	6	1	131	0	408	10	75	2	0	9	981					
	APPROACH %	0%	98%	2%	1%	99%	0%	83%	2%	15%	18%	0%	82%						
	PEAK HR FACTOR		0.791			0.733			0.756			0.393		0.820					
	APP/DEPART	345	/	756	132	/	208	493	/	17	11	/	0	0					
MD	11:30 AM	0	52	0	2	43	0	47	1	10	0	0	2	157	0	0	0	0	0
	11:45 AM	0	48	0	6	40	0	54	2	6	3	0	3	162	0	1	0	0	1
	12:00 PM	0	47	0	3	50	0	40	2	7	2	0	1	152	0	0	0	0	0
	12:15 PM	0	55	0	2	46	0	24	1	9	2	0	0	139	0	1	0	0	1
	12:30 PM	0	50	1	3	36	0	33	4	11	0	0	1	139	0	0	0	0	0
	12:45 PM	0	53	2	0	35	0	33	0	10	2	0	0	135	0	0	0	0	0
	1:00 PM	0	51	0	0	33	0	26	0	18	0	0	2	130	0	0	0	0	0
	1:15 PM	0	47	0	3	26	0	53	2	14	1	0	0	146	0	0	0	0	0
	VOLUMES	0	403	3	19	309	0	310	12	85	10	0	9	1,160	0	2	0	0	2
	APPROACH %	0%	99%	1%	6%	94%	0%	76%	3%	21%	53%	0%	47%						
	APP/DEPART	406	/	724	328	/	404	407	/	32	19	/	0	0					
	BEGIN PEAK HR		11:30 AM																
	VOLUMES	0	202	0	13	179	0	165	6	32	7	0	6	610					
	APPROACH %	0%	100%	0%	7%	93%	0%	81%	3%	16%	54%	0%	46%						
	PEAK HR FACTOR		0.918			0.906			0.819			0.542		0.941					
	APP/DEPART	202	/	375	192	/	218	203	/	17	13	/	0	0					
PM	04:00 PM	0	67	2	3	88	0	40	1	12	0	0	3	216	0	0	0	0	0
	4:15 PM	1	42	1	2	79	0	27	4	15	1	0	1	173	1	0	0	0	1
	4:30 PM	0	55	0	5	61	0	37	3	11	1	0	0	173	0	0	0	0	0
	4:45 PM	0	60	1	5	51	0	34	4	18	2	0	3	178	0	0	0	0	0
	5:00 PM	0	37	1	0	53	0	25	4	9	0	0	1	130	0	0	0	0	0
	5:15 PM	0	61	0	1	82	0	41	3	19	0	0	2	209	0	0	0	0	0
	5:30 PM	0	59	2	3	74	0	26	0	11	1	0	5	181	0	0	0	0	0
	5:45 PM	0	59	2	4	74	0	45	5	12	0	0	2	203	0	0	0	0	0
	VOLUMES	1	440	9	23	562	0	275	24	107	5	0	17	1,463	1	0	0	0	1
	APPROACH %	0%	98%	2%	4%	96%	0%	68%	6%	26%	23%	0%	77%						
	APP/DEPART	450	/	732	585	/	675	406	/	56	22	/	0	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	1	224	4	15	279	0	138	12	56	4	0	7	740					
	APPROACH %	0%	98%	2%	5%	95%	0%	67%	6%	27%	36%	0%	64%						
	PEAK HR FACTOR		0.830			0.808			0.920			0.550		0.856					
	APP/DEPART	229	/	369	294	/	340	206	/	31	11	/	0	0					



		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	0	0	2	1	0	0	0	0	1	0	4
	7:45 AM	0	0	0	0	1	3	0	2	2	0	0	0	8
	8:00 AM	0	0	0	0	1	0	0	3	1	0	2	1	8
	8:15 AM	0	0	0	0	0	0	0	2	0	0	6	0	8
	8:30 AM	0	0	0	0	2	0	0	2	0	0	3	1	8
	8:45 AM	0	0	0	1	2	3	1	2	2	0	2	0	13
	9:00 AM	0	0	0	1	1	4	0	0	3	0	2	0	11
	9:15 AM	2	0	0	0	2	1	0	2	0	1	1	2	11
	TOTAL	2	0	0	2	11	12	1	13	8	1	17	4	71
MD	11:30 AM	1	0	0	1	3	2	0	2	1	0	1	1	12
	11:45 AM	0	0	0	1	3	5	0	2	0	0	2	4	17
	12:00 PM	0	0	0	1	2	2	0	6	4	0	0	1	16
	12:15 PM	0	0	0	0	0	2	0	0	0	0	2	1	5
	12:30 PM	0	0	0	0	1	0	0	1	0	0	1	1	4
	12:45 PM	0	0	0	0	2	4	0	0	0	0	1	2	9
	1:00 PM	0	0	0	0	2	0	1	0	0	0	0	0	3
	1:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	TOTAL	1	0	0	3	13	15	1	12	5	0	7	10	67
PM	4:00 PM	0	0	0	0	13	0	0	8	0	0	2	2	25
	4:15 PM	0	0	0	0	0	5	0	0	0	0	0	5	10
	4:30 PM	0	0	0	0	0	18	0	2	0	0	2	3	25
	4:45 PM	0	0	0	0	1	2	0	0	2	0	0	2	7
	5:00 PM	0	0	0	0	2	1	0	2	1	0	0	0	6
	5:15 PM	0	0	0	0	3	1	0	2	0	0	0	2	8
	5:30 PM	0	0	0	0	3	1	0	2	0	0	1	0	7
	5:45 PM	0	0	0	0	1	0	0	2	3	0	0	1	7
	TOTAL	0	0	0	0	23	28	0	18	6	0	5	15	95



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:				
Tue, Feb 23, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
	NORTH & SOUTH:	Grand	LOCATION #:	41
	EAST & WEST:	Hwy 101 NB	CONTROL:	SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

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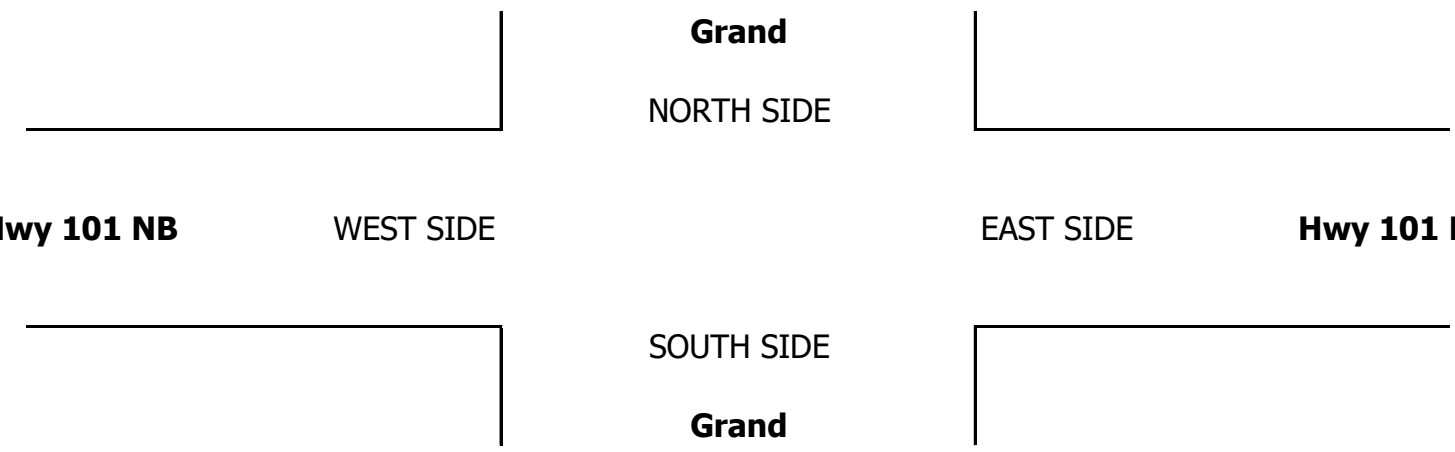
		NORTHBOUND Grand			SOUTHBOUND Grand			EASTBOUND Hwy 101 NB			WESTBOUND Hwy 101 NB			
	LANES:	NL X	NT 2	NR 0	SL 1	ST 2	SR X	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:30 AM	0	3	0	0	2	0	0	0	0	0	0	0	5
	7:45 AM	0	4	0	0	0	0	0	0	0	0	0	0	4
	8:00 AM	0	8	0	0	1	0	0	0	0	0	0	1	10
	8:15 AM	0	4	0	0	2	0	0	0	0	0	0	0	6
	8:30 AM	0	4	0	0	2	0	0	0	0	0	0	0	6
	8:45 AM	0	6	0	0	0	0	0	0	0	0	0	0	6
	9:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	31	0	0	7	0	0	0	0	0	0	1	39
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	31	/	32	7	/	7	0	/	0	1	/	0	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	0	22	0	0	5	0	0	0	0	0	0	1	28
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	
	PEAK HR FACTOR		0.688			0.625			0.000			0.250		0.700
	APP/DEPART	22	/	23	5	/	5	0	/	0	1	/	0	0
MD	11:30 AM	0	2	0	0	2	0	0	0	0	0	0	0	4
	11:45 AM	0	5	0	0	0	0	0	0	0	0	0	0	5
	12:00 PM	0	5	0	0	2	0	0	0	0	0	0	0	7
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	12:45 PM	0	3	0	0	1	0	0	0	0	0	0	0	4
	1:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	16	0	0	7	0	0	0	0	0	0	0	23
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	16	/	16	7	/	7	0	/	0	0	/	0	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	0	12	0	0	4	0	0	0	0	0	0	0	16
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.600			0.500			0.000			0.000		0.571
	APP/DEPART	12	/	12	4	/	4	0	/	0	0	/	0	0
PM	04:00 PM	0	0	0	0	4	0	0	0	0	0	0	0	4
	4:15 PM	0	4	0	0	4	0	0	0	0	0	0	0	8
	4:30 PM	0	0	0	1	6	0	0	0	0	0	0	0	7
	4:45 PM	0	1	0	1	3	0	0	0	0	0	0	0	5
	5:00 PM	0	1	0	0	3	0	0	0	0	0	0	0	4
	5:15 PM	0	0	0	1	1	0	0	0	0	0	0	0	2
	5:30 PM	0	4	0	0	0	0	0	0	0	0	0	0	4
	5:45 PM	0	3	0	0	1	0	0	0	0	0	0	0	4
	VOLUMES	0	13	0	3	22	0	0	0	0	0	0	0	38
	APPROACH %	0%	100%	0%	12%	88%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	13	/	13	25	/	22	0	/	3	0	/	0	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	6	0	2	16	0	0	0	0	0	0	0	24
	APPROACH %	0%	100%	0%	11%	89%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.375			0.643			0.000			0.000		0.750
	APP/DEPART	6	/	6	18	/	16	0	/	2	0	/	0	0



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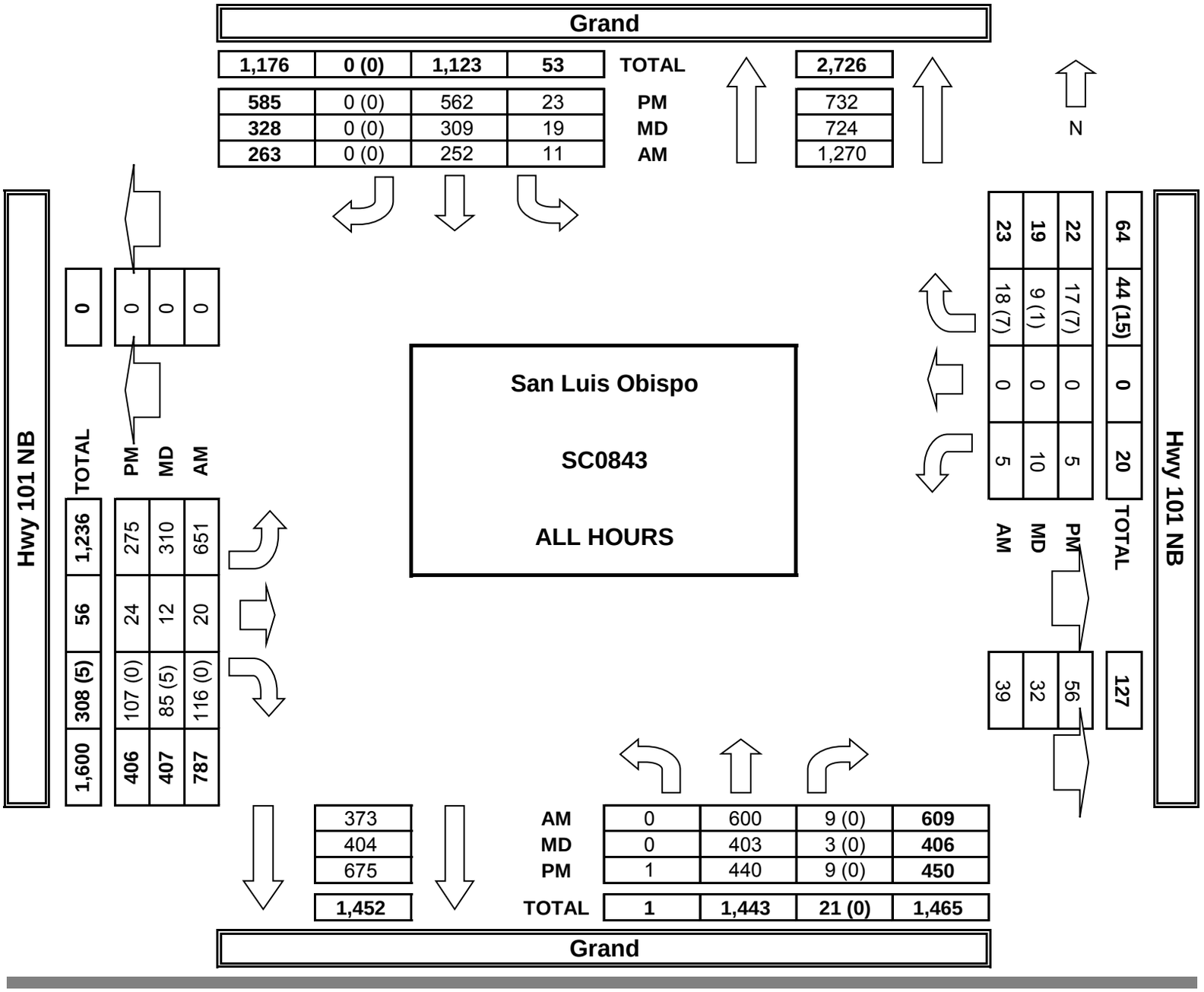
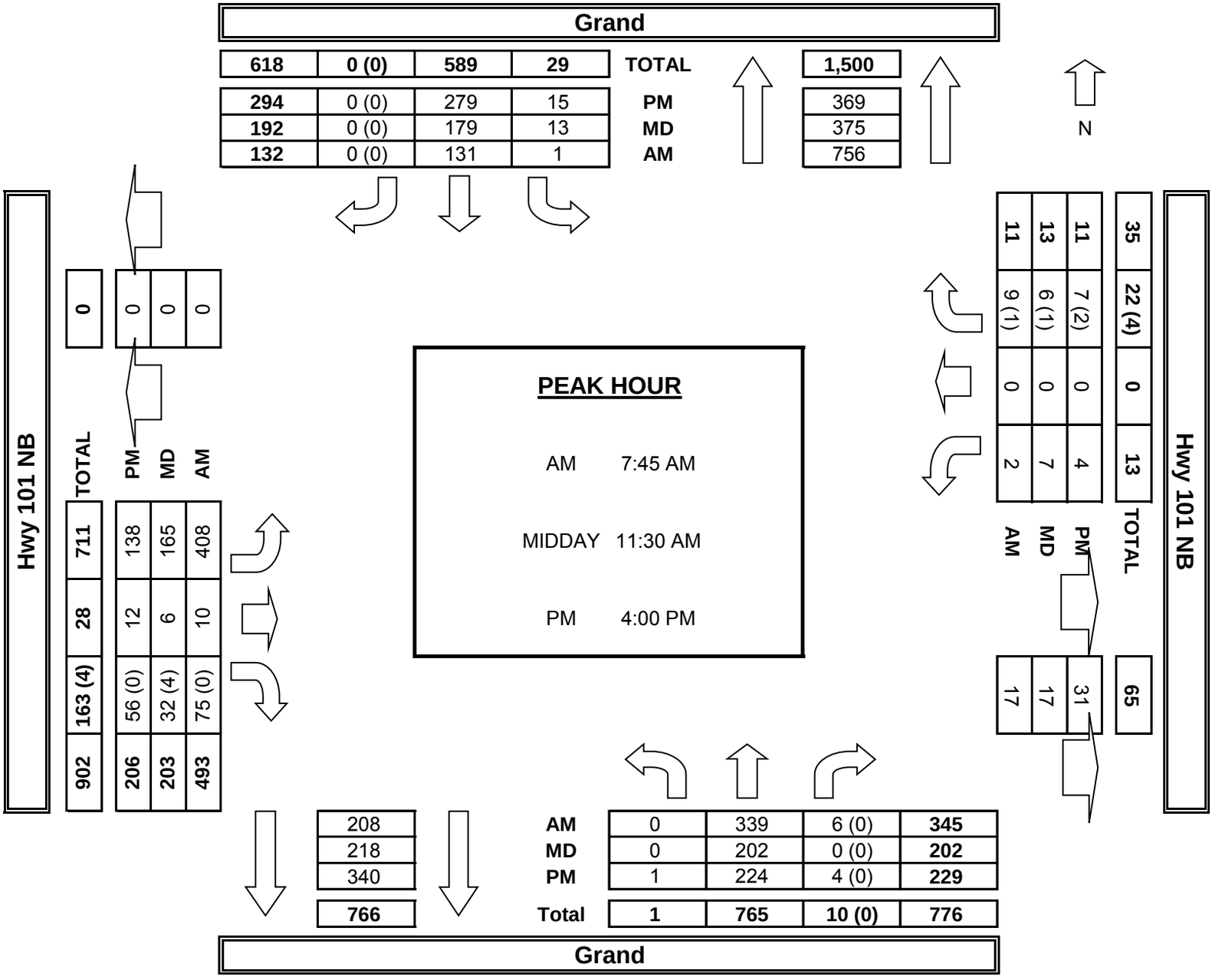
TURNING MOVEMENT COUNTS




Grand
618
0 (0)
589
29
TOTAL
1,500
294
0 (0)
279
15
PM
369
192
0 (0)
179
13
MD
375
132
0 (0)
131
1
AM
756
N
Hwy 101 NB
0
0
0
0
TOTAL
PM
MD
AM
711
138
165
408
28
12
6
10
163 (4)
56 (0)
32 (4)
75 (0)
902
206
203
493
PEAK HOUR
AM 7:45 AM
MIDDAY 11:30 AM
PM 4:00 PM
11
13
11
35
9 (1)
6 (1)
7 (2)
22 (4)
0
0
0
0
2
7
4
13
AM
MD
PM
TOTAL
17
17
31
65
Hwy 101 NB
208
218
340
766
AM
MD
PM
Total
0
339
6 (0)
345
0
202
0 (0)
202
1
224
4 (0)
229
1
765
10 (0)
776
Grand

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Grand
EAST & WEST: Mill

PROJECT #: SC0843
LOCATION #: 42
CONTROL: STOP E/W

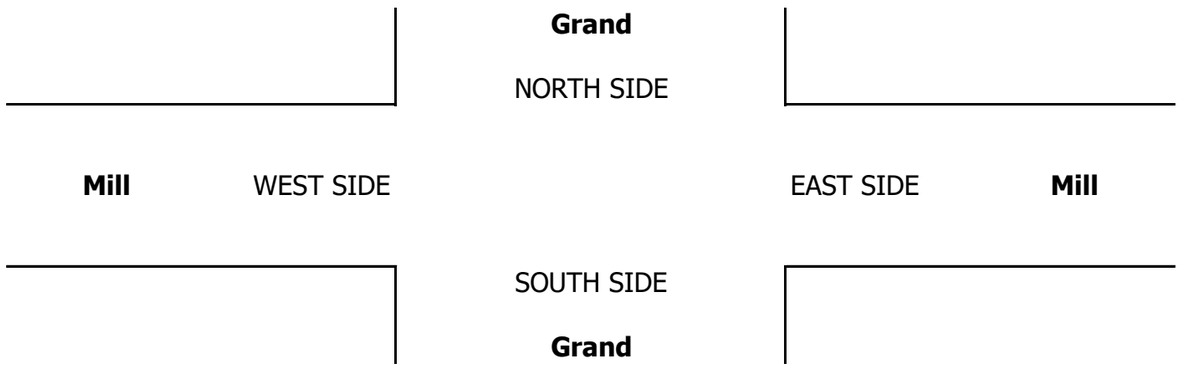
NOTES:

AM PM MD OTHER OTHER

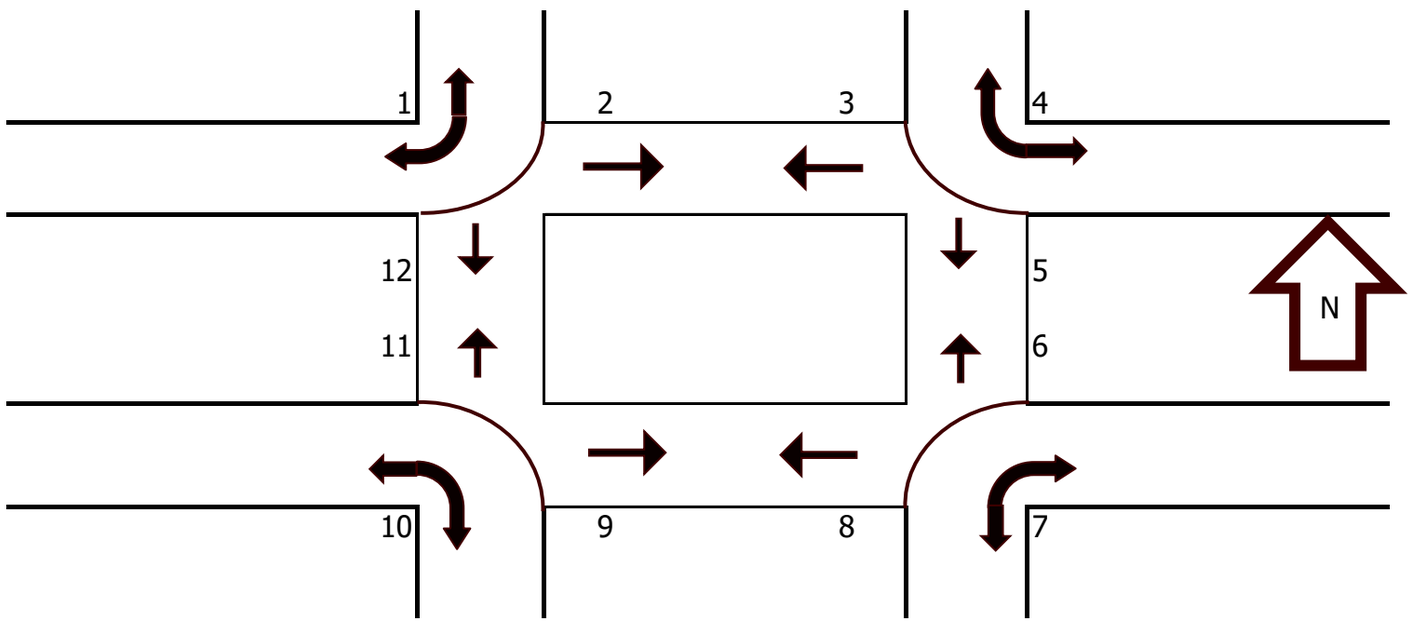
▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Grand			SOUTHBOUND Grand			EASTBOUND Mill			WESTBOUND Mill				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 0	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:30 AM	6	65	0	1	32	6	4	0	5	0	0	3	122	0	1	0	0	1
	7:45 AM	5	104	0	0	33	7	13	0	2	0	0	3	167	0	0	0	0	0
	8:00 AM	10	85	0	2	37	6	9	0	4	0	0	1	154	0	1	0	0	1
	8:15 AM	8	59	0	0	49	8	4	0	4	0	1	0	133	0	0	0	0	0
	8:30 AM	2	53	0	1	46	6	3	0	9	0	1	0	121	0	0	0	0	0
	8:45 AM	3	64	0	1	32	4	4	0	10	0	0	1	119	0	1	0	0	1
	9:00 AM	4	35	0	2	50	9	5	0	5	0	2	1	113	0	1	0	0	1
	9:15 AM	0	52	0	3	40	4	10	0	0	0	0	0	109	0	3	0	0	3
	VOLUMES	38	517	0	10	319	50	52	0	39	0	4	9	1,038	0	7	0	0	7
	APPROACH %	7%	93%	0%	3%	84%	13%	57%	0%	43%	0%	31%	69%						
	APP/DEPART	555	/	585	379	/	358	91	/	3	13	/	92	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	29	313	0	3	151	27	30	0	15	0	1	7	576					
	APPROACH %	8%	92%	0%	2%	83%	15%	67%	0%	33%	0%	13%	88%						
	PEAK HR FACTOR		0.784			0.794			0.750			0.667		0.862					
	APP/DEPART	342	/	352	181	/	166	45	/	1	8	/	57	0					
MD	11:30 AM	2	49	1	1	49	7	6	1	2	0	0	1	119	0	0	0	0	0
	11:45 AM	5	41	0	1	41	6	5	0	2	1	1	0	103	1	0	0	0	1
	12:00 PM	4	45	0	3	47	8	5	0	2	0	0	0	114	0	2	0	0	2
	12:15 PM	3	42	0	2	55	2	3	1	6	0	0	0	114	0	2	0	0	2
	12:30 PM	3	38	1	1	44	6	3	0	2	1	0	0	99	1	0	0	0	1
	12:45 PM	1	43	2	3	41	7	5	0	2	0	0	1	105	0	1	0	0	1
	1:00 PM	1	44	0	2	43	5	8	0	1	2	0	2	108	0	1	0	0	1
	1:15 PM	5	40	0	4	35	2	9	0	2	0	0	2	99	1	3	0	0	4
	VOLUMES	24	342	4	17	355	43	44	2	19	4	1	6	861	3	9	0	0	12
	APPROACH %	6%	92%	1%	4%	86%	10%	68%	3%	29%	36%	9%	55%						
	APP/DEPART	370	/	401	415	/	381	65	/	14	11	/	65	0					
	BEGIN PEAK HR		11:30 AM																
	VOLUMES	14	177	1	7	192	23	19	2	12	1	1	1	450					
	APPROACH %	7%	92%	1%	3%	86%	10%	58%	6%	36%	33%	33%	33%						
	PEAK HR FACTOR		0.923			0.941			0.825			0.375		0.945					
	APP/DEPART	192	/	201	222	/	206	33	/	6	3	/	37	0					
PM	03:30 PM	2	45	0	0	49	8	1	0	2	0	0	2	109	0	0	0	0	0
	3:45 PM	0	58	0	0	73	2	6	1	4	0	0	2	146	0	0	0	0	0
	4:00 PM	3	45	0	0	94	11	11	0	3	0	0	2	169	0	0	0	0	0
	4:15 PM	1	32	1	4	82	9	8	0	2	1	1	1	142	0	4	0	0	4
	4:30 PM	3	39	1	3	60	5	5	1	2	0	0	0	119	1	3	0	0	4
	4:45 PM	3	40	0	5	55	7	6	0	6	0	0	0	122	0	3	0	0	3
	5:00 PM	1	45	1	7	69	9	4	0	5	0	1	4	146	0	0	0	0	0
	5:15 PM	2	48	0	6	101	5	7	2	4	1	0	2	178	0	3	0	0	3
	VOLUMES	15	352	3	25	583	56	48	4	28	2	2	13	1,131	1	13	0	0	14
	APPROACH %	4%	95%	1%	4%	88%	8%	60%	5%	35%	12%	12%	76%						
	APP/DEPART	370	/	426	664	/	614	80	/	19	17	/	72	0					
	BEGIN PEAK HR		3:45 PM																
	VOLUMES	7	174	2	7	309	27	30	2	11	1	1	5	576					
	APPROACH %	4%	95%	1%	2%	90%	8%	70%	5%	26%	14%	14%	71%						
	PEAK HR FACTOR		0.789			0.817			0.768			0.583		0.852					
	APP/DEPART	183	/	216	343	/	322	43	/	4	7	/	34	0					



		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	1	0	0	0	0	1	0	0	0	0	0	1	3
	7:45 AM	2	1	0	0	0	0	0	11	0	0	1	3	18
	8:00 AM	3	1	0	0	0	0	0	0	0	0	1	0	5
	8:15 AM	0	1	0	0	0	0	0	2	0	0	2	2	7
	8:30 AM	3	0	0	0	0	0	0	0	0	0	0	0	3
	8:45 AM	2	0	0	0	0	0	0	2	0	0	0	1	5
	9:00 AM	1	0	0	0	0	0	0	0	0	1	0	0	2
	9:15 AM	1	3	0	1	0	0	0	1	0	0	0	2	8
	TOTAL	13	6	0	1	0	1	0	16	0	1	4	9	51
MD	11:30 AM	3	0	0	0	0	0	0	0	0	0	0	0	3
	11:45 AM	3	2	0	0	0	0	0	3	0	1	1	3	13
	12:00 PM	1	1	0	0	0	0	0	0	0	0	0	3	5
	12:15 PM	1	0	0	0	0	0	0	0	0	0	1	1	3
	12:30 PM	0	0	1	0	0	0	0	0	0	0	4	3	8
	12:45 PM	1	0	0	0	1	1	0	5	0	0	0	1	9
	1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	9	3	2	0	1	1	0	8	0	1	6	11	42
PM	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
	3:45 PM	1	0	0	0	18	0	0	2	0	0	1	1	23
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	5	0	0	6	0	0	0	0	1	0	12
	4:45 PM	0	0	0	0	0	3	0	0	0	0	0	0	3
	5:00 PM	0	0	1	0	1	0	0	0	1	0	0	1	4
	5:15 PM	1	1	1	0	0	1	0	2	0	0	0	2	8
	TOTAL	2	1	7	0	19	10	0	4	1	0	2	5	51



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Grand
EAST & WEST: Mill

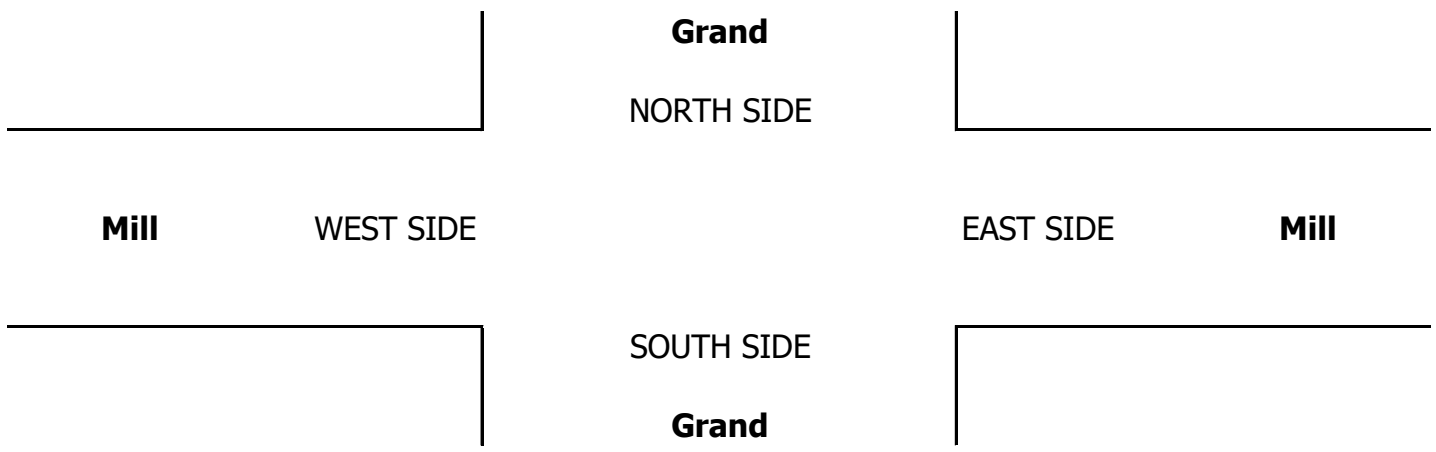
PROJECT #: SC0843
LOCATION #: 42
CONTROL: STOP E/W

NOTES:

AM
PM
MD
OTHER
OTHER

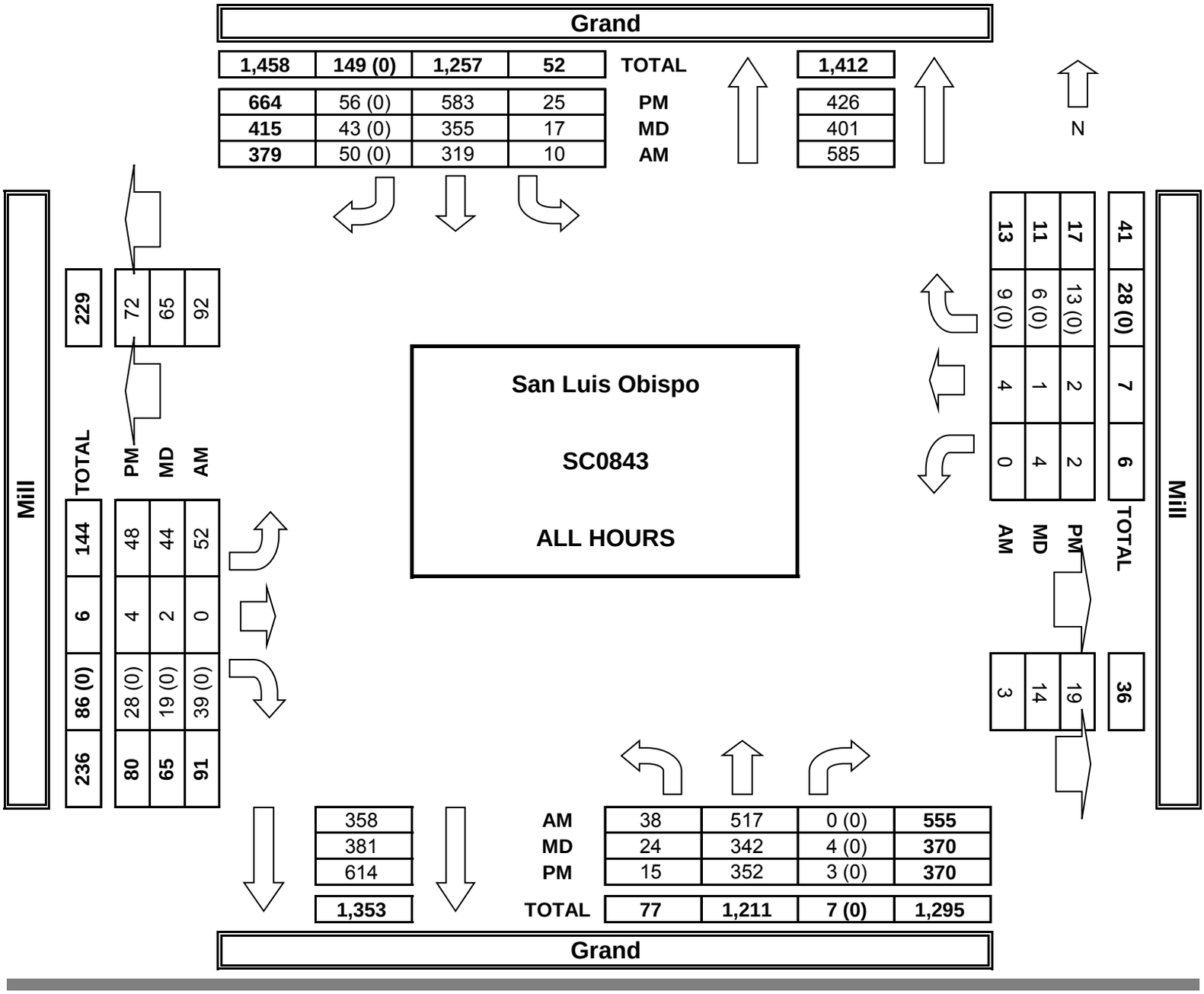
▲ N
◄ W E ►
S ▼

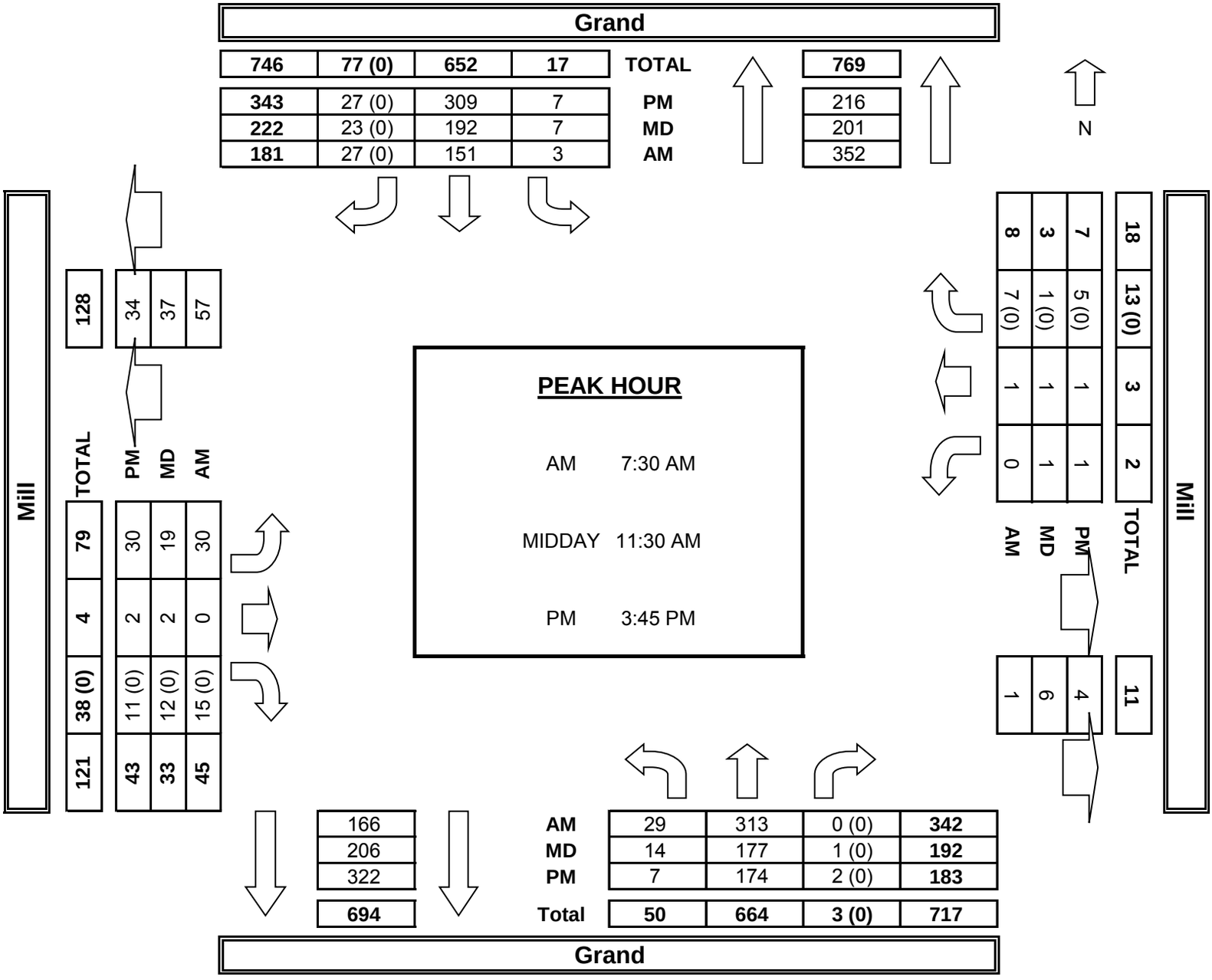
		NORTHBOUND Grand			SOUTHBOUND Grand			EASTBOUND Mill			WESTBOUND Mill			
	LANES:	NL 1	NT 2	NR 0	SL 0	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	0	1	0	0	0	0	1	0	0	0	0	0	2
	8:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
	8:15 AM	0	4	0	0	0	0	0	0	0	0	0	0	4
	8:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	8:45 AM	0	1	0	0	0	0	3	0	0	0	1	1	6
	9:00 AM	0	1	0	0	0	0	0	0	0	0	1	1	3
	9:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	VOLUMES	0	11	0	0	1	0	4	0	0	0	3	2	21
	APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	0%	60%	40%	
	APP/DEPART	11	/	17	1	/	1	4	/	0	5	/	3	0
	BEGIN PEAK HR		8:15 AM											
	VOLUMES	0	7	0	0	1	0	3	0	0	0	2	2	15
	APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	0%	50%	50%	
	PEAK HR FACTOR		0.438			0.250			0.250			0.500		0.625
	APP/DEPART	7	/	12	1	/	1	3	/	0	4	/	2	0
MD	11:30 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
	11:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
	12:00 PM	0	1	0	0	0	0	1	0	0	0	1	0	3
	12:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	1	0	0	0	0	1	0	0	0	0	0	2
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	3	0	0	2	0	3	0	0	0	1	0	9
	APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	0%	100%	0%	
	APP/DEPART	3	/	6	2	/	2	3	/	0	1	/	1	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	0	2	0	0	2	0	2	0	0	0	1	0	7
	APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.500			0.250			0.500			0.250		0.583
	APP/DEPART	2	/	4	2	/	2	2	/	0	1	/	1	0
PM	03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	4:00 PM	0	1	0	1	0	0	0	1	0	0	0	0	3
	4:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	2
	4:30 PM	0	0	0	0	1	1	0	0	0	0	0	0	2
	4:45 PM	0	3	0	0	1	0	0	0	0	0	0	0	4
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	1	0	0	2	0	0	0	0	0	0	0	3
	VOLUMES	0	6	0	1	5	2	0	1	0	0	0	0	15
	APPROACH %	0%	100%	0%	13%	63%	25%	0%	100%	0%	0%	0%	0%	
	APP/DEPART	6	/	6	8	/	5	1	/	2	0	/	2	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	5	0	1	2	2	0	1	0	0	0	0	11
	APPROACH %	0%	100%	0%	20%	40%	40%	0%	100%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.417			0.625			0.250			0.000		0.688
	APP/DEPART	5	/	5	5	/	2	1	/	2	0	/	2	0



AimTD LLC

TURNING MOVEMENT COUNTS




Grand
746
77 (0)
652
17
TOTAL
769
343
27 (0)
309
7
PM
216
222
23 (0)
192
7
MD
201
181
27 (0)
151
3
AM
352
N
Mill
128
34
37
57
TOTAL
PM
MD
AM
79
30
19
30
4
2
2
0
38 (0)
11 (0)
12 (0)
15 (0)
121
43
33
45
PEAK HOUR
AM 7:30 AM
MIDDAY 11:30 AM
PM 3:45 PM
8
3
7
18
7 (0)
1 (0)
5 (0)
13 (0)
1
1
1
3
0
1
1
2
AM
MD
PM
TOTAL
1
6
4
11
Mill
166
206
322
694
AM
MD
PM
Total
29
313
0 (0)
342
14
177
1 (0)
192
7
174
2 (0)
183
50
664
3 (0)
717
Grand

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Grand
EAST & WEST: Monterey

PROJECT #: SC0843
LOCATION #: 43
CONTROL: SIGNAL

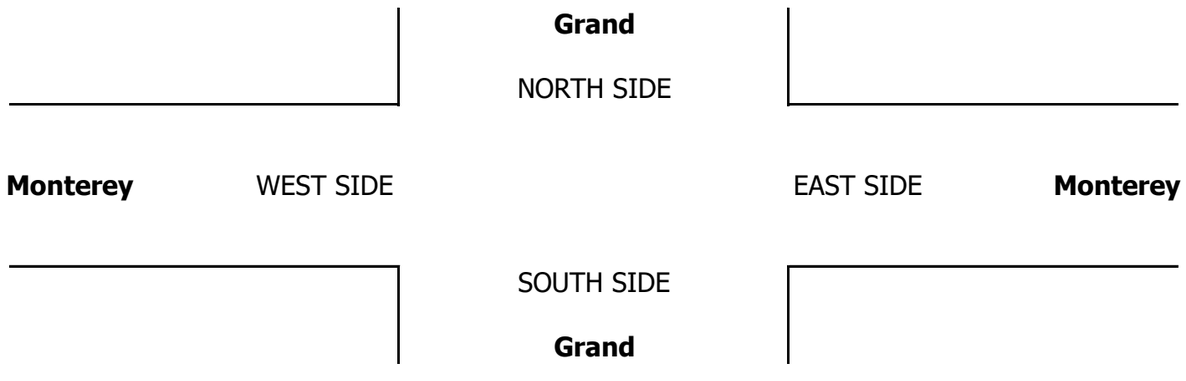
NOTES:

AM PM MD OTHER OTHER

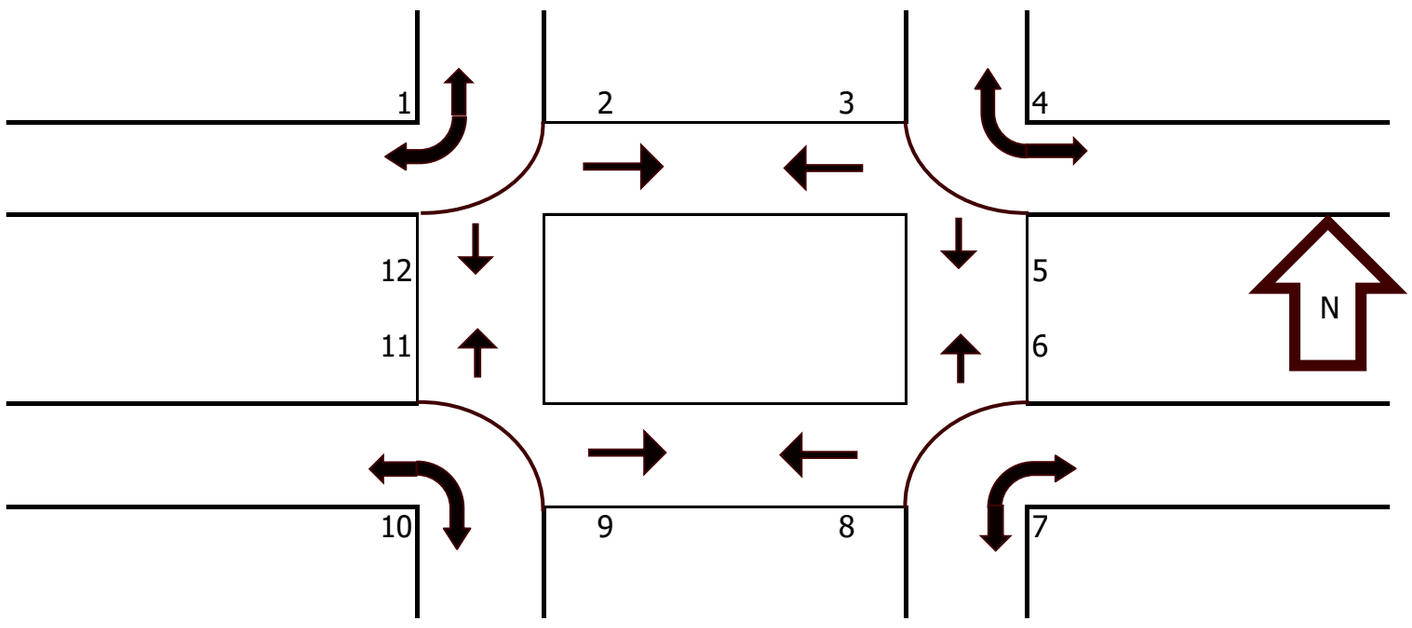
▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Grand			SOUTHBOUND Grand			EASTBOUND Monterey			WESTBOUND Monterey				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 1	ST 0.5	SR 0.5	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:30 AM	1	1	0	10	1	27	58	40	0	0	132	13	283	0	0	0	0	0
	7:45 AM	0	0	0	8	0	32	89	43	1	0	119	13	305	0	0	0	0	0
	8:00 AM	0	0	0	7	1	30	81	35	1	0	104	15	274	0	0	0	0	0
	8:15 AM	1	0	0	9	1	38	49	42	0	0	107	13	260	0	0	0	0	0
	8:30 AM	1	1	0	8	1	43	44	40	3	0	100	15	256	0	0	0	0	0
	8:45 AM	0	0	0	11	1	24	57	39	2	0	109	8	251	0	0	0	0	0
	9:00 AM	1	0	0	6	0	43	30	31	4	0	84	13	212	0	0	0	0	0
	9:15 AM	2	0	0	10	0	34	39	36	0	0	52	8	181	0	1	0	0	1
	VOLUMES	6	2	0	69	5	271	447	306	11	0	807	98	2,022	0	1	0	0	1
	APPROACH %	75%	25%	0%	20%	1%	79%	59%	40%	1%	0%	89%	11%						
	APP/DEPART	8	/	548	345	/	16	764	/	374	905	/	1,084	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	2	1	0	34	3	127	277	160	2	0	462	54	1,122					
	APPROACH %	67%	33%	0%	21%	2%	77%	63%	36%	0%	0%	90%	10%						
	PEAK HR FACTOR		0.375			0.854			0.825			0.890		0.920					
	APP/DEPART	3	/	332	164	/	5	439	/	194	516	/	591	0					
MD	11:30 AM	0	0	0	5	0	49	43	38	0	0	46	5	186	0	0	0	0	0
	11:45 AM	0	2	0	7	0	34	39	43	1	0	56	7	189	0	1	0	0	1
	12:00 PM	0	0	0	13	0	47	41	49	0	0	52	8	210	0	4	0	0	4
	12:15 PM	0	0	0	12	0	45	39	53	0	0	77	8	234	0	0	0	0	0
	12:30 PM	0	0	0	6	0	40	27	67	0	0	56	4	200	0	0	0	0	0
	12:45 PM	0	0	0	4	0	34	45	48	0	0	63	8	202	0	0	0	0	0
	1:00 PM	0	0	0	5	0	42	35	38	0	0	62	5	187	0	0	0	0	0
	1:15 PM	0	0	0	5	0	29	39	50	0	0	67	8	198	0	0	0	0	0
	VOLUMES	0	2	0	57	0	320	308	386	1	0	479	53	1,606	0	5	0	0	5
	APPROACH %	0%	100%	0%	15%	0%	85%	44%	56%	0%	0%	90%	10%						
	APP/DEPART	2	/	368	377	/	1	695	/	438	532	/	799	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	0	0	0	35	0	166	152	217	0	0	248	28	846					
	APPROACH %	0%	0%	0%	17%	0%	83%	41%	59%	0%	0%	90%	10%						
	PEAK HR FACTOR		0.000			0.838			0.981			0.812		0.904					
	APP/DEPART	0	/	184	201	/	0	369	/	248	276	/	414	0					
PM	03:30 PM	0	1	0	19	1	40	42	104	1	0	64	4	276	0	0	0	0	0
	3:45 PM	1	0	0	17	0	62	57	97	2	0	70	4	310	0	1	0	0	1
	4:00 PM	0	0	0	37	0	62	40	97	0	0	57	4	297	0	0	0	0	0
	4:15 PM	1	0	0	18	0	65	30	87	1	0	55	4	261	0	0	0	0	0
	4:30 PM	0	1	0	21	0	41	38	98	0	0	56	4	259	0	0	0	0	0
	4:45 PM	1	0	0	25	0	35	35	103	0	1	61	8	269	0	0	0	0	0
	5:00 PM	0	0	0	23	0	53	45	126	0	1	65	2	315	0	1	0	0	1
	5:15 PM	1	0	0	26	0	71	51	127	2	0	65	3	346	0	0	0	0	0
	VOLUMES	4	2	0	186	1	429	338	839	6	2	493	33	2,333	0	2	0	0	2
	APPROACH %	67%	33%	0%	30%	0%	70%	29%	71%	1%	0%	93%	6%						
	APP/DEPART	6	/	375	616	/	9	1,183	/	1,023	528	/	926	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	2	1	0	95	0	200	169	454	2	2	247	17	1,189					
	APPROACH %	67%	33%	0%	32%	0%	68%	27%	73%	0%	1%	93%	6%						
	PEAK HR FACTOR		0.750			0.760			0.868			0.950		0.859					
	APP/DEPART	3	/	188	295	/	4	625	/	548	266	/	449	0					



		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	3	0	0	0	0	0	1	0	0	0	4
	7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	8:00 AM	0	0	1	0	0	0	0	2	6	0	2	0	11
	8:15 AM	0	0	0	0	1	0	0	2	1	0	3	0	7
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
	9:00 AM	0	0	0	0	0	1	0	1	3	0	3	0	8
	9:15 AM	0	2	0	0	0	0	0	0	0	0	1	0	3
	TOTAL	0	2	4	0	1	1	0	7	11	0	10	0	36
MD	11:30 AM	0	2	0	0	0	0	0	2	0	0	1	2	7
	11:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
	12:00 PM	0	0	0	0	0	0	0	1	0	0	0	1	2
	12:15 PM	0	0	0	0	0	1	0	3	1	0	1	3	9
	12:30 PM	0	1	0	0	1	0	0	0	0	0	1	2	5
	12:45 PM	0	0	0	0	0	0	0	1	0	1	0	1	3
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:15 PM	0	1	1	0	0	0	0	0	0	0	0	1	3
	TOTAL	0	4	1	0	1	1	0	7	2	1	3	10	30
PM	3:30 PM	0	0	0	0	1	0	1	1	0	0	0	1	4
	3:45 PM	0	0	1	0	26	0	0	0	0	0	2	0	29
	4:00 PM	1	0	0	0	1	0	0	0	1	0	0	1	4
	4:15 PM	2	0	0	0	1	4	0	1	1	0	0	1	10
	4:30 PM	0	0	0	0	0	20	0	0	2	0	1	2	25
	4:45 PM	0	1	2	1	0	2	1	1	2	0	0	0	10
	5:00 PM	0	2	2	0	0	0	0	0	2	0	0	1	7
	5:15 PM	2	0	1	0	1	3	1	2	3	1	0	1	15
	TOTAL	5	3	6	1	30	29	3	5	11	1	3	7	104



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Grand
EAST & WEST: Monterey

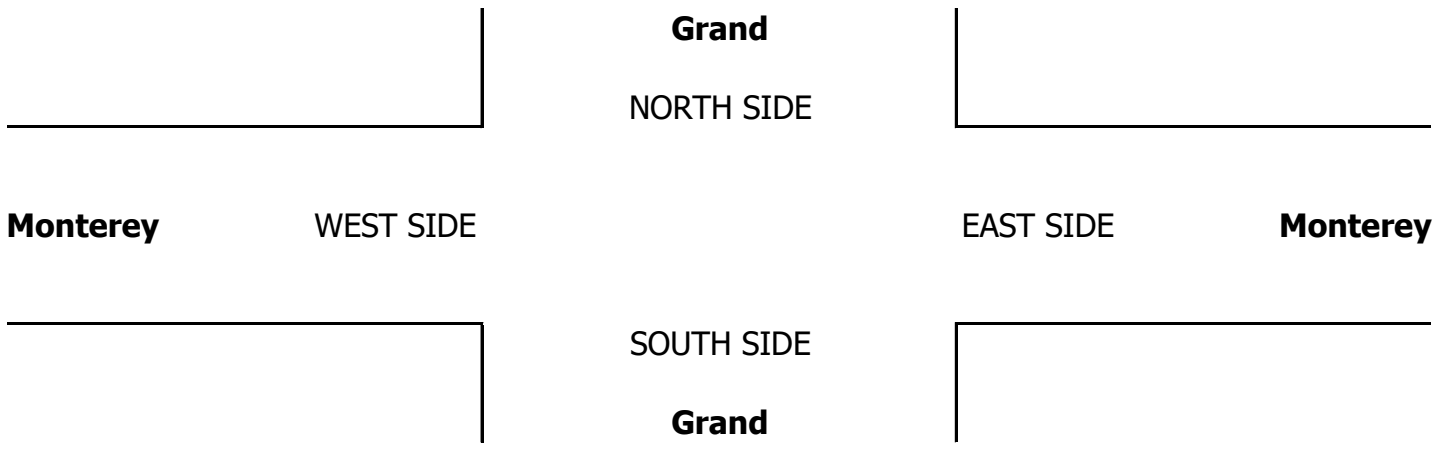
PROJECT #: SC0843
LOCATION #: 43
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

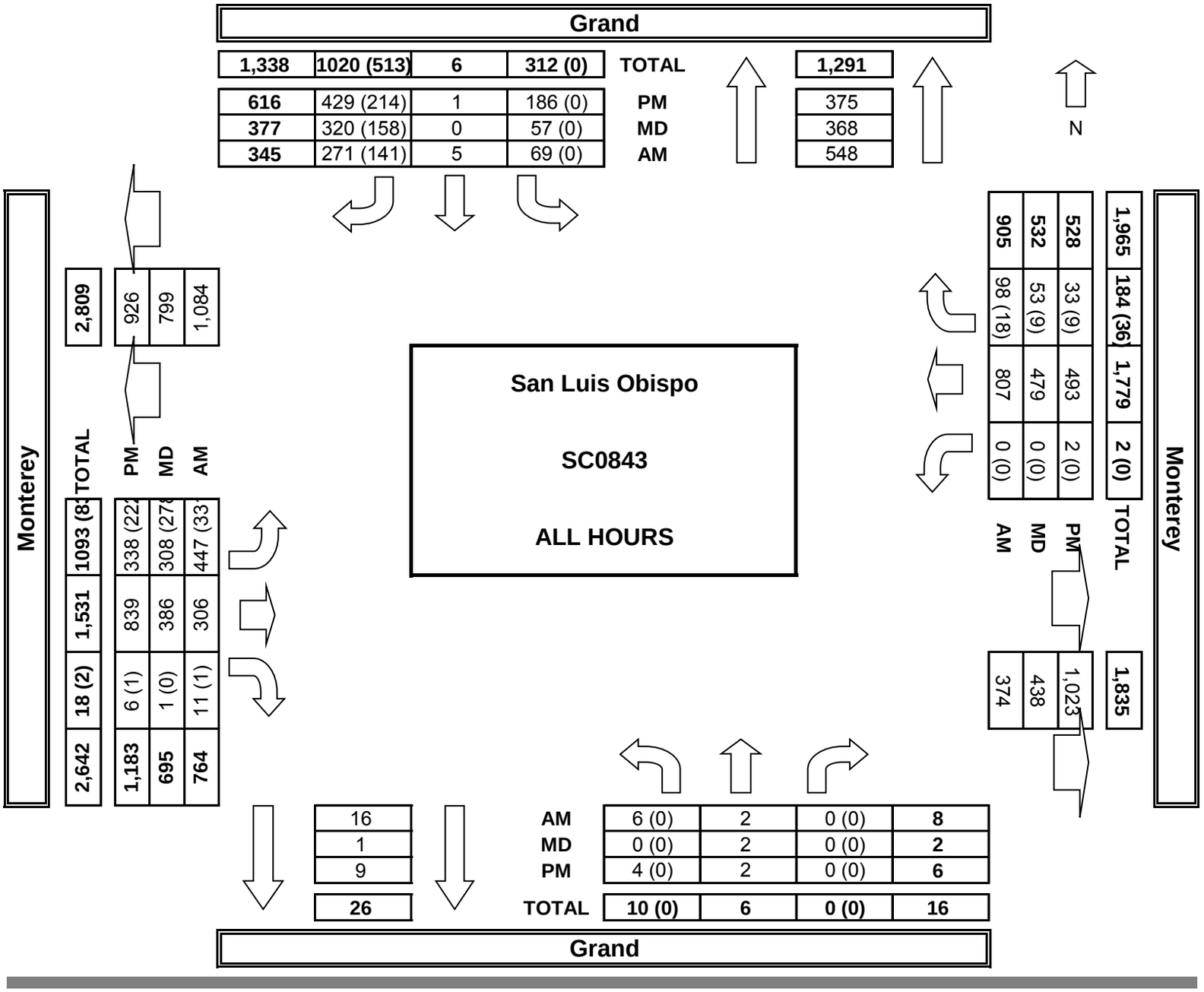
N ▲
◄ W
E ►
S ▼

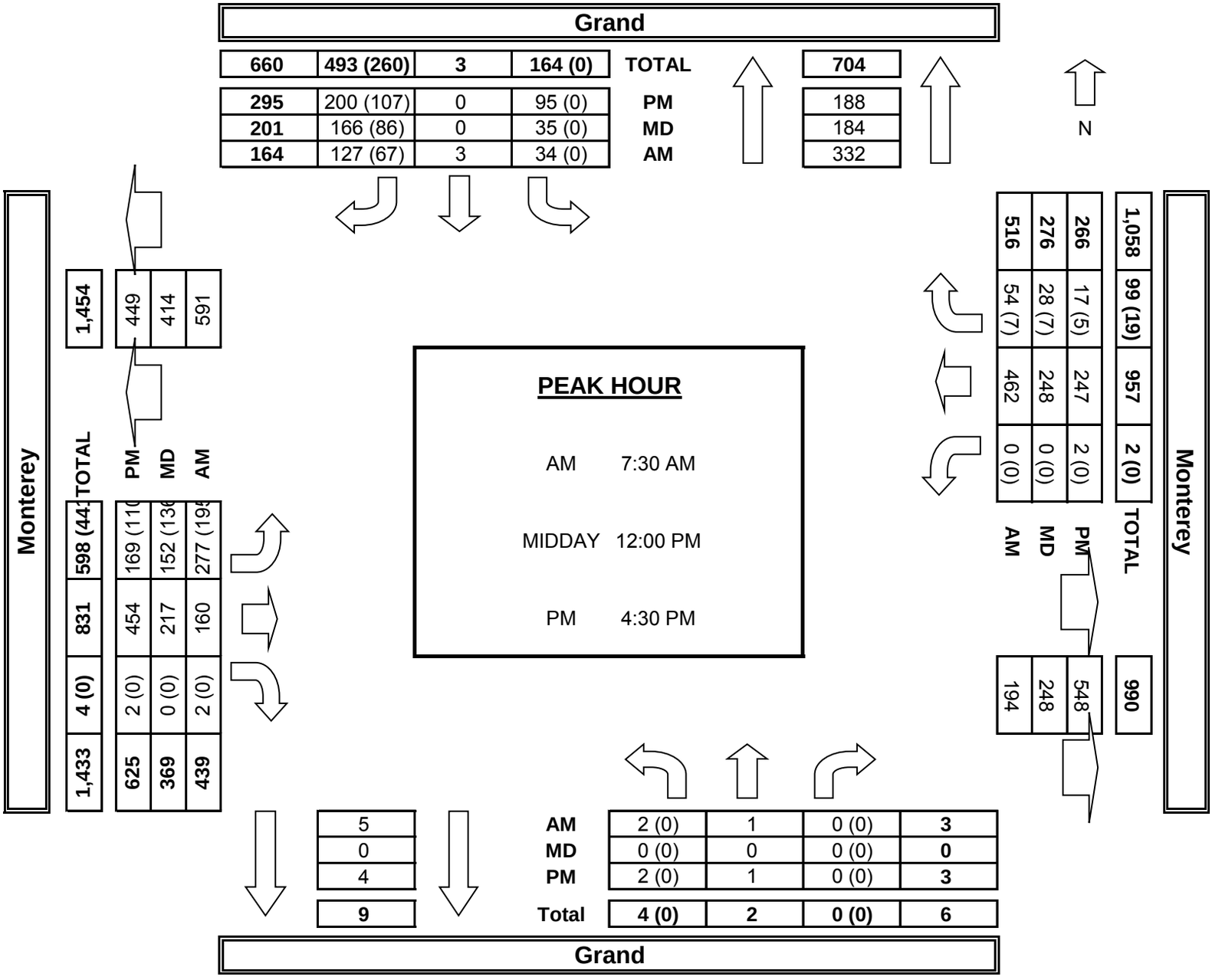
	NORTHBOUND Grand			SOUTHBOUND Grand			EASTBOUND Monterey			WESTBOUND Monterey			
LANES:	NL 0	NT 1	NR 0	SL 1	ST 0.5	SR 0.5	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1	TOTAL
AM													
7:30 AM	0	0	0	0	1	1	2	0	0	1	0	0	5
7:45 AM	0	2	1	0	0	0	1	0	0	1	0	0	5
8:00 AM	0	1	0	0	0	2	1	0	1	0	0	0	5
8:15 AM	0	2	0	0	0	1	2	0	0	0	0	0	5
8:30 AM	0	0	0	0	0	1	2	0	0	1	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	5	1	0	1	5	9	0	1	3	0	0	25
APPROACH %	0%	83%	17%	0%	17%	83%	90%	0%	10%	100%	0%	0%	
APP/DEPART	6	/	14	6	/	5	10	/	1	3	/	5	0
BEGIN PEAK HR		7:30 AM											
VOLUMES	0	5	1	0	1	4	6	0	1	2	0	0	20
APPROACH %	0%	83%	17%	0%	20%	80%	86%	0%	14%	100%	0%	0%	
PEAK HR FACTOR		0.500			0.625			0.875			0.500		1.000
APP/DEPART	6	/	11	5	/	4	7	/	1	2	/	4	0
MD													
11:30 AM	0	0	0	0	0	2	0	0	0	0	0	0	2
11:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	2
12:00 PM	0	0	1	0	0	2	2	1	0	0	0	0	6
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	0	0	0	0	0	2	0	0	1	0	0	3
12:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	2
VOLUMES	0	2	1	1	0	7	4	2	0	1	1	0	19
APPROACH %	0%	67%	33%	13%	0%	88%	67%	33%	0%	50%	50%	0%	
APP/DEPART	3	/	6	8	/	1	6	/	4	2	/	8	0
BEGIN PEAK HR		11:45 AM											
VOLUMES	0	1	1	1	0	2	4	1	0	1	1	0	12
APPROACH %	0%	50%	50%	33%	0%	67%	80%	20%	0%	50%	50%	0%	
PEAK HR FACTOR		0.500			0.375			0.417			0.500		0.500
APP/DEPART	2	/	5	3	/	1	5	/	3	2	/	3	0
PM													
03:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	1	2	0	1	0	0	4
4:15 PM	0	1	0	0	0	2	1	0	0	0	0	0	4
4:30 PM	0	0	0	0	4	0	0	0	0	0	0	0	4
4:45 PM	0	0	0	1	2	1	1	1	0	1	0	1	8
5:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	2
5:15 PM	0	1	0	0	1	0	0	1	0	0	1	0	4
VOLUMES	0	3	0	1	7	7	3	4	0	2	1	1	29
APPROACH %	0%	100%	0%	7%	47%	47%	43%	57%	0%	50%	25%	25%	
APP/DEPART	3	/	7	15	/	9	7	/	5	4	/	8	0
BEGIN PEAK HR		4:00 PM											
VOLUMES	0	1	0	1	6	3	3	3	0	2	0	1	20
APPROACH %	0%	100%	0%	10%	60%	30%	50%	50%	0%	67%	0%	33%	
PEAK HR FACTOR		0.250			0.625			0.500			0.375		0.625
APP/DEPART	1	/	5	10	/	8	6	/	4	3	/	3	0



AimTD LLC

TURNING MOVEMENT COUNTS




Grand
660
493 (260)
3
164 (0)
TOTAL
704
295
200 (107)
0
95 (0)
PM
188
201
166 (86)
0
35 (0)
MD
184
164
127 (67)
3
34 (0)
AM
332
N
Monterey
1,454
449
414
591
PM
MD
AM
TOTAL
598 (44
831
4 (0)
1,433
169 (110
454
2 (0)
625
152 (136
217
0 (0)
369
277 (194
160
2 (0)
439
PEAK HOUR
AM 7:30 AM
MIDDAY 12:00 PM
PM 4:30 PM
516
276
266
1,058
54 (7)
28 (7)
17 (5)
99 (19)
462
248
247
957
0 (0)
0 (0)
2 (0)
2 (0)
AM
MD
PM
TOTAL
194
248
548
990
Monterey
5
0
4
9
AM
MD
PM
Total
2 (0)
1
0 (0)
3
0 (0)
0
0 (0)
0
2 (0)
1
0 (0)
3
4 (0)
2
0 (0)
6
Grand

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Murray

PROJECT #: SC0843
LOCATION #: 104
CONTROL: SIGNAL

NOTES:

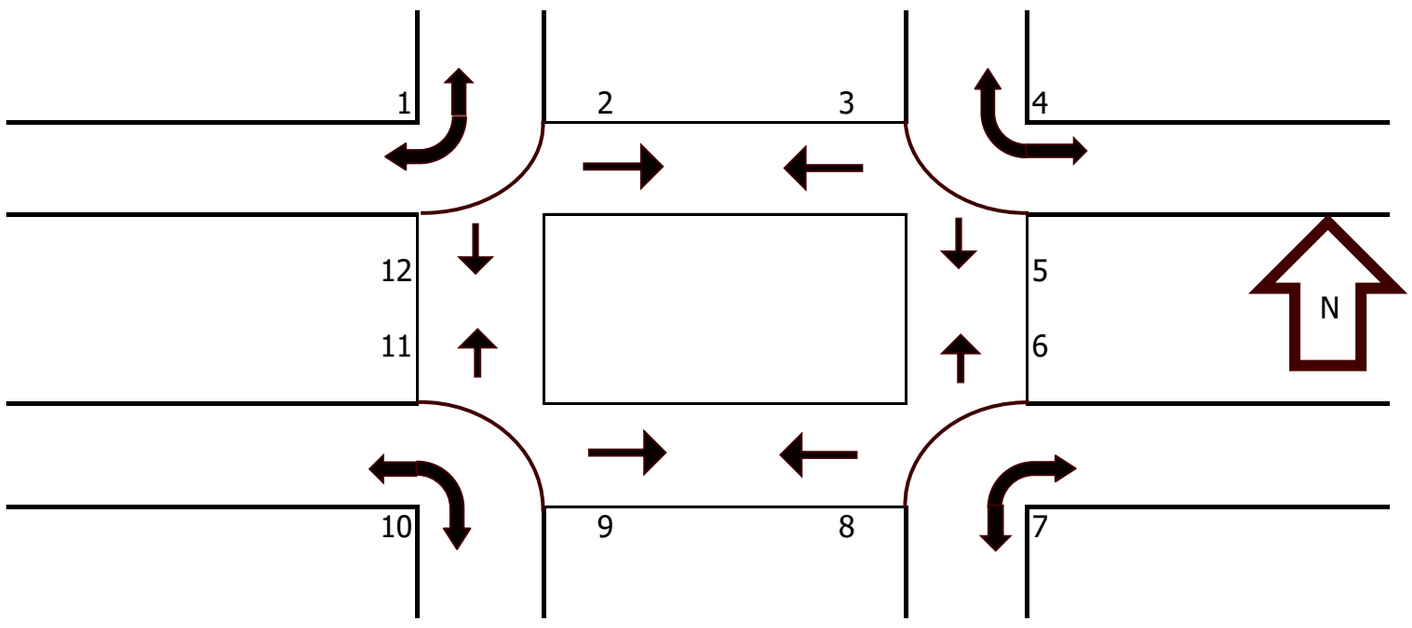
AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Murray			WESTBOUND Murray				U-TURNS				
	LANES:	NL 1	NT 3	NR 0	SL 1	ST 2	SR 0	EL 0	ET 2	ER 0	WL 0.5	WT 0.5	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:30 AM	1	318	32	5	266	0	4	3	8	21	2	7	667	0	1	0	0	1
	7:45 AM	10	346	45	15	314	2	6	3	6	19	0	10	776	0	2	0	0	2
	8:00 AM	5	340	47	7	287	3	2	2	5	15	2	4	719	0	1	0	0	1
	8:15 AM	6	299	34	12	309	5	2	4	6	12	4	7	700	2	3	0	0	5
	8:30 AM	5	306	27	9	297	2	3	6	5	9	3	8	680	0	2	0	0	2
	8:45 AM	4	249	33	14	299	2	5	5	4	27	2	4	648	0	1	0	0	1
	9:00 AM	3	250	29	6	189	1	1	0	4	19	3	4	509	0	0	0	0	0
	9:15 AM	5	201	28	10	242	3	0	5	3	21	3	10	531	0	2	0	0	2
	VOLUMES	39	2,309	275	78	2,203	18	23	28	41	143	19	54	5,230	2	12	0	0	14
	APPROACH %	1%	88%	10%	3%	96%	1%	25%	30%	45%	66%	9%	25%						
	APP/DEPART	2,623	/	2,398	2,299	/	2,389	92	/	369	216	/	74	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	26	1,291	153	43	1,207	12	13	15	22	55	9	29	2,875					
	APPROACH %	2%	88%	10%	3%	96%	1%	26%	30%	44%	59%	10%	31%						
	PEAK HR FACTOR		0.916			0.953			0.833			0.802		0.926					
	APP/DEPART	1,470	/	1,341	1,262	/	1,286	50	/	203	93	/	45	0					
MD	11:00 AM	3	245	30	3	295	1	1	3	4	33	5	16	639	0	0	0	0	0
	11:15 AM	9	235	39	11	252	1	1	4	1	37	4	12	606	2	2	0	0	4
	11:30 AM	5	264	23	14	283	3	0	2	11	40	3	4	652	0	1	0	0	1
	11:45 AM	6	229	19	10	248	3	1	3	7	44	3	12	585	0	3	0	0	3
	12:00 PM	5	254	22	8	299	2	2	4	4	46	1	12	659	0	2	0	0	2
	12:15 PM	7	242	24	12	286	8	2	2	8	31	4	9	635	1	2	0	0	3
	12:30 PM	6	246	40	10	320	3	1	1	4	24	5	7	667	0	3	0	0	3
	12:45 PM	3	245	33	8	305	3	1	3	4	19	1	8	633	0	0	0	0	0
	VOLUMES	44	1,960	230	76	2,288	24	9	22	43	274	26	80	5,076	3	13	0	0	16
	APPROACH %	2%	88%	10%	3%	96%	1%	12%	30%	58%	72%	7%	21%						
	APP/DEPART	2,234	/	2,062	2,388	/	2,608	74	/	315	380	/	91	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	21	987	119	38	1,210	16	6	10	20	120	11	36	2,594					
	APPROACH %	2%	88%	11%	3%	96%	1%	17%	28%	56%	72%	7%	22%						
	PEAK HR FACTOR		0.965			0.949			0.750			0.708		0.972					
	APP/DEPART	1,127	/	1,036	1,264	/	1,351	36	/	160	167	/	47	0					
PM	04:00 PM	11	258	25	5	395	5	3	3	5	48	3	12	773	0	0	0	0	0
	4:15 PM	7	249	22	6	383	3	1	2	10	28	2	18	731	2	2	0	0	4
	4:30 PM	11	280	18	7	368	3	1	2	6	47	6	13	762	1	1	0	0	2
	4:45 PM	6	311	25	11	311	5	1	2	8	38	5	5	728	0	2	0	0	2
	5:00 PM	4	359	23	11	347	8	3	0	10	48	3	14	830	0	2	0	0	2
	5:15 PM	9	321	15	6	359	4	2	2	4	36	4	11	773	1	3	1	0	5
	5:30 PM	16	337	30	4	290	3	0	4	7	29	4	8	732	3	1	0	0	4
	5:45 PM	10	293	21	7	264	2	0	2	6	21	3	9	638	2	0	0	0	2
	VOLUMES	74	2,408	179	57	2,717	33	11	17	56	295	30	90	5,967	9	11	1	0	21
	APPROACH %	3%	90%	7%	2%	97%	1%	13%	20%	67%	71%	7%	22%						
	APP/DEPART	2,661	/	2,519	2,807	/	3,077	84	/	242	415	/	129	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	30	1,271	81	35	1,385	20	7	6	28	169	18	43	3,093					
	APPROACH %	2%	92%	6%	2%	96%	1%	17%	15%	68%	73%	8%	19%						
	PEAK HR FACTOR		0.895			0.952			0.788			0.871		0.932					
	APP/DEPART	1,382	/	1,328	1,440	/	1,584	41	/	114	230	/	67	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	4	0	1	0	0	0	0	0	0	2	1	8
	7:45 AM	0	1	1	2	0	0	0	0	0	0	1	0	5
	8:00 AM	0	1	0	1	0	0	0	0	0	0	1	0	3
	8:15 AM	0	3	0	0	1	0	0	0	0	0	1	0	5
	8:30 AM	0	0	0	1	3	1	0	0	0	0	0	0	5
	8:45 AM	0	3	0	0	1	1	0	0	0	0	2	1	8
	9:00 AM	0	1	1	3	1	1	0	0	0	0	0	3	10
	9:15 AM	0	0	2	0	0	0	0	0	0	0	0	4	6
	TOTAL	0	13	4	8	6	3	0	0	0	0	7	9	50
MD	11:00 AM	0	2	1	1	1	0	0	0	0	1	1	3	10
	11:15 AM	1	11	2	0	2	0	0	0	0	0	15	2	33
	11:30 AM	0	0	3	1	0	1	0	0	0	0	1	4	10
	11:45 AM	0	3	1	4	1	0	0	1	0	0	1	1	12
	12:00 PM	1	2	2	1	0	1	0	0	0	0	1	1	9
	12:15 PM	0	0	0	1	1	0	0	0	0	0	0	2	4
	12:30 PM	0	3	3	3	2	0	0	0	0	0	2	2	15
	12:45 PM	0	2	14	4	0	0	0	0	1	0	1	13	35
	TOTAL	2	23	26	15	7	2	0	1	1	1	22	28	128
PM	4:00 PM	0	0	1	1	0	1	0	0	0	0	0	2	5
	4:15 PM	0	0	2	2	2	0	0	0	0	0	0	4	10
	4:30 PM	0	0	1	0	2	0	0	0	0	0	0	0	3
	4:45 PM	0	0	1	1	1	0	0	0	0	0	0	1	4
	5:00 PM	0	1	2	2	0	0	1	0	0	0	0	0	6
	5:15 PM	0	1	2	1	0	0	3	0	0	0	0	0	7
	5:30 PM	0	1	3	0	1	0	0	0	0	0	0	3	8
	5:45 PM	0	0	1	1	1	0	0	0	0	0	1	0	4
	TOTAL	0	3	13	8	7	1	4	0	0	0	1	10	47



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Murray

PROJECT #: SC0843
LOCATION #: 104
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Murray			WESTBOUND Murray			
	LANES:	NL 1	NT 3	NR 0	SL 1	ST 2	SR 0	EL 0	ET 2	ER 0	WL 0.5	WT 0.5	WR 1	TOTAL
AM	7:30 AM	0	3	0	0	0	0	0	1	0	0	0	0	4
	7:45 AM	0	14	0	0	1	0	2	5	1	1	0	0	24
	8:00 AM	0	1	0	0	1	0	1	0	0	0	0	0	3
	8:15 AM	0	1	1	1	0	0	0	0	0	0	0	0	3
	8:30 AM	0	1	1	0	0	0	0	1	0	0	0	0	3
	8:45 AM	0	1	1	0	0	0	2	5	0	0	0	0	9
	9:00 AM	0	5	0	0	0	1	0	0	0	0	0	0	6
	9:15 AM	0	1	0	0	0	0	0	1	0	1	1	0	4
	VOLUMES	0	27	3	1	2	1	5	13	1	2	1	0	56
	APPROACH %	0%	90%	10%	25%	50%	25%	26%	68%	5%	67%	33%	0%	
	APP/DEPART	30	/	32	4	/	5	19	/	17	3	/	2	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	19	1	1	2	0	3	6	1	1	0	0	34
	APPROACH %	0%	95%	5%	33%	67%	0%	30%	60%	10%	100%	0%	0%	
	PEAK HR FACTOR		0.357			0.750			0.313			0.250		0.354
	APP/DEPART	20	/	22	3	/	4	10	/	8	1	/	0	0
MD	11:00 AM	0	1	0	1	1	0	0	1	0	0	0	1	5
	11:15 AM	0	0	1	0	0	0	0	0	0	0	2	0	3
	11:30 AM	0	0	0	0	4	0	1	1	0	0	0	0	6
	11:45 AM	0	2	1	0	0	0	0	2	0	0	0	0	5
	12:00 PM	0	2	0	0	0	0	3	3	0	0	1	0	9
	12:15 PM	0	0	0	0	3	3	0	0	0	0	0	0	6
	12:30 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
	12:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	3
	VOLUMES	0	5	2	1	10	3	4	10	0	0	4	1	40
	APPROACH %	0%	71%	29%	7%	71%	21%	29%	71%	0%	0%	80%	20%	
	APP/DEPART	7	/	10	14	/	10	14	/	13	5	/	7	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	0	4	1	0	7	3	4	6	0	0	1	0	26
	APPROACH %	0%	80%	20%	0%	70%	30%	40%	60%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.417			0.417			0.417			0.250		0.722
	APP/DEPART	5	/	8	10	/	7	10	/	7	1	/	4	0
PM	04:00 PM	0	2	0	0	2	2	1	1	0	1	2	0	11
	4:15 PM	0	2	0	0	1	1	0	0	0	0	2	0	6
	4:30 PM	0	1	0	0	1	0	0	1	0	0	2	0	5
	4:45 PM	1	0	0	0	3	0	0	0	0	0	1	0	5
	5:00 PM	0	0	0	0	0	0	0	0	1	0	3	0	4
	5:15 PM	1	1	0	0	2	2	0	0	0	0	2	1	9
	5:30 PM	0	0	0	0	0	0	0	2	0	0	1	0	3
	5:45 PM	0	1	0	0	4	1	0	1	0	0	2	0	9
	VOLUMES	2	7	0	0	13	6	1	5	1	1	15	1	52
	APPROACH %	22%	78%	0%	0%	68%	32%	14%	71%	14%	6%	88%	6%	
	APP/DEPART	9	/	9	19	/	15	7	/	5	17	/	23	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	1	5	0	0	7	3	1	2	0	1	7	0	27
	APPROACH %	17%	83%	0%	0%	70%	30%	33%	67%	0%	13%	88%	0%	
	PEAK HR FACTOR		0.750			0.625			0.375			0.667		0.614
	APP/DEPART	6	/	6	10	/	8	3	/	2	8	/	11	0

Santa Rosa

NORTH SIDE

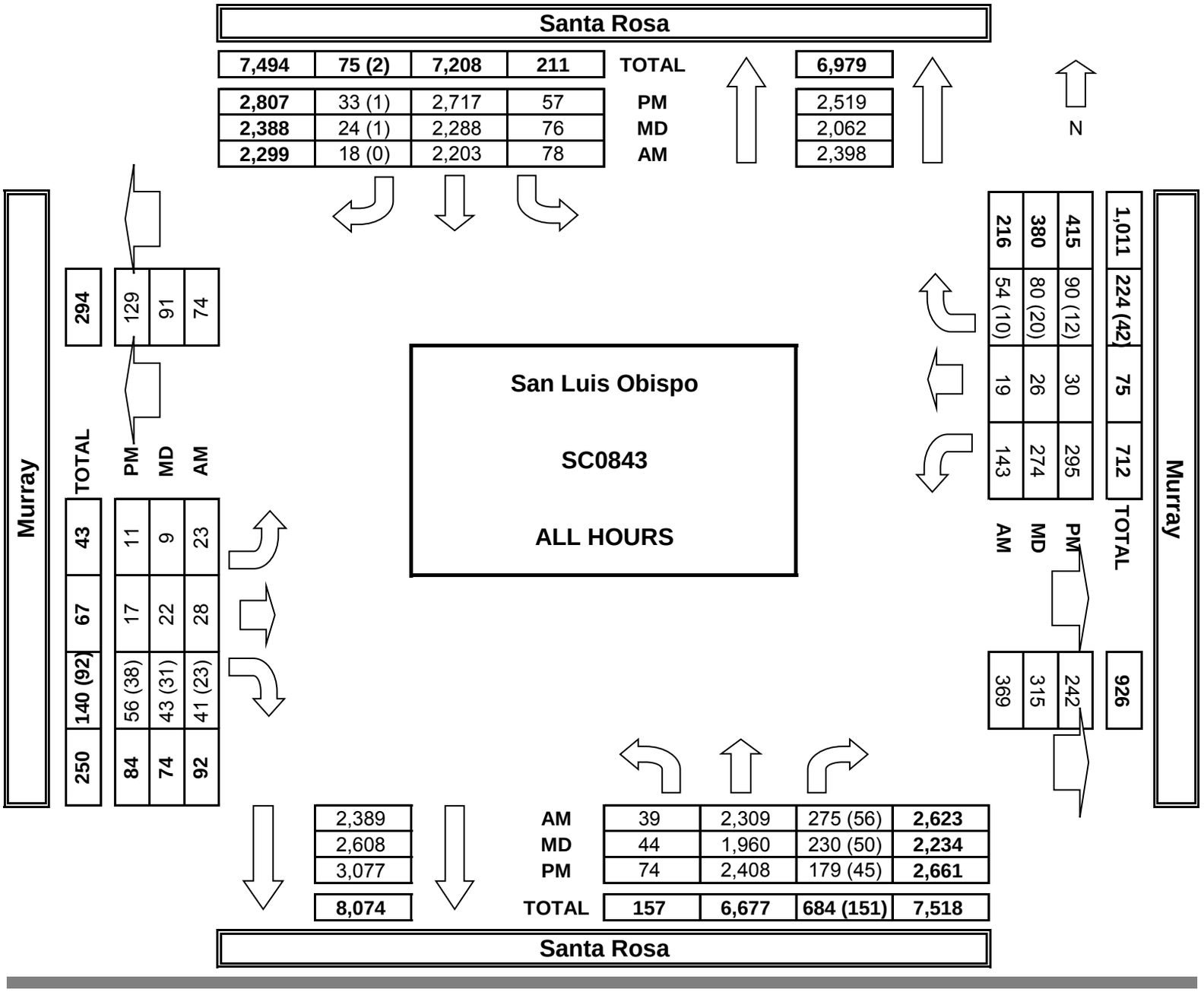
Murray WEST SIDE EAST SIDE **Murray**

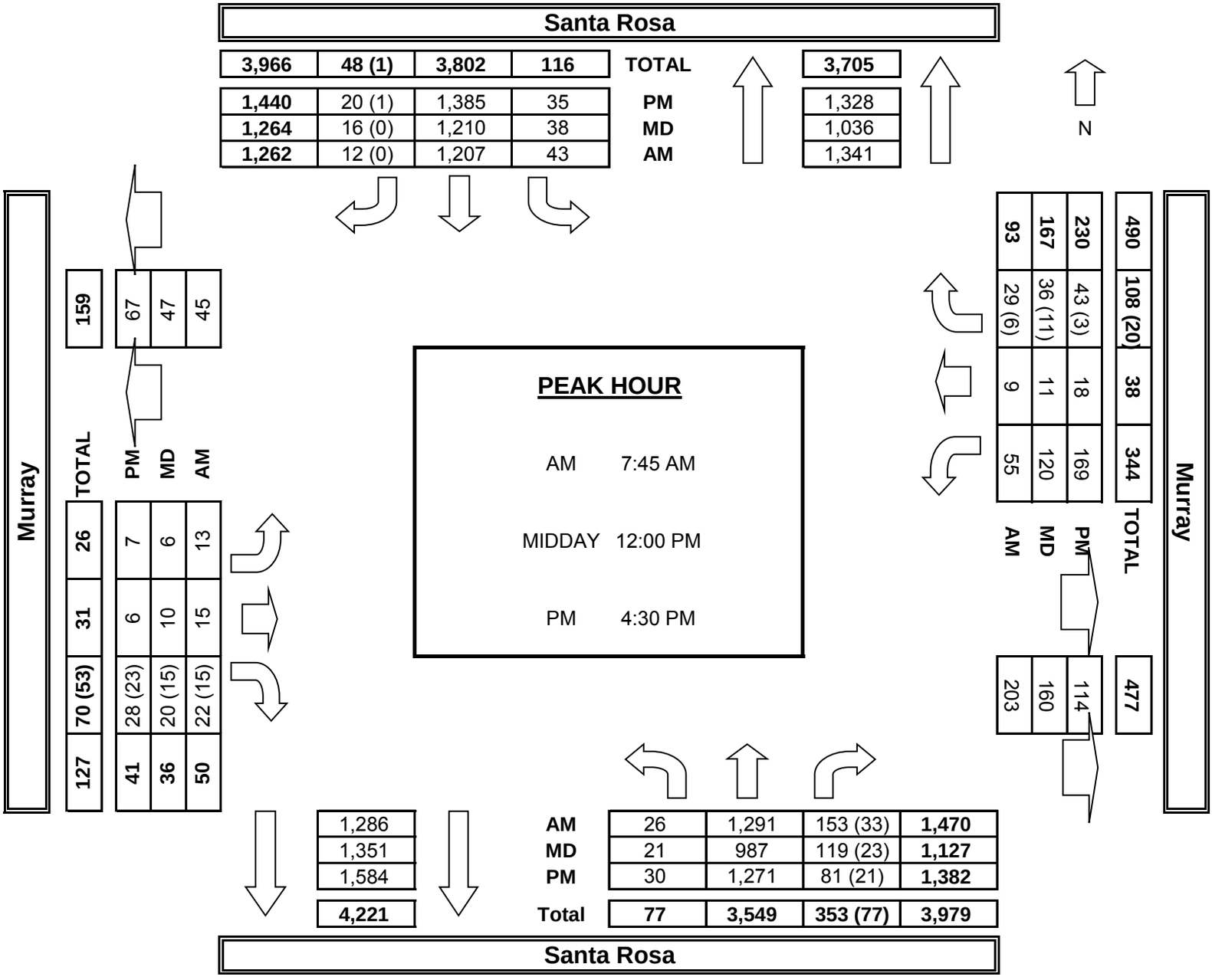
SOUTH SIDE

Santa Rosa

AimTD LLC

TURNING MOVEMENT COUNTS




Santa Rosa
3,966 | 48 (1) | 3,802 | 116 | TOTAL
1,440 | 20 (1) | 1,385 | 35 | PM
1,264 | 16 (0) | 1,210 | 38 | MD
1,262 | 12 (0) | 1,207 | 43 | AM
3,705
1,328
1,036
1,341
N
Murray
159
67 | 47 | 45
TOTAL
PM
MD
AM
26 | 7 | 6 | 13
31 | 6 | 10 | 15
70 (53) | 28 (23) | 20 (15) | 22 (15)
127 | 41 | 36 | 50
PEAK HOUR
AM 7:45 AM
MIDDAY 12:00 PM
PM 4:30 PM
93 | 167 | 230 | 490
29 (6) | 36 (11) | 43 (3) | 108 (20)
9 | 11 | 18 | 38
55 | 120 | 169 | 344
AM
MD
PM
TOTAL
203 | 160 | 114 | 477
Murray
1,286
1,351
1,584
4,221
AM | 26 | 1,291 | 153 (33) | 1,470
MD | 21 | 987 | 119 (23) | 1,127
PM | 30 | 1,271 | 81 (21) | 1,382
Total | 77 | 3,549 | 353 (77) | 3,979
Santa Rosa

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Olive

PROJECT #: SC0843
LOCATION #: 105
CONTROL: SIGNAL

NOTES:

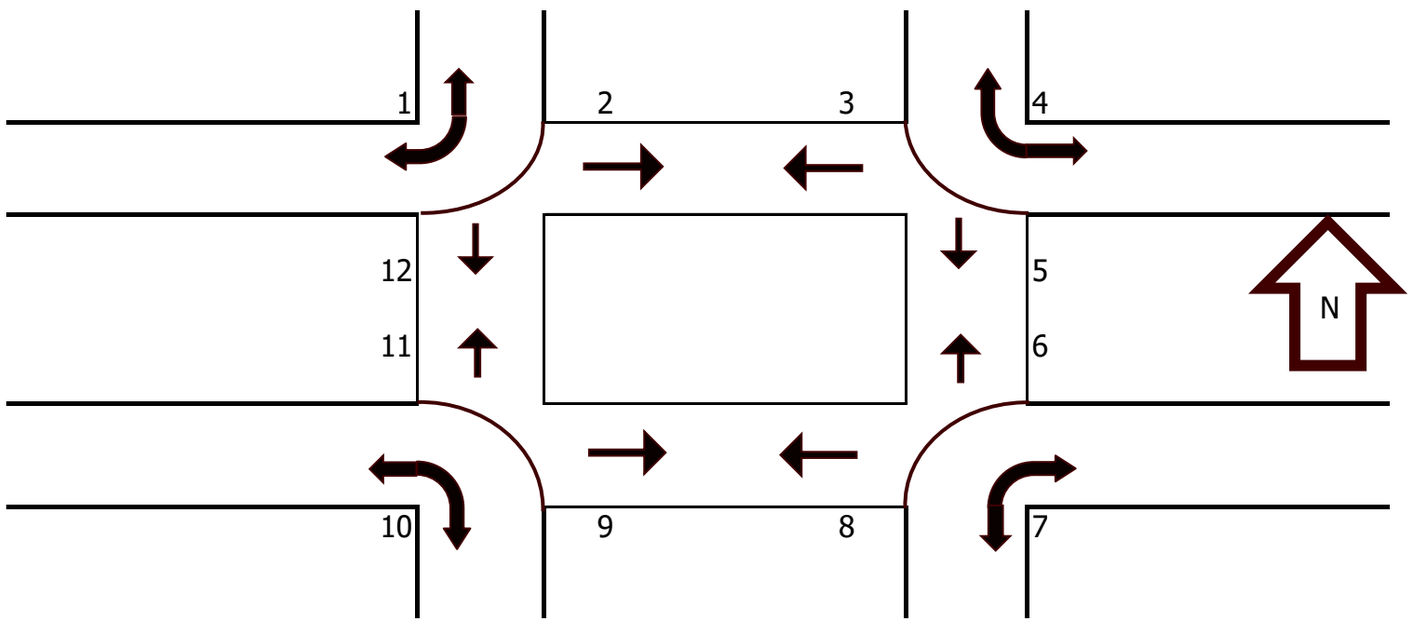
AM PM MD OTHER OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Olive			WESTBOUND Olive				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 1	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB X	SB X	EB 0	WB 0	TTL
AM	7:30 AM	5	295	19	3	179	81	6	1	50	5	0	3	647	0	0	0	0	0
	7:45 AM	8	401	17	0	223	130	9	0	55	8	0	2	853	0	0	0	0	0
	8:00 AM	8	321	21	0	194	101	7	0	31	3	1	1	688	0	0	0	0	0
	8:15 AM	5	305	14	0	203	128	8	2	44	12	3	4	728	0	0	0	0	0
	8:30 AM	9	270	21	1	211	120	6	0	28	7	1	0	674	0	0	0	0	0
	8:45 AM	9	306	22	1	204	118	6	0	22	3	2	0	693	0	0	0	0	0
	9:00 AM	9	277	23	2	142	86	9	0	19	6	0	0	573	0	0	0	0	0
	9:15 AM	9	228	18	1	160	115	6	1	14	6	0	1	559	0	0	0	0	0
	VOLUMES	62	2,403	155	8	1,516	879	57	4	263	50	7	11	5,415	0	0	0	0	0
	APPROACH %	2%	92%	6%	0%	63%	37%	18%	1%	81%	74%	10%	16%						
	APP/DEPART	2,620	/	2,471	2,403	/	1,829	324	/	167	68	/	948	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	30	1,297	73	1	831	479	30	2	158	30	5	7	2,943					
	APPROACH %	2%	93%	5%	0%	63%	37%	16%	1%	83%	71%	12%	17%						
	PEAK HR FACTOR		0.822			0.928			0.742			0.553		0.863					
	APP/DEPART	1,400	/	1,334	1,311	/	1,019	190	/	76	42	/	514	0					
MD	11:00 AM	18	219	26	4	178	132	9	0	16	7	4	7	620	0	0	0	0	0
	11:15 AM	21	254	23	2	182	128	13	0	15	6	0	3	647	0	0	0	0	0
	11:30 AM	15	243	34	1	193	132	10	1	27	4	0	1	661	0	0	0	0	0
	11:45 AM	22	234	28	6	164	126	12	0	28	2	0	0	622	0	0	0	0	0
	12:00 PM	33	244	41	6	191	144	20	1	17	12	0	3	712	0	0	0	0	0
	12:15 PM	17	252	35	1	170	158	9	0	25	8	1	1	677	0	0	0	0	0
	12:30 PM	20	267	28	0	203	131	14	0	20	15	4	3	705	0	0	0	0	0
	12:45 PM	18	282	16	2	181	156	8	1	25	7	1	2	699	0	0	0	0	0
	VOLUMES	164	1,995	231	22	1,462	1,107	95	3	173	61	10	20	5,343	0	0	0	0	0
	APPROACH %	7%	83%	10%	1%	56%	43%	35%	1%	64%	67%	11%	22%						
	APP/DEPART	2,390	/	2,110	2,591	/	1,696	271	/	256	91	/	1,281	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	88	1,045	120	9	745	589	51	2	87	42	6	9	2,793					
	APPROACH %	7%	83%	10%	1%	55%	44%	36%	1%	62%	74%	11%	16%						
	PEAK HR FACTOR		0.985			0.985			0.921			0.648		0.981					
	APP/DEPART	1,253	/	1,105	1,343	/	874	140	/	131	57	/	683	0					
PM	04:00 PM	25	271	45	6	222	245	14	1	16	5	1	1	852	0	0	0	0	0
	4:15 PM	21	277	21	6	228	194	9	0	9	7	3	1	776	0	0	0	0	0
	4:30 PM	17	288	34	5	236	191	6	0	12	6	2	0	797	0	0	0	0	0
	4:45 PM	16	315	50	2	227	167	11	1	17	8	3	2	819	0	0	0	1	1
	5:00 PM	28	390	87	2	205	206	7	0	17	6	0	1	949	0	0	0	0	0
	5:15 PM	23	345	46	6	226	185	6	1	17	12	2	2	871	0	0	0	0	0
	5:30 PM	22	346	50	3	186	157	5	0	15	8	4	0	796	0	0	0	0	0
	5:45 PM	11	295	21	3	160	151	9	0	20	3	0	1	674	0	0	0	0	0
	VOLUMES	163	2,527	354	33	1,690	1,496	67	3	123	55	15	8	6,534	0	0	0	1	1
	APPROACH %	5%	83%	12%	1%	53%	46%	35%	2%	64%	71%	19%	10%						
	APP/DEPART	3,044	/	2,602	3,219	/	1,867	193	/	391	78	/	1,674	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	84	1,338	217	15	894	749	30	2	63	32	7	5	3,436					
	APPROACH %	5%	82%	13%	1%	54%	45%	32%	2%	66%	73%	16%	11%						
	PEAK HR FACTOR		0.811			0.959			0.819			0.688		0.905					
	APP/DEPART	1,639	/	1,373	1,658	/	988	95	/	235	44	/	840	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	0	0	1	0	0	1	0	0	1	1	4
	7:45 AM	0	0	0	0	0	3	0	0	0	0	0	0	3
	8:00 AM	0	0	0	0	0	1	0	0	0	1	0	1	3
	8:15 AM	0	0	0	0	2	1	0	0	0	0	0	0	3
	8:30 AM	0	3	2	1	2	1	0	0	0	1	1	0	11
	8:45 AM	1	0	0	1	2	2	0	0	1	3	0	0	10
	9:00 AM	0	0	0	0	2	1	0	1	0	1	0	2	7
	9:15 AM	0	0	1	1	0	2	0	0	1	0	1	1	7
	TOTAL	1	3	3	3	9	11	0	2	2	6	3	5	48
MD	11:00 AM	0	0	5	1	2	1	0	1	3	0	1	2	16
	11:15 AM	0	0	0	0	0	2	0	0	1	2	0	2	7
	11:30 AM	0	1	0	0	0	2	0	0	0	0	1	0	4
	11:45 AM	0	1	0	0	5	1	0	1	1	0	2	1	12
	12:00 PM	0	1	2	0	1	1	0	0	0	2	0	0	7
	12:15 PM	0	0	0	0	1	3	0	0	1	0	1	0	6
	12:30 PM	0	0	1	1	0	0	0	0	0	3	1	0	6
	12:45 PM	0	1	0	1	1	1	0	0	0	1	1	2	8
	TOTAL	0	4	8	3	10	11	0	2	6	8	7	7	66
PM	4:00 PM	0	0	0	0	1	2	0	2	1	0	0	0	6
	4:15 PM	0	0	0	0	2	1	0	1	0	0	0	4	8
	4:30 PM	0	0	0	0	3	0	0	1	1	0	0	0	5
	4:45 PM	0	6	4	0	4	0	0	0	0	0	1	0	15
	5:00 PM	0	3	4	1	2	0	0	0	0	0	0	1	11
	5:15 PM	0	1	0	1	3	2	0	0	1	0	0	0	8
	5:30 PM	0	2	2	0	2	5	0	0	0	0	0	2	13
	5:45 PM	0	0	4	3	1	0	0	3	0	4	3	3	21
	TOTAL	0	12	14	5	18	10	0	7	3	4	4	10	87



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Olive

PROJECT #: SC0843
LOCATION #: 105
CONTROL: SIGNAL

NOTES:

AM PM MD OTHER OTHER

N W E S

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Olive			WESTBOUND Olive			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 1	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:30 AM	0	4	0	0	0	0	0	0	0	0	0	0	4
	7:45 AM	0	14	0	0	1	0	0	0	0	0	0	0	15
	8:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	8:15 AM	0	2	0	0	2	0	0	0	0	0	0	0	4
	8:30 AM	0	2	0	0	1	0	0	0	1	0	0	0	4
	8:45 AM	0	5	0	0	1	0	0	0	0	1	1	0	8
	9:00 AM	0	4	0	0	1	0	2	1	0	0	0	0	8
	9:15 AM	1	2	1	0	2	0	0	0	0	0	0	0	6
	VOLUMES	1	34	1	0	9	0	2	1	1	1	1	0	51
	APPROACH %	3%	94%	3%	0%	100%	0%	50%	25%	25%	50%	50%	0%	
	APP/DEPART	36	/	36	9	/	11	4	/	2	2	/	2	0
	BEGIN PEAK HR		8:30 AM											
	VOLUMES	1	13	1	0	5	0	2	1	1	1	1	0	26
	APPROACH %	7%	87%	7%	0%	100%	0%	50%	25%	25%	50%	50%	0%	
	PEAK HR FACTOR		0.750			0.625			0.333			0.250		0.813
	APP/DEPART	15	/	15	5	/	7	4	/	2	2	/	2	0
MD	11:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	11:15 AM	0	1	0	0	3	0	0	0	1	0	0	0	5
	11:30 AM	0	0	0	0	4	0	0	1	0	0	0	0	5
	11:45 AM	0	3	0	0	1	0	0	0	1	0	0	0	5
	12:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	2
	12:15 PM	1	1	0	0	3	0	0	0	0	0	0	0	5
	12:30 PM	0	1	0	0	1	0	0	0	1	0	0	0	3
	12:45 PM	0	2	0	0	1	0	0	0	1	0	0	0	4
	VOLUMES	1	10	0	1	14	0	0	1	4	0	0	0	31
	APPROACH %	9%	91%	0%	7%	93%	0%	0%	20%	80%	0%	0%	0%	
	APP/DEPART	11	/	10	15	/	18	5	/	2	0	/	1	0
	BEGIN PEAK HR		11:00 AM											
	VOLUMES	1	5	0	1	8	0	0	1	1	0	0	0	17
	APPROACH %	17%	83%	0%	11%	89%	0%	0%	50%	50%	0%	0%	0%	
	PEAK HR FACTOR		0.500			0.563			0.500			0.000		0.850
	APP/DEPART	6	/	5	9	/	9	2	/	2	0	/	1	0
PM	04:00 PM	0	0	1	0	2	0	0	0	0	0	0	0	3
	4:15 PM	0	2	0	0	5	1	0	0	0	0	0	0	8
	4:30 PM	0	0	1	0	2	1	0	0	0	0	0	0	4
	4:45 PM	0	1	0	0	3	0	0	0	1	1	0	0	6
	5:00 PM	0	1	0	0	1	0	0	0	0	1	0	0	3
	5:15 PM	0	2	0	0	4	0	0	0	0	0	0	0	6
	5:30 PM	0	2	1	0	0	0	0	0	0	0	0	0	3
	5:45 PM	0	2	0	0	4	0	0	0	0	0	0	0	6
	VOLUMES	0	10	3	0	21	2	0	0	1	2	0	0	39
	APPROACH %	0%	77%	23%	0%	91%	9%	0%	0%	100%	100%	0%	0%	
	APP/DEPART	13	/	10	23	/	24	1	/	3	2	/	2	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	4	1	0	11	2	0	0	1	2	0	0	21
	APPROACH %	0%	80%	20%	0%	85%	15%	0%	0%	100%	100%	0%	0%	
	PEAK HR FACTOR		0.625			0.542			0.250			0.500		0.656
	APP/DEPART	5	/	4	13	/	14	1	/	1	2	/	2	0

Santa Rosa

NORTH SIDE

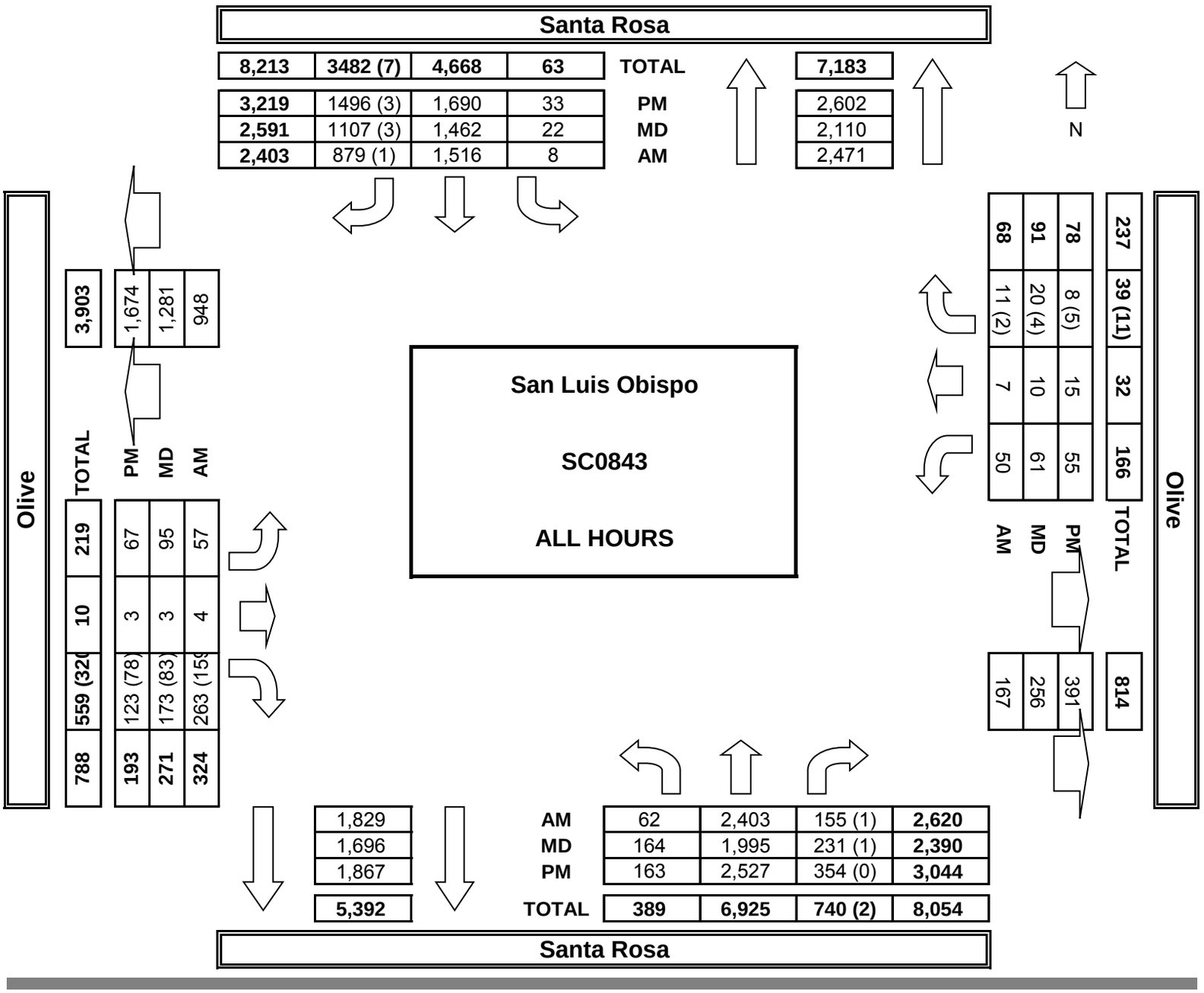
Olive WEST SIDE EAST SIDE **Olive**

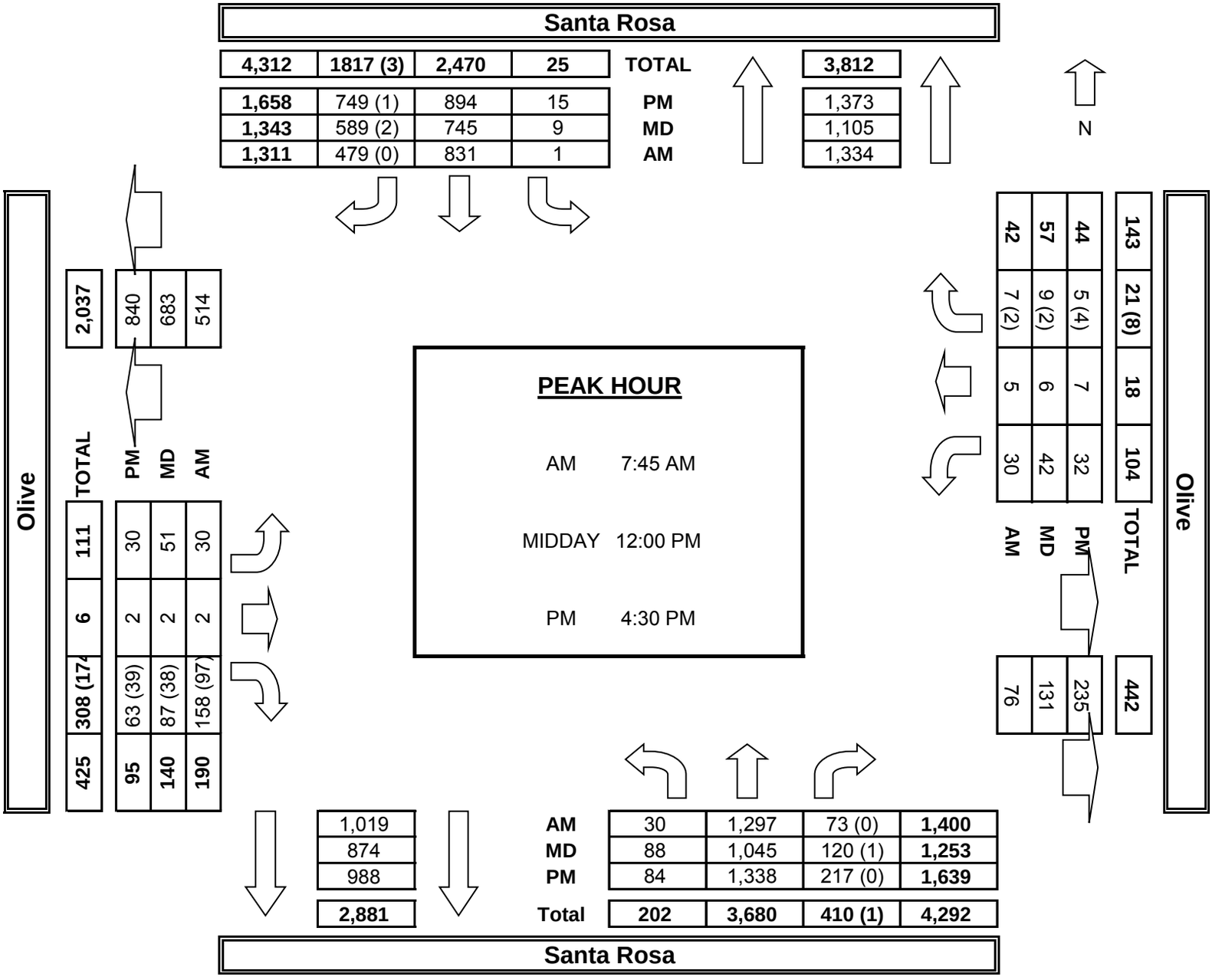
SOUTH SIDE

Santa Rosa

AimTD LLC

TURNING MOVEMENT COUNTS




Santa Rosa
4,312
1817 (3)
2,470
25
TOTAL
3,812
1,658
749 (1)
894
15
PM
1,373
1,343
589 (2)
745
9
MD
1,105
1,311
479 (0)
831
1
AM
1,334
N
Olive
2,037
840
683
514
TOTAL
PM
MD
AM
111
30
51
30
6
2
2
2
308 (174
63 (39)
87 (38)
158 (97)
425
95
140
190
PEAK HOUR
AM 7:45 AM
MIDDAY 12:00 PM
PM 4:30 PM
42
57
44
143
7 (2)
9 (2)
5 (4)
21 (8)
5
6
7
18
30
42
32
104
AM
MD
PM
TOTAL
76
131
235
442
Olive
1,019
874
988
2,881
AM
MD
PM
Total
30
1,297
73 (0)
1,400
88
1,045
120 (1)
1,253
84
1,338
217 (0)
1,639
202
3,680
410 (1)
4,292
Santa Rosa

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Walnut

PROJECT #: SC0843
LOCATION #: 106
CONTROL: SIGNAL

NOTES:

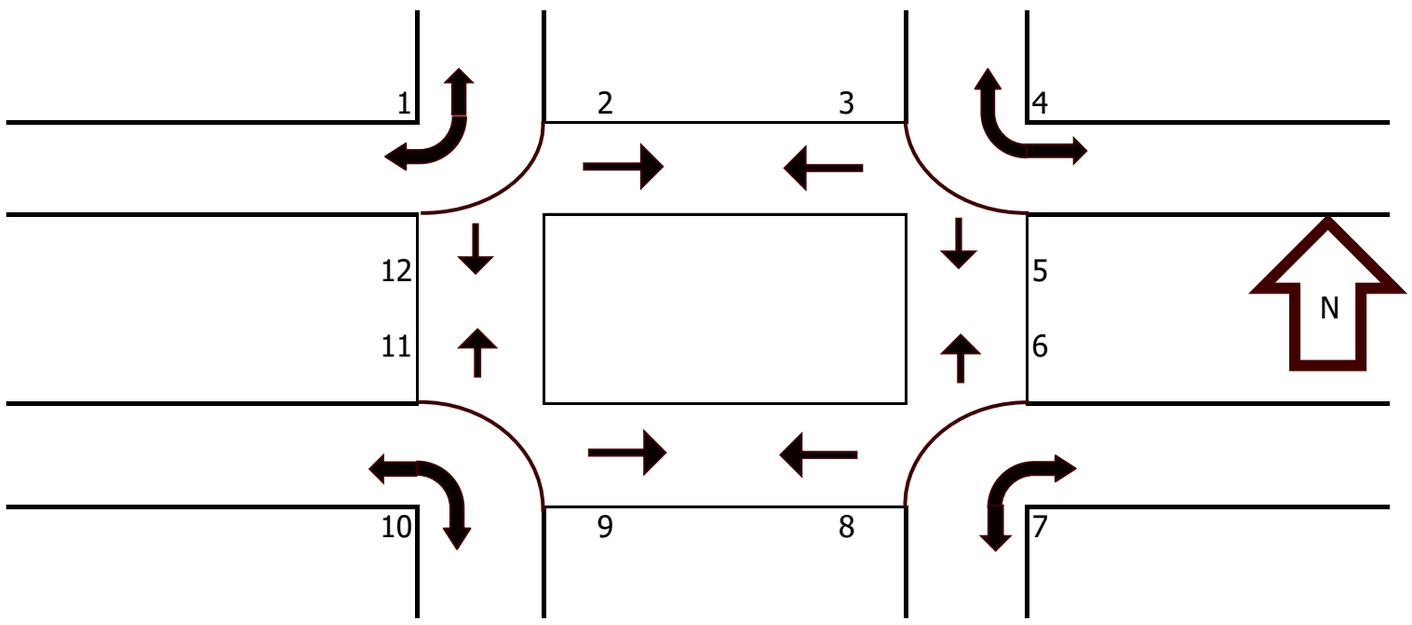
AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Walnut			WESTBOUND Walnut				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0.5	WT 0.5	WR 1	TOTAL	NB 0	SB X	EB 0	WB 0	TTL
AM	7:30 AM	0	146	5	6	214	19	22	1	8	1	0	153	575	0	0	0	0	0
	7:45 AM	1	192	5	6	266	18	35	0	11	2	1	185	722	0	0	0	0	0
	8:00 AM	0	148	8	4	212	13	26	0	2	1	1	154	569	0	0	0	0	0
	8:15 AM	4	171	4	8	214	17	19	1	3	7	0	139	587	0	0	0	0	0
	8:30 AM	2	165	8	8	227	16	12	0	4	3	0	137	582	0	0	0	0	0
	8:45 AM	0	156	4	5	200	9	18	1	3	6	2	168	572	0	0	0	0	0
	9:00 AM	2	147	12	9	140	11	23	1	4	1	0	144	494	0	0	0	0	0
	9:15 AM	0	126	5	4	164	13	12	0	6	3	1	109	443	0	0	0	0	0
	VOLUMES	9	1,251	51	50	1,637	116	167	4	41	24	5	1,189	4,544	0	0	0	0	0
	APPROACH %	1%	95%	4%	3%	91%	6%	79%	2%	19%	2%	0%	98%						
	APP/DEPART	1,311	/	2,607	1,803	/	1,702	212	/	105	1,218	/	130	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	7	676	25	26	919	64	92	1	20	13	2	615	2,460					
	APPROACH %	1%	95%	4%	3%	91%	6%	81%	1%	18%	2%	0%	98%						
	PEAK HR FACTOR		0.894			0.870			0.614			0.838		0.852					
	APP/DEPART	708	/	1,383	1,009	/	952	113	/	52	630	/	73	0					
MD	11:00 AM	4	165	7	9	176	21	14	1	7	2	1	90	497	0	0	1	0	1
	11:15 AM	2	174	8	5	184	22	19	1	8	2	0	118	543	0	0	0	0	0
	11:30 AM	1	169	6	2	211	13	11	0	6	7	1	107	534	0	0	0	0	0
	11:45 AM	3	174	9	3	152	20	16	0	5	3	3	116	504	0	0	0	0	0
	12:00 PM	0	215	7	10	199	20	8	0	1	5	0	111	576	0	0	0	0	0
	12:15 PM	4	172	13	3	177	13	14	1	9	6	2	109	523	0	0	0	0	0
	12:30 PM	1	178	10	7	205	27	18	0	5	5	3	115	574	0	0	0	0	0
	12:45 PM	2	185	16	10	178	20	16	3	6	3	2	102	543	0	0	0	0	0
	VOLUMES	17	1,432	76	49	1,482	156	116	6	47	33	12	868	4,294	0	0	1	0	1
	APPROACH %	1%	94%	5%	3%	88%	9%	69%	4%	28%	4%	1%	95%						
	APP/DEPART	1,525	/	2,415	1,687	/	1,562	169	/	131	913	/	186	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	7	750	46	30	759	80	56	4	21	19	7	437	2,216					
	APPROACH %	1%	93%	6%	3%	87%	9%	69%	5%	26%	4%	2%	94%						
	PEAK HR FACTOR		0.904			0.909			0.810			0.941		0.962					
	APP/DEPART	803	/	1,243	869	/	799	81	/	80	463	/	94	0					
PM	04:00 PM	2	228	9	19	177	48	28	2	8	3	0	96	620	0	0	0	0	0
	4:15 PM	1	205	16	9	171	36	10	1	1	7	1	84	542	0	0	0	0	0
	4:30 PM	0	209	14	18	186	56	21	0	4	7	0	112	627	0	0	1	0	1
	4:45 PM	2	232	10	10	206	32	19	2	5	4	2	117	641	0	0	0	0	0
	5:00 PM	0	336	14	8	186	36	26	2	6	4	1	148	767	0	0	0	0	0
	5:15 PM	2	262	16	9	194	37	29	2	2	3	0	137	693	0	0	0	0	0
	5:30 PM	1	252	11	13	165	40	28	5	3	4	1	117	640	0	1	0	0	1
	5:45 PM	0	211	9	4	146	32	16	0	2	1	2	91	514	0	0	0	0	0
	VOLUMES	8	1,935	99	90	1,431	317	177	14	31	33	7	902	5,044	0	1	1	0	2
	APPROACH %	0%	95%	5%	5%	78%	17%	80%	6%	14%	4%	1%	96%						
	APP/DEPART	2,042	/	3,014	1,838	/	1,495	222	/	202	942	/	333	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	5	1,082	51	40	751	145	102	11	16	15	4	519	2,741					
	APPROACH %	0%	95%	4%	4%	80%	15%	79%	9%	12%	3%	1%	96%						
	PEAK HR FACTOR		0.813			0.944			0.896			0.879		0.893					
	APP/DEPART	1,138	/	1,704	936	/	782	129	/	101	538	/	154	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	7:45 AM	0	0	0	0	2	1	0	0	0	0	0	0	3
	8:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
	8:15 AM	2	0	1	0	1	0	0	0	0	0	1	0	5
	8:30 AM	0	0	0	0	1	2	0	0	0	0	0	1	4
	8:45 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
	9:00 AM	3	0	0	0	2	0	0	0	0	0	2	0	7
	9:15 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
	TOTAL	5	0	1	0	10	3	0	0	0	0	7	1	27
MD	11:00 AM	0	1	1	0	1	0	0	0	1	0	1	1	6
	11:15 AM	0	1	0	0	3	0	0	0	0	0	4	2	10
	11:30 AM	0	1	0	0	2	0	2	0	0	0	0	0	5
	11:45 AM	2	2	0	0	1	0	0	0	1	0	0	2	8
	12:00 PM	1	0	2	0	0	0	0	0	0	0	2	2	7
	12:15 PM	0	2	0	0	0	5	0	0	1	0	0	1	9
	12:30 PM	1	3	0	0	0	1	0	0	0	0	0	4	9
	12:45 PM	1	2	0	0	3	2	0	0	0	0	1	3	12
	TOTAL	5	12	3	0	10	8	2	0	3	0	8	15	66
PM	4:00 PM	0	0	0	0	2	0	0	1	0	0	1	1	5
	4:15 PM	0	1	0	0	3	4	1	0	0	0	0	3	12
	4:30 PM	0	1	0	0	3	2	0	0	0	0	1	0	7
	4:45 PM	0	0	0	0	2	3	0	0	0	0	0	2	7
	5:00 PM	0	0	0	0	4	2	0	0	0	0	1	0	7
	5:15 PM	0	0	0	0	2	2	0	0	0	0	0	0	4
	5:30 PM	0	3	0	0	7	1	0	0	0	0	0	0	11
	5:45 PM	9	0	0	0	0	0	0	0	1	0	0	0	10
	TOTAL	9	5	0	0	23	14	1	1	1	0	3	6	63



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Walnut

PROJECT #: SC0843
LOCATION #: 106
CONTROL: SIGNAL

NOTES:

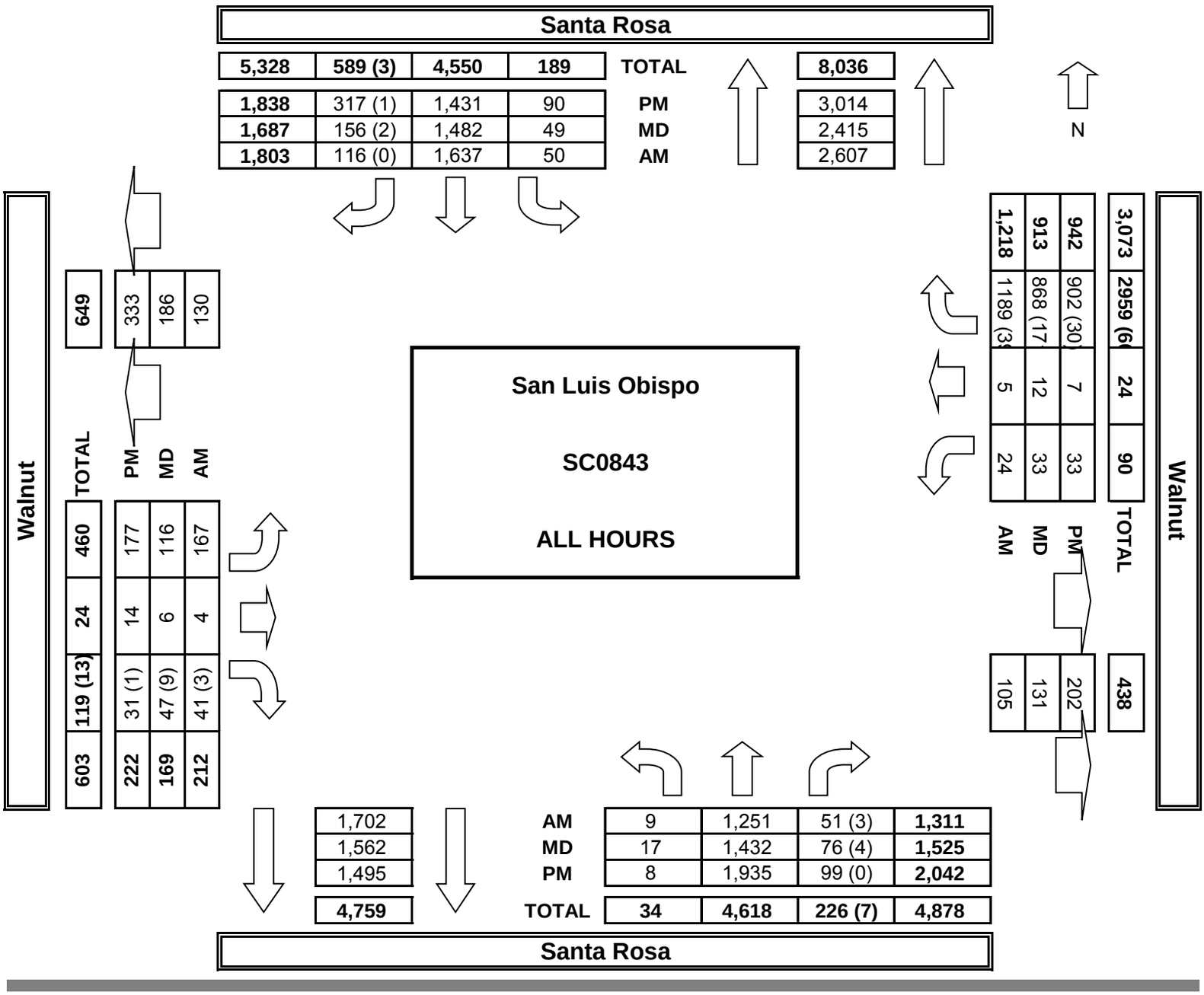
AM
PM
MD
OTHER
OTHER

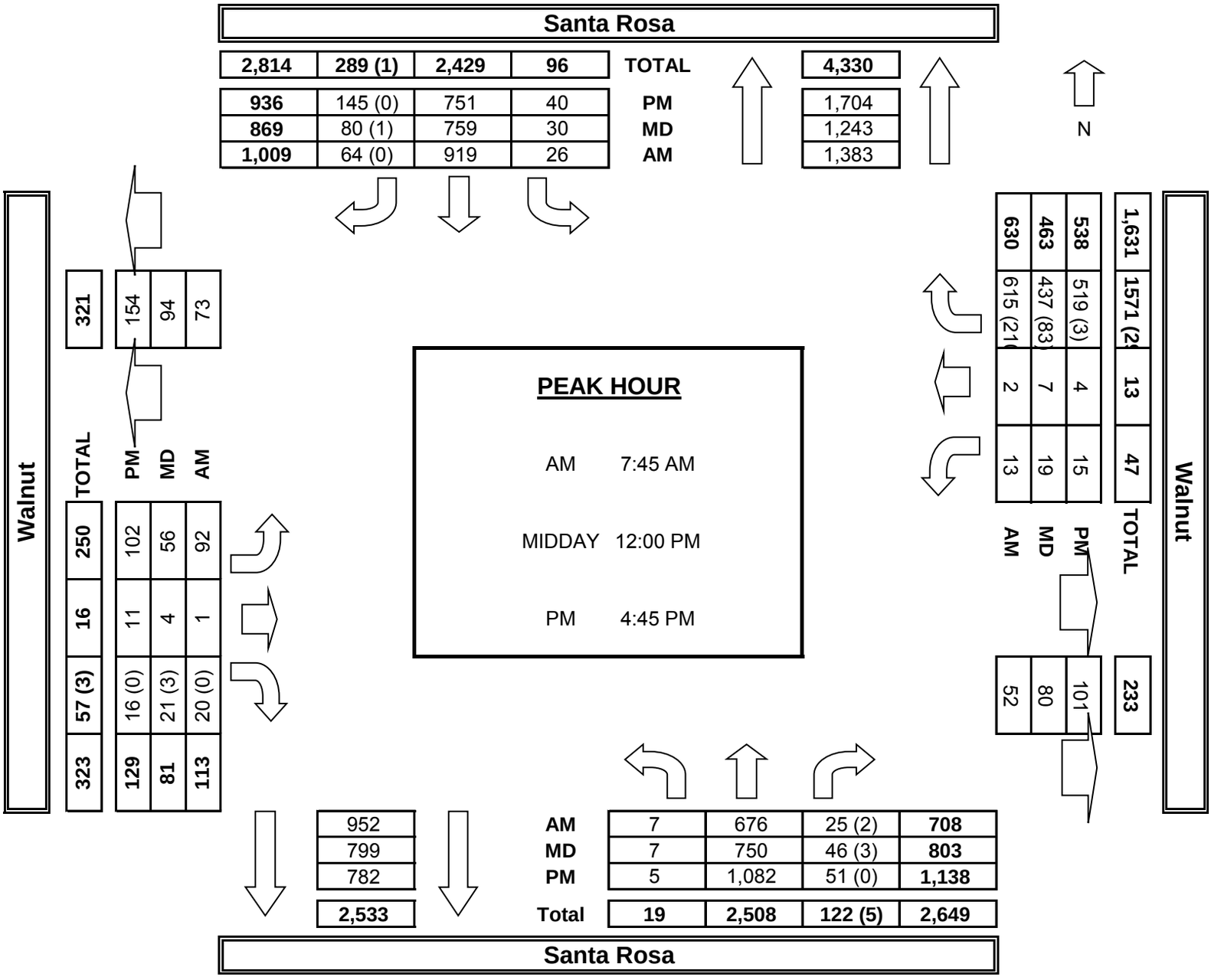
N ▲ ▼ S
◄ W E ►

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Walnut			WESTBOUND Walnut			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0.5	WT 0.5	WR 1	TOTAL
AM	7:30 AM	0	3	0	0	0	0	1	0	0	0	0	0	4
	7:45 AM	0	11	0	0	1	0	2	0	0	0	0	0	14
	8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	8:15 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
	8:30 AM	0	2	0	0	2	0	0	0	0	0	0	0	4
	8:45 AM	0	4	0	0	2	0	0	0	0	0	0	1	7
	9:00 AM	0	3	0	0	1	1	1	0	0	0	0	0	6
	9:15 AM	0	3	0	0	1	0	0	0	0	0	0	0	4
	VOLUMES	0	28	0	0	9	1	4	0	0	0	0	1	43
	APPROACH %	0%	100%	0%	0%	90%	10%	100%	0%	0%	0%	0%	100%	
	APP/DEPART	28	/	33	10	/	9	4	/	0	1	/	1	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	15	0	0	5	0	2	0	0	0	0	0	22
	APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.341			0.625			0.250			0.000		0.393
	APP/DEPART	15	/	17	5	/	5	2	/	0	0	/	0	0
MD	11:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
	11:15 AM	0	1	0	0	3	1	0	0	0	0	0	0	5
	11:30 AM	0	0	0	0	4	0	0	0	0	0	0	0	4
	11:45 AM	0	4	0	0	1	1	0	0	0	0	0	0	6
	12:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	12:15 PM	0	1	0	0	3	0	1	0	0	0	0	0	5
	12:30 PM	0	1	0	0	1	1	0	0	0	0	0	0	3
	12:45 PM	0	1	0	0	1	1	0	0	0	0	0	0	3
	VOLUMES	0	11	0	0	14	4	1	0	0	0	0	0	30
	APPROACH %	0%	100%	0%	0%	78%	22%	100%	0%	0%	0%	0%	0%	
	APP/DEPART	11	/	12	18	/	14	1	/	0	0	/	4	0
	BEGIN PEAK HR		11:00 AM											
	VOLUMES	0	7	0	0	9	2	0	0	0	0	0	0	18
	APPROACH %	0%	100%	0%	0%	82%	18%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.438			0.688			0.000			0.000		0.750
	APP/DEPART	7	/	7	11	/	9	0	/	0	0	/	2	0
PM	04:00 PM	0	1	0	0	1	1	0	0	0	0	0	0	3
	4:15 PM	0	1	0	0	1	2	0	0	0	2	0	0	6
	4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
	4:45 PM	0	2	0	0	4	0	0	0	0	0	0	0	6
	5:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	2
	5:15 PM	0	2	0	0	4	0	0	0	0	0	0	0	6
	5:30 PM	0	2	0	0	0	2	0	0	0	0	0	0	4
	5:45 PM	0	2	0	0	2	1	0	0	0	0	0	0	5
	VOLUMES	0	11	0	0	14	7	0	0	0	2	0	0	34
	APPROACH %	0%	100%	0%	0%	67%	33%	0%	0%	0%	100%	0%	0%	
	APP/DEPART	11	/	11	21	/	16	0	/	0	2	/	7	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	0	6	0	0	9	3	0	0	0	0	0	0	18
	APPROACH %	0%	100%	0%	0%	75%	25%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.750			0.750			0.000			0.000		0.750
	APP/DEPART	6	/	6	12	/	9	0	/	0	0	/	3	0

AimTD LLC

TURNING MOVEMENT COUNTS




Santa Rosa
2,814
289 (1)
2,429
96
TOTAL
4,330
936
145 (0)
751
40
PM
1,704
869
80 (1)
759
30
MD
1,243
1,009
64 (0)
919
26
AM
1,383
N
Walnut
321
154
94
73
TOTAL
PM
MD
AM
250
102
56
92
16
11
4
1
57 (3)
16 (0)
21 (3)
20 (0)
323
129
81
113
PEAK HOUR
AM 7:45 AM
MIDDAY 12:00 PM
PM 4:45 PM
538
463
630
519 (3)
437 (83)
615 (21
4
7
2
15
19
13
1,631
1571 (2
13
47
TOTAL
PM
MD
AM
101
80
52
233
Walnut
952
799
782
2,533
AM
MD
PM
Total
7
7
5
19
676
750
1,082
2,508
25 (2)
46 (3)
51 (0)
122 (5)
708
803
1,138
2,649
Santa Rosa

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: California
EAST & WEST: Hathway

PROJECT #: SC0843
LOCATION #: 17
CONTROL: STOP W

NOTES:

AM PM MD OTHER OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Hathway			WESTBOUND Hathway				U-TURNS				
	LANES:	NL X	NT 1	NR 1	SL 1	ST 1	SR X	EL X	ET X	ER X	WL 1	WT X	WR 1	TOTAL	NB 0	SB 0	EB X	WB 0	TTL
AM	7:30 AM	0	214	9	6	98	0	0	0	0	2	0	5	334	0	0	0	0	0
	7:45 AM	0	261	26	10	90	0	0	0	0	5	0	3	395	0	0	0	0	0
	8:00 AM	0	216	20	14	89	0	0	0	0	4	0	14	357	0	0	0	0	0
	8:15 AM	0	210	13	10	81	0	0	0	0	2	0	6	322	0	0	0	0	0
	8:30 AM	0	220	18	18	85	0	0	0	0	2	0	3	346	0	0	0	0	0
	8:45 AM	0	257	23	19	64	0	0	0	0	6	0	7	376	0	0	0	0	0
	9:00 AM	0	152	11	10	102	0	0	0	0	10	0	17	302	0	0	0	0	0
	9:15 AM	0	120	17	9	65	0	0	0	0	4	0	10	225	0	0	0	0	0
	VOLUMES	0	1,650	137	96	674	0	0	0	0	35	0	65	2,657	0	0	0	0	0
	APPROACH %	0%	92%	8%	12%	88%	0%	0%	0%	0%	35%	0%	65%						
	APP/DEPART	1,787	/	1,715	770	/	709	0	/	233	100	/	0	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	907	77	52	345	0	0	0	0	13	0	26	1,420					
	APPROACH %	0%	92%	8%	13%	87%	0%	0%	0%	0%	33%	0%	67%						
	PEAK HR FACTOR		0.857			0.964			0.000			0.542		0.899					
	APP/DEPART	984	/	933	397	/	358	0	/	129	39	/	0	0					
MD	11:00 AM	0	106	20	8	124	0	1	0	0	15	0	5	279	0	1	1	0	2
	11:15 AM	0	105	16	10	131	0	0	0	0	11	0	7	280	0	0	0	0	0
	11:30 AM	0	132	15	9	114	0	0	0	0	10	0	4	284	0	0	0	0	0
	11:45 AM	0	174	15	6	89	0	0	0	0	4	0	9	297	0	0	0	0	0
	12:00 PM	0	135	16	7	133	0	0	0	0	3	0	10	304	0	0	0	0	0
	12:15 PM	0	111	13	5	123	0	0	0	0	9	0	13	274	0	0	0	0	0
	12:30 PM	0	117	14	14	104	0	0	0	0	5	0	6	260	0	0	0	0	0
	12:45 PM	0	149	16	9	94	0	0	0	0	4	0	14	286	0	0	0	0	0
	VOLUMES	0	1,029	125	68	912	0	1	0	0	61	0	68	2,264	0	1	1	0	2
	APPROACH %	0%	89%	11%	7%	93%	0%	100%	0%	0%	47%	0%	53%						
	APP/DEPART	1,154	/	1,098	980	/	973	1	/	192	129	/	1	0					
	BEGIN PEAK HR		11:15 AM																
	VOLUMES	0	546	62	32	467	0	0	0	0	28	0	30	1,165					
	APPROACH %	0%	90%	10%	6%	94%	0%	0%	0%	0%	48%	0%	52%						
	PEAK HR FACTOR		0.804			0.885			0.000			0.806		0.958					
	APP/DEPART	608	/	576	499	/	495	0	/	94	58	/	0	0					
PM	03:45 PM	0	166	21	17	174	0	0	0	0	1	0	14	393	0	0	0	0	0
	4:00 PM	0	131	15	13	211	0	0	0	0	9	0	15	394	0	0	0	0	0
	4:15 PM	0	104	17	13	219	0	0	0	0	14	0	9	376	0	0	0	0	0
	4:30 PM	0	151	20	17	189	0	0	0	0	11	0	9	397	0	0	0	0	0
	4:45 PM	0	129	25	9	175	0	0	0	0	5	0	10	353	0	0	0	0	0
	5:00 PM	0	142	31	10	191	0	0	0	0	5	0	13	392	0	0	0	0	0
	5:15 PM	0	137	25	12	217	0	0	0	0	7	0	17	415	0	0	0	0	0
	5:30 PM	0	115	27	13	180	0	0	0	0	3	0	17	355	0	0	0	0	0
	VOLUMES	0	1,075	181	104	1,556	0	0	0	0	55	0	104	3,075	0	0	0	0	0
	APPROACH %	0%	86%	14%	6%	94%	0%	0%	0%	0%	35%	0%	65%						
	APP/DEPART	1,256	/	1,179	1,660	/	1,611	0	/	285	159	/	0	0					
	BEGIN PEAK HR		3:45 PM																
	VOLUMES	0	552	73	60	793	0	0	0	0	35	0	47	1,560					
	APPROACH %	0%	88%	12%	7%	93%	0%	0%	0%	0%	43%	0%	57%						
	PEAK HR FACTOR		0.836			0.919			0.000			0.854		0.982					
	APP/DEPART	625	/	599	853	/	828	0	/	133	82	/	0	0					

California

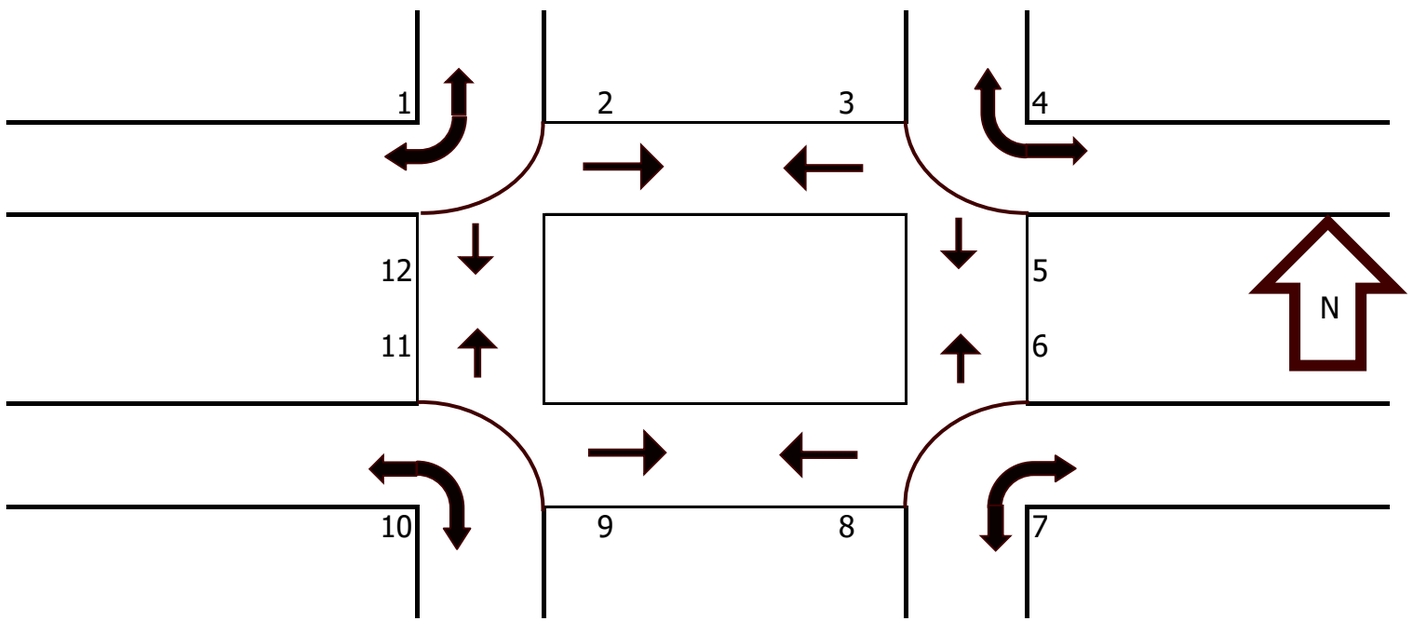
NORTH SIDE

Hathway WEST SIDE EAST SIDE **Hathway**

SOUTH SIDE

California

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	0	0	2	0	0	0	0	0	3	0	5
	7:45 AM	0	0	0	0	2	0	0	0	0	0	3	0	5
	8:00 AM	0	0	0	0	0	0	0	1	0	0	6	0	7
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	2	2	4
	8:45 AM	0	0	0	3	3	0	1	0	0	0	1	0	8
	9:00 AM	0	0	0	1	4	0	1	0	0	0	3	3	12
	9:15 AM	0	0	0	2	1	1	0	0	1	0	1	1	7
	TOTAL	0	0	0	6	12	1	2	1	1	0	19	6	48
MD	11:00 AM	0	0	0	0	1	2	0	1	0	0	3	4	11
	11:15 AM	0	0	0	0	1	1	1	0	0	0	0	0	3
	11:30 AM	0	0	0	0	3	3	0	0	0	0	2	2	10
	11:45 AM	0	0	0	2	4	0	0	0	0	0	1	1	8
	12:00 PM	0	0	0	0	1	2	1	0	1	0	0	1	6
	12:15 PM	0	0	0	0	0	2	0	0	0	0	0	1	3
	12:30 PM	0	0	0	0	4	1	1	0	0	0	0	1	7
	12:45 PM	0	0	0	0	0	1	0	2	0	0	2	3	8
	TOTAL	0	0	0	2	14	12	3	3	1	0	8	13	56
PM	3:45 PM	0	0	1	1	4	1	2	0	0	0	1	3	13
	4:00 PM	0	0	0	0	0	2	0	0	0	0	0	3	5
	4:15 PM	0	0	0	0	2	1	0	0	0	0	0	4	7
	4:30 PM	0	0	0	0	2	2	1	0	0	0	0	2	7
	4:45 PM	0	0	0	1	0	1	0	0	0	0	1	2	5
	5:00 PM	0	0	0	0	1	1	0	0	0	0	1	3	6
	5:15 PM	0	0	0	0	1	1	2	0	0	0	1	2	7
	5:30 PM	0	0	0	0	1	2	0	0	0	0	0	2	5
	TOTAL	0	0	1	2	11	11	5	0	0	0	4	21	55



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:				
Tue, Feb 23, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
	NORTH & SOUTH:	California	LOCATION #:	17
	EAST & WEST:	Hathway	CONTROL:	STOP W

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Hathway			WESTBOUND Hathway			
	LANES:	NL X	NT 1	NR 1	SL 1	ST 1	SR X	EL X	ET X	ER X	WL 1	WT X	WR 1	TOTAL
AM	7:30 AM	0	13	2	0	1	0	0	0	0	1	0	0	17
	7:45 AM	0	25	4	0	7	0	0	0	0	0	0	0	36
	8:00 AM	0	14	5	0	0	0	0	0	0	0	0	1	20
	8:15 AM	0	5	1	0	0	0	0	0	0	0	0	0	6
	8:30 AM	0	6	1	0	2	0	0	0	0	0	0	0	9
	8:45 AM	0	10	5	0	0	0	0	0	0	0	0	0	15
	9:00 AM	0	12	3	0	5	0	0	0	0	0	0	0	20
	9:15 AM	0	12	2	0	1	0	0	0	0	0	0	0	15
	VOLUMES	0	97	23	0	16	0	0	0	0	1	0	1	138
	APPROACH %	0%	81%	19%	0%	100%	0%	0%	0%	0%	50%	0%	50%	
	APP/DEPART	120	/	98	16	/	17	0	/	23	2	/	0	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	57	12	0	8	0	0	0	0	1	0	1	79
	APPROACH %	0%	83%	17%	0%	100%	0%	0%	0%	0%	50%	0%	50%	
	PEAK HR FACTOR		0.595			0.286			0.000			0.500		0.549
	APP/DEPART	69	/	58	8	/	9	0	/	12	2	/	0	0
MD	11:00 AM	0	5	0	0	8	0	0	0	0	0	0	0	13
	11:15 AM	0	2	0	0	5	0	0	0	0	1	0	0	8
	11:30 AM	0	0	1	0	4	0	0	0	0	0	0	0	5
	11:45 AM	0	10	3	0	6	0	0	0	0	0	0	0	19
	12:00 PM	0	11	4	1	2	0	0	0	0	0	0	1	19
	12:15 PM	0	7	1	0	2	0	0	0	0	1	0	0	11
	12:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
	12:45 PM	0	3	1	0	3	0	0	0	0	0	0	0	7
	VOLUMES	0	39	10	1	31	0	0	0	0	2	0	1	84
	APPROACH %	0%	80%	20%	3%	97%	0%	0%	0%	0%	67%	0%	33%	
	APP/DEPART	49	/	40	32	/	33	0	/	11	3	/	0	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	0	28	9	1	14	0	0	0	0	1	0	1	54
	APPROACH %	0%	76%	24%	7%	93%	0%	0%	0%	0%	50%	0%	50%	
	PEAK HR FACTOR		0.617			0.625			0.000			0.500		0.711
	APP/DEPART	37	/	29	15	/	15	0	/	10	2	/	0	0
PM	03:45 PM	0	7	1	0	3	0	0	0	0	0	0	0	11
	4:00 PM	0	6	1	0	15	0	0	0	0	0	0	0	22
	4:15 PM	0	3	0	0	3	0	0	0	0	1	0	0	7
	4:30 PM	0	2	0	0	5	0	0	0	0	0	0	0	7
	4:45 PM	0	3	1	1	10	0	0	0	0	0	0	0	15
	5:00 PM	0	4	1	0	8	0	0	0	0	3	0	0	16
	5:15 PM	0	2	1	0	14	0	0	0	0	3	0	0	20
	5:30 PM	0	0	0	0	18	0	0	0	0	2	0	0	20
	VOLUMES	0	27	5	1	76	0	0	0	0	9	0	0	118
	APPROACH %	0%	84%	16%	1%	99%	0%	0%	0%	0%	100%	0%	0%	
	APP/DEPART	32	/	27	77	/	85	0	/	6	9	/	0	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	0	9	3	1	50	0	0	0	0	8	0	0	71
	APPROACH %	0%	75%	25%	2%	98%	0%	0%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR		0.600			0.708			0.000			0.667		0.888
	APP/DEPART	12	/	9	51	/	58	0	/	4	8	/	0	0

California

NORTH SIDE

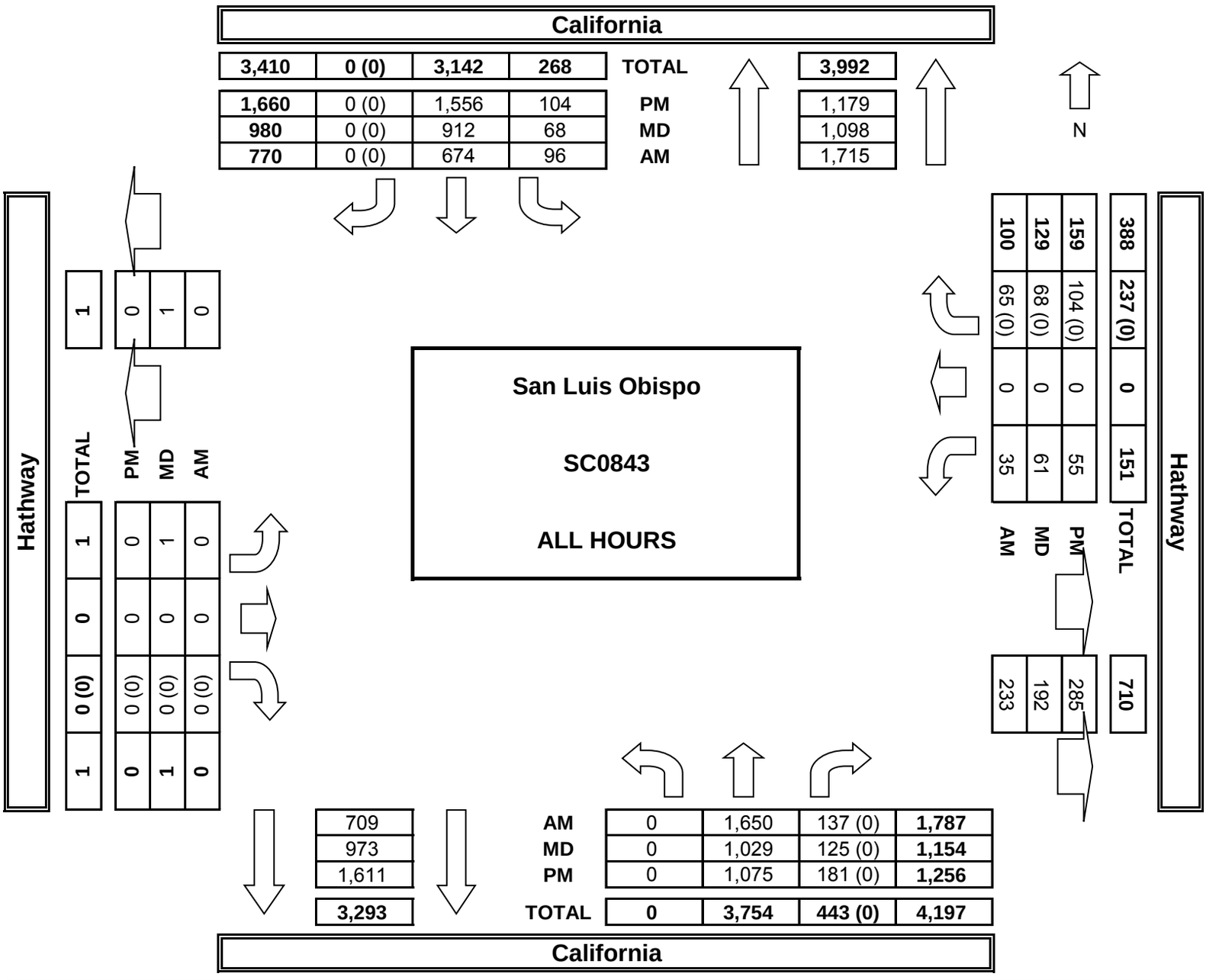
Hathway WEST SIDE EAST SIDE **Hathway**

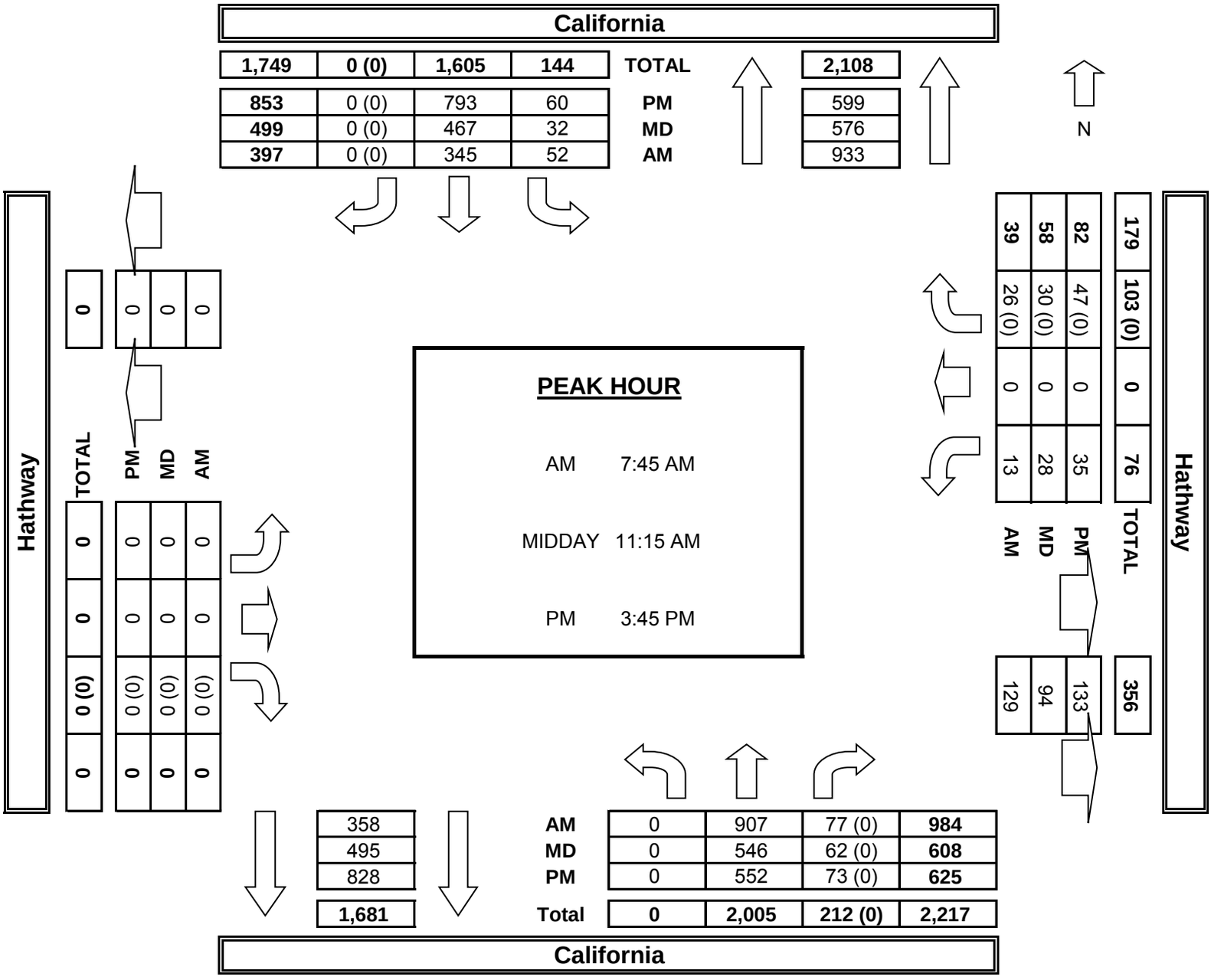
SOUTH SIDE

California

AimTD LLC

TURNING MOVEMENT COUNTS




California
1,749
0 (0)
1,605
144
TOTAL
2,108
853
0 (0)
793
60
PM
599
499
0 (0)
467
32
MD
576
397
0 (0)
345
52
AM
933
N
Hathway
0
0
0
0
TOTAL
PM
MD
AM
0
0
0
0
0
0
0
0
0
0 (0)
0 (0)
0 (0)
0 (0)
0
0
0
0
PEAK HOUR
AM 7:45 AM
MIDDAY 11:15 AM
PM 3:45 PM
39
58
82
179
26 (0)
30 (0)
47 (0)
103 (0)
0
0
0
0
13
28
35
76
AM
MD
PM
TOTAL
129
94
133
356
Hathway
358
495
828
1,681
AM
MD
PM
Total
0
907
77 (0)
984
0
546
62 (0)
608
0
552
73 (0)
625
0
2,005
212 (0)
2,217
California

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: California
EAST & WEST: Taft

PROJECT #: SC0843
LOCATION #: 18
CONTROL: STOP W

NOTES:

AM PM MD OTHER OTHER

◄ W E ► ▲ N S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Taft			WESTBOUND Taft				U-TURNS				
	LANES:	NL X	NT 2	NR 0	SL 1	ST 1	SR X	EL X	ET X	ER X	WL 1	WT X	WR 1	TOTAL	NB 0	SB 0	EB X	WB 0	TTL
AM	7:15 AM	0	141	25	11	47	0	0	0	0	5	0	62	291	0	0	0	0	0
	7:30 AM	0	185	47	16	93	0	0	0	0	5	0	80	426	0	0	0	0	0
	7:45 AM	0	203	44	14	69	0	0	0	0	11	0	73	414	0	0	0	0	0
	8:00 AM	0	154	23	21	59	0	0	0	0	11	0	54	322	0	0	0	0	0
	8:15 AM	0	144	24	11	77	0	0	0	0	9	0	62	327	0	0	0	0	0
	8:30 AM	0	184	15	19	54	0	0	0	0	13	0	76	361	0	0	0	0	0
	8:45 AM	0	159	33	20	57	0	0	0	0	13	0	82	364	0	0	0	0	0
	9:00 AM	0	104	15	29	73	0	0	0	0	4	0	42	267	0	0	0	0	0
	VOLUMES	0	1,274	226	141	529	0	0	0	0	71	0	531	2,772	0	0	0	0	0
	APPROACH %	0%	85%	15%	21%	79%	0%	0%	0%	0%	12%	0%	88%						
	APP/DEPART	1,500	/	1,805	670	/	600	0	/	367	602	/	0	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	0	686	138	62	298	0	0	0	0	36	0	269	1,489					
	APPROACH %	0%	83%	17%	17%	83%	0%	0%	0%	0%	12%	0%	88%						
	PEAK HR FACTOR		0.834			0.826			0.000			0.897		0.874					
	APP/DEPART	824	/	955	360	/	334	0	/	200	305	/	0	0					
MD	11:15 AM	0	107	32	52	83	0	0	0	0	12	0	30	316	0	0	0	0	0
	11:30 AM	0	112	42	29	81	0	0	0	0	8	0	31	303	0	0	0	0	0
	11:45 AM	0	146	33	34	62	0	0	0	0	7	0	34	316	0	0	0	0	0
	12:00 PM	1	105	44	57	91	0	0	0	0	9	0	33	340	1	0	0	0	1
	12:15 PM	0	83	30	27	99	0	0	0	0	18	0	31	288	0	0	0	0	0
	12:30 PM	0	103	44	26	77	0	0	0	0	14	0	30	294	0	0	0	0	0
	12:45 PM	0	133	35	30	78	0	0	0	0	14	0	35	325	0	0	0	0	0
	1:00 PM	0	108	37	38	88	0	0	0	0	7	0	34	312	0	0	0	0	0
	VOLUMES	1	897	297	293	659	0	0	0	0	89	0	258	2,494	1	0	0	0	1
	APPROACH %	0%	75%	25%	31%	69%	0%	0%	0%	0%	26%	0%	74%						
	APP/DEPART	1,195	/	1,155	952	/	749	0	/	590	347	/	0	0					
	BEGIN PEAK HR		11:15 AM																
	VOLUMES	1	470	151	172	317	0	0	0	0	36	0	128	1,275					
	APPROACH %	0%	76%	24%	35%	65%	0%	0%	0%	0%	22%	0%	78%						
	PEAK HR FACTOR		0.869			0.826			0.000			0.976		0.938					
	APP/DEPART	622	/	598	489	/	354	0	/	323	164	/	0	0					
PM	03:45 PM	0	140	53	58	139	0	0	0	0	11	0	34	435	0	0	0	0	0
	4:00 PM	0	109	45	62	161	0	0	0	0	9	0	27	413	0	0	0	0	0
	4:15 PM	0	115	48	67	139	0	0	0	0	12	0	30	411	0	0	0	0	0
	4:30 PM	0	138	55	47	149	0	0	0	0	10	0	22	421	0	0	0	0	0
	4:45 PM	0	116	49	45	125	0	0	0	0	6	0	35	376	0	0	0	0	0
	5:00 PM	0	145	57	67	130	0	0	0	0	4	0	22	425	0	0	0	0	0
	5:15 PM	0	131	53	62	147	0	0	0	0	11	0	26	430	0	0	0	0	0
	5:30 PM	0	141	46	59	126	0	0	0	0	16	0	35	423	0	0	0	0	0
	VOLUMES	0	1,035	406	467	1,116	0	0	0	0	79	0	231	3,334	0	0	0	0	0
	APPROACH %	0%	72%	28%	30%	70%	0%	0%	0%	0%	25%	0%	75%						
	APP/DEPART	1,441	/	1,266	1,583	/	1,195	0	/	873	310	/	0	0					
	BEGIN PEAK HR		3:45 PM																
	VOLUMES	0	502	201	234	588	0	0	0	0	42	0	113	1,680					
	APPROACH %	0%	71%	29%	28%	72%	0%	0%	0%	0%	27%	0%	73%						
	PEAK HR FACTOR		0.911			0.922			0.000			0.861		0.966					
	APP/DEPART	703	/	615	822	/	630	0	/	435	155	/	0	0					

California

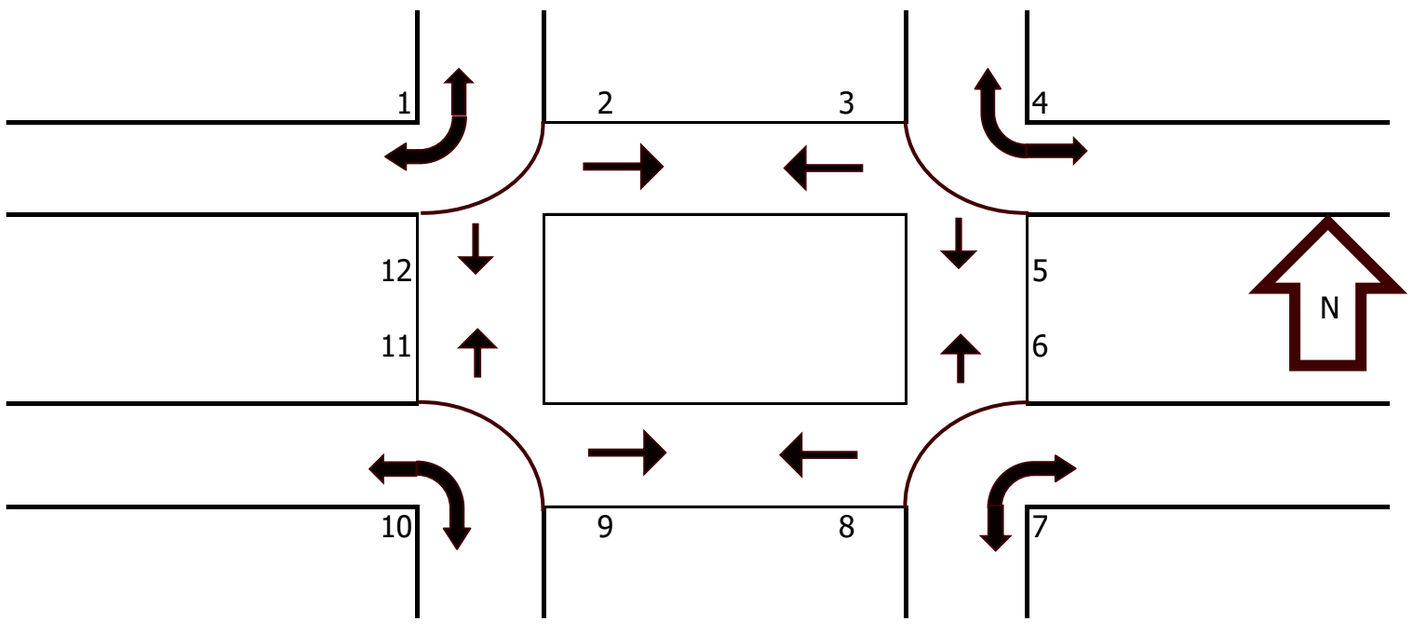
NORTH SIDE

Taft WEST SIDE EAST SIDE **Taft**

SOUTH SIDE

California

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:15 AM	0	0	0	0	2	1	0	0	0	0	2	0	5
	7:30 AM	0	0	0	0	2	0	0	0	0	0	6	0	8
	7:45 AM	0	0	0	0	0	0	0	0	0	0	6	0	6
	8:00 AM	0	0	0	0	0	0	0	0	0	0	2	1	3
	8:15 AM	0	0	0	0	0	0	0	0	0	0	2	1	3
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
	8:45 AM	0	0	0	0	0	0	0	0	0	0	6	0	6
	9:00 AM	0	0	0	0	0	2	1	0	0	0	3	3	9
	TOTAL	0	0	0	0	4	3	1	0	0	0	27	6	41
MD	11:15 AM	0	0	0	0	2	2	0	0	0	0	0	1	5
	11:30 AM	0	0	0	0	0	0	0	0	0	0	3	1	4
	11:45 AM	0	0	0	0	1	0	0	0	0	0	2	1	4
	12:00 PM	0	0	0	0	0	0	1	0	0	0	0	3	4
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
	12:30 PM	0	0	0	0	0	3	0	0	0	0	1	1	5
	12:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	3	5	1	0	0	0	8	8	25
PM	3:45 PM	0	1	0	0	2	3	0	0	0	0	2	3	11
	4:00 PM	0	0	0	0	0	0	1	0	0	0	0	4	5
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	2
	4:30 PM	0	0	0	0	0	1	0	0	0	0	0	2	3
	4:45 PM	0	0	0	0	0	0	0	0	0	0	2	2	4
	5:00 PM	0	0	0	0	0	2	0	0	0	0	0	2	4
	5:15 PM	0	0	0	0	0	2	0	0	0	0	0	3	5
	5:30 PM	0	0	0	0	0	1	0	0	0	0	0	5	6
	TOTAL	0	1	0	0	2	9	1	0	0	0	4	23	40



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:				
Tue, Feb 23, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
	NORTH & SOUTH:	California	LOCATION #:	18
	EAST & WEST:	Taft	CONTROL:	STOP W

NOTES:

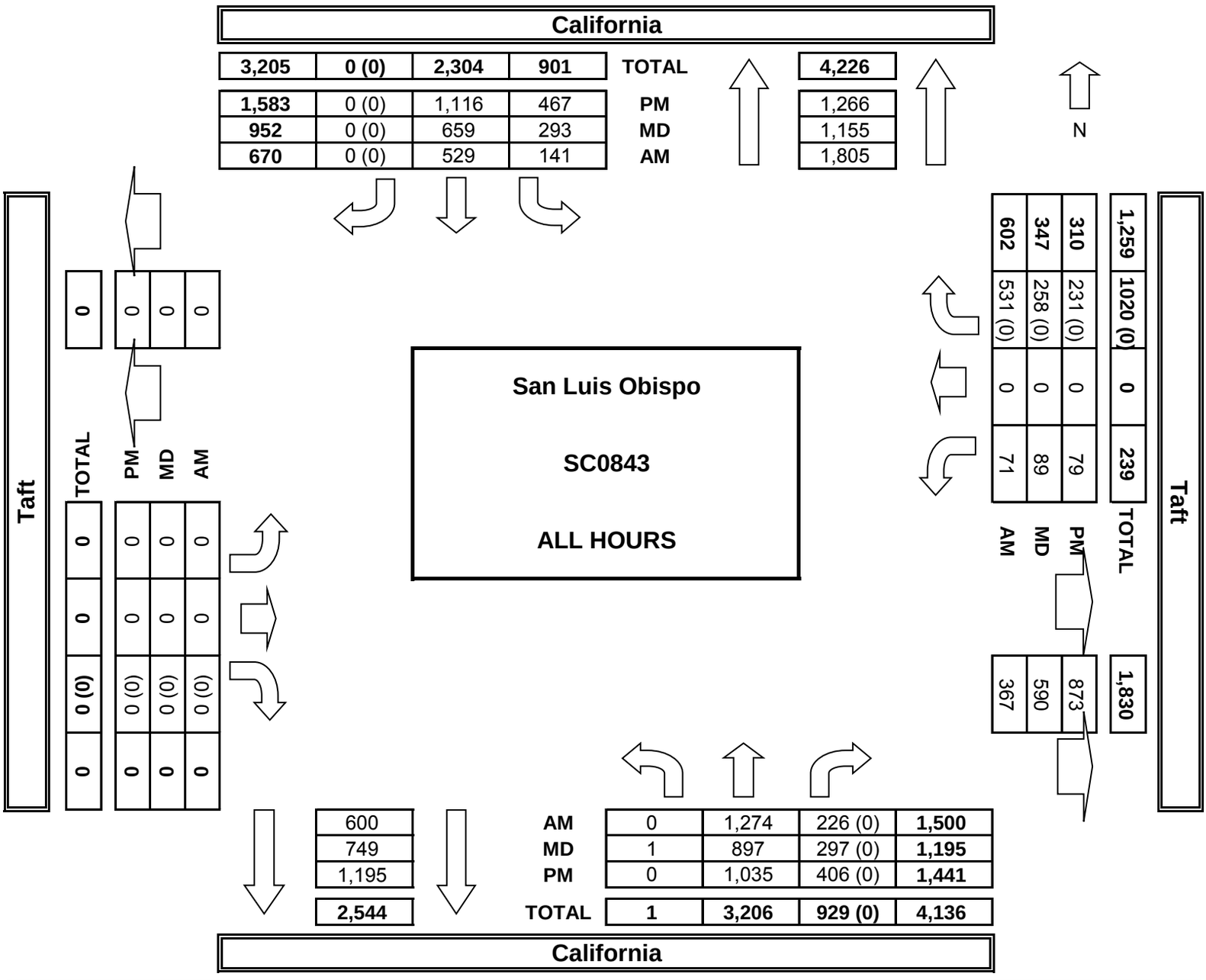
AM
PM
MD
OTHER
OTHER

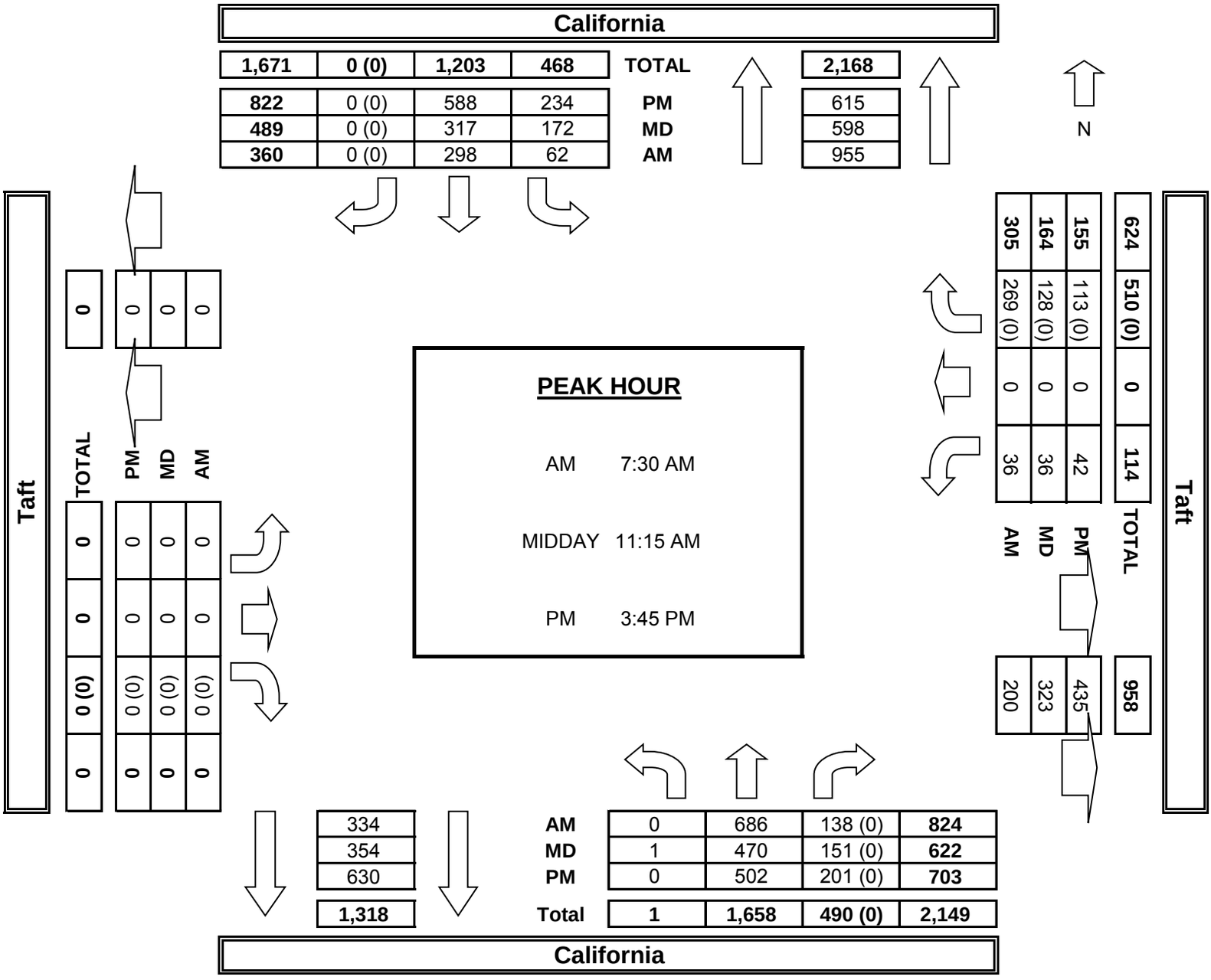
▲ N
◄ W E ►
S ▼

		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Taft			WESTBOUND Taft			
	LANES:	NL X	NT 2	NR 0	SL 1	ST 1	SR X	EL X	ET X	ER X	WL 1	WT X	WR 1	TOTAL
AM	7:15 AM	0	7	0	0	1	0	0	0	0	0	0	0	8
	7:30 AM	0	13	0	0	1	0	0	0	0	0	0	0	14
	7:45 AM	0	39	0	0	5	0	0	0	0	0	0	0	44
	8:00 AM	0	8	0	0	0	0	0	0	0	1	0	0	9
	8:15 AM	0	3	0	0	3	0	0	0	0	1	0	0	7
	8:30 AM	0	11	0	0	0	0	0	0	0	2	0	0	13
	8:45 AM	0	20	0	0	2	0	0	0	0	0	0	1	23
	9:00 AM	0	10	1	0	4	0	0	0	0	0	0	0	15
	VOLUMES	0	111	1	0	16	0	0	0	0	4	0	1	133
	APPROACH %	0%	99%	1%	0%	100%	0%	0%	0%	0%	80%	0%	20%	
	APP/DEPART	112	/	112	16	/	20	0	/	1	5	/	0	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	67	0	0	7	0	0	0	0	1	0	0	75
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR		0.429			0.350			0.000			0.250		0.426
	APP/DEPART	67	/	67	7	/	8	0	/	0	1	/	0	0
MD	11:15 AM	0	0	0	0	5	0	0	0	0	0	0	0	5
	11:30 AM	0	7	0	0	2	0	0	0	0	0	0	0	9
	11:45 AM	0	13	0	0	6	0	0	0	0	0	0	0	19
	12:00 PM	0	10	0	0	3	0	0	0	0	0	0	0	13
	12:15 PM	0	5	0	0	2	0	0	0	0	0	0	0	7
	12:30 PM	0	3	1	0	1	0	0	0	0	0	0	0	5
	12:45 PM	0	4	0	0	1	0	0	0	0	0	0	0	5
	1:00 PM	0	5	0	0	6	0	0	0	0	0	0	0	11
	VOLUMES	0	47	1	0	26	0	0	0	0	0	0	0	74
	APPROACH %	0%	98%	2%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	48	/	47	26	/	26	0	/	1	0	/	0	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	0	35	0	0	13	0	0	0	0	0	0	0	48
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.673			0.542			0.000			0.000		0.632
	APP/DEPART	35	/	35	13	/	13	0	/	0	0	/	0	0
PM	03:45 PM	0	8	0	0	3	0	0	0	0	0	0	1	12
	4:00 PM	0	2	0	0	9	0	0	0	0	0	0	0	11
	4:15 PM	0	2	0	0	6	0	0	0	0	0	0	0	8
	4:30 PM	0	0	0	0	4	0	0	0	0	0	0	0	4
	4:45 PM	0	4	0	0	8	0	0	0	0	0	0	0	12
	5:00 PM	0	5	0	0	5	0	0	0	0	0	0	0	10
	5:15 PM	0	2	0	0	6	0	0	0	0	0	0	0	8
	5:30 PM	0	2	0	1	9	0	0	0	0	0	0	0	12
	VOLUMES	0	25	0	1	50	0	0	0	0	0	0	1	77
	APPROACH %	0%	100%	0%	2%	98%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	25	/	26	51	/	50	0	/	1	1	/	0	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	0	13	0	1	28	0	0	0	0	0	0	0	42
	APPROACH %	0%	100%	0%	3%	97%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.650			0.725			0.000			0.000		0.875
	APP/DEPART	13	/	13	29	/	28	0	/	1	0	/	0	0

AimTD LLC

TURNING MOVEMENT COUNTS




California
1,671
0 (0)
1,203
468
TOTAL
2,168
822
0 (0)
588
234
PM
615
489
0 (0)
317
172
MD
598
360
0 (0)
298
62
AM
955
N
Taft
Taft
PEAK HOUR
AM 7:30 AM
MIDDAY 11:15 AM
PM 3:45 PM
TOTAL
PM
MD
AM
0
0
0
0
0
0
0
0
0
0
0
0
0 (0)
0 (0)
0 (0)
0 (0)
0
0
0
0
305
164
155
624
269 (0)
128 (0)
113 (0)
510 (0)
0
0
0
0
36
36
42
114
TOTAL
AM
MD
PM
200
323
435
958
334
354
630
1,318
AM
MD
PM
Total
0
1
686
470
502
1,658
138 (0)
151 (0)
201 (0)
490 (0)
824
622
703
2,149
California

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: California
EAST & WEST: Hwy 101 NB

PROJECT #: SC0843
LOCATION #: 19
CONTROL: STOP W

NOTES:

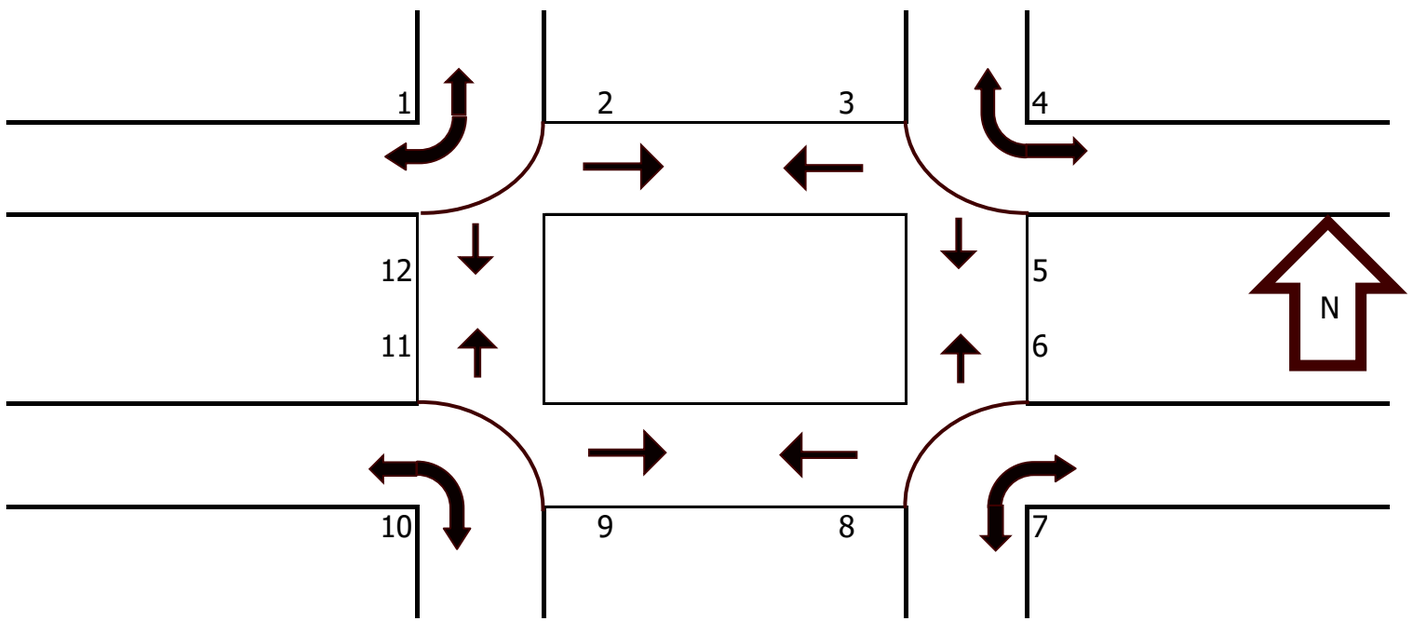
AM PM MD OTHER OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Hwy 101 NB			WESTBOUND Hwy 101 NB				U-TURNS				
	LANES:	NL X	NT 1	NR 1	SL 1	ST 1	SR X	EL X	ET X	ER X	WL 1	WT X	WR 1	TOTAL	NB 0	SB 0	EB X	WB 0	TTL
AM	7:00 AM	0	63	5	20	26	0	0	0	0	17	0	43	174	0	0	0	0	0
	7:15 AM	0	70	3	25	30	0	0	0	0	16	0	70	214	0	0	0	0	0
	7:30 AM	0	118	5	15	62	0	0	0	0	37	0	79	316	0	0	0	0	0
	7:45 AM	0	132	3	17	80	0	0	0	0	40	0	113	385	0	0	0	0	0
	8:00 AM	0	125	4	29	49	0	0	0	0	35	0	95	337	0	0	0	0	0
	8:15 AM	0	90	6	15	63	0	0	0	0	22	0	77	273	0	0	0	0	0
	8:30 AM	0	87	3	20	55	0	0	0	0	30	0	86	281	0	0	0	0	0
	8:45 AM	0	108	4	18	51	0	0	0	0	33	0	108	322	0	0	0	0	0
	VOLUMES	0	793	33	159	416	0	0	0	0	230	0	671	2,302	0	0	0	0	0
	APPROACH %	0%	96%	4%	28%	72%	0%	0%	0%	0%	26%	0%	74%						
	APP/DEPART	826	/	1,464	575	/	646	0	/	192	901	/	0	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	0	465	18	76	254	0	0	0	0	134	0	364	1,311					
	APPROACH %	0%	96%	4%	23%	77%	0%	0%	0%	0%	27%	0%	73%						
	PEAK HR FACTOR		0.894			0.851			0.000			0.814		0.851					
	APP/DEPART	483	/	829	330	/	388	0	/	94	498	/	0	0					
MD	11:00 AM	0	93	3	25	66	0	0	0	0	17	0	57	261	0	0	0	0	0
	11:15 AM	0	82	2	34	71	0	0	0	0	22	0	46	257	0	0	0	0	0
	11:30 AM	0	87	7	28	66	0	0	0	0	18	0	50	256	0	0	0	0	0
	11:45 AM	0	100	5	29	51	0	0	0	0	26	0	74	285	0	0	0	0	0
	12:00 PM	0	119	9	17	60	0	0	0	0	22	0	59	286	0	0	0	0	0
	12:15 PM	0	93	9	35	84	0	0	0	0	19	0	41	281	0	0	0	0	0
	12:30 PM	0	75	6	26	74	0	0	0	0	20	0	44	245	0	0	0	0	0
	12:45 PM	0	107	3	18	68	0	0	0	0	31	0	53	280	0	0	0	0	0
	VOLUMES	0	756	44	212	540	0	0	0	0	175	0	424	2,151	0	0	0	0	0
	APPROACH %	0%	95%	6%	28%	72%	0%	0%	0%	0%	29%	0%	71%						
	APP/DEPART	800	/	1,180	752	/	715	0	/	256	599	/	0	0					
	BEGIN PEAK HR		11:30 AM																
	VOLUMES	0	399	30	109	261	0	0	0	0	85	0	224	1,108					
	APPROACH %	0%	93%	7%	29%	71%	0%	0%	0%	0%	28%	0%	72%						
	PEAK HR FACTOR		0.838			0.777			0.000			0.773		0.969					
	APP/DEPART	429	/	623	370	/	346	0	/	139	309	/	0	0					
PM	03:30 PM	0	136	10	68	77	0	0	0	0	23	0	72	386	0	0	0	0	0
	3:45 PM	0	146	10	88	82	0	0	0	0	22	0	73	421	0	0	0	0	0
	4:00 PM	0	110	13	64	84	0	0	0	0	16	0	67	354	0	0	0	0	0
	4:15 PM	0	105	10	70	103	0	0	0	0	27	0	52	367	0	0	0	0	0
	4:30 PM	0	129	13	72	76	0	0	0	0	9	0	56	355	0	0	0	0	0
	4:45 PM	0	98	5	55	86	0	0	0	0	22	0	62	328	0	0	0	0	0
	5:00 PM	0	118	15	61	79	0	0	0	0	20	0	64	357	0	1	0	0	1
	5:15 PM	0	134	15	60	92	0	0	0	0	24	0	66	391	0	0	0	0	0
	VOLUMES	0	976	91	538	679	0	0	0	0	163	0	512	2,959	0	1	0	0	1
	APPROACH %	0%	91%	9%	44%	56%	0%	0%	0%	0%	24%	0%	76%						
	APP/DEPART	1,067	/	1,489	1,217	/	842	0	/	628	675	/	0	0					
	BEGIN PEAK HR		3:30 PM																
	VOLUMES	0	497	43	290	346	0	0	0	0	88	0	264	1,528					
	APPROACH %	0%	92%	8%	46%	54%	0%	0%	0%	0%	25%	0%	75%						
	PEAK HR FACTOR		0.865			0.919			0.000			0.926		0.907					
	APP/DEPART	540	/	761	636	/	434	0	/	333	352	/	0	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:00 AM	0	0	0	0	0	1	0	0	0	0	0	1	2
	7:15 AM	0	0	0	0	3	1	0	0	0	0	0	0	4
	7:30 AM	0	0	0	0	2	1	0	0	0	0	2	0	5
	7:45 AM	0	0	0	0	1	0	0	0	0	0	3	0	4
	8:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	1	2	3
	8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	TOTAL	0	0	0	0	6	3	0	0	0	0	9	3	21
MD	11:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	2
	11:15 AM	0	0	0	0	2	1	0	0	0	0	0	0	3
	11:30 AM	0	0	0	0	0	2	0	0	0	0	1	1	4
	11:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	1	0	0	0	0	1	1	3
	TOTAL	0	0	0	0	2	4	0	0	0	0	4	5	15
PM	3:30 PM	0	0	0	0	1	2	0	0	0	0	2	1	6
	3:45 PM	0	0	0	0	1	0	0	0	0	0	0	3	4
	4:00 PM	0	0	0	0	0	1	0	0	0	0	0	1	2
	4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
	4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	2	5	0	0	0	0	2	6	15



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: California
EAST & WEST: Hwy 101 NB

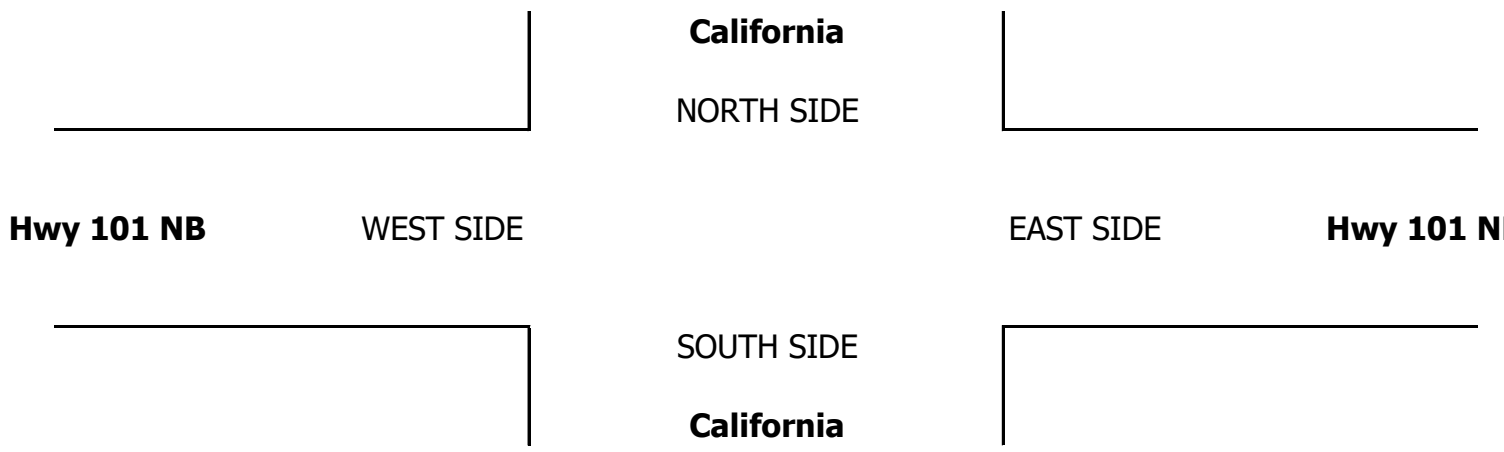
PROJECT #: SC0843
LOCATION #: 19
CONTROL: STOP W

NOTES:

AM PM MD OTHER OTHER

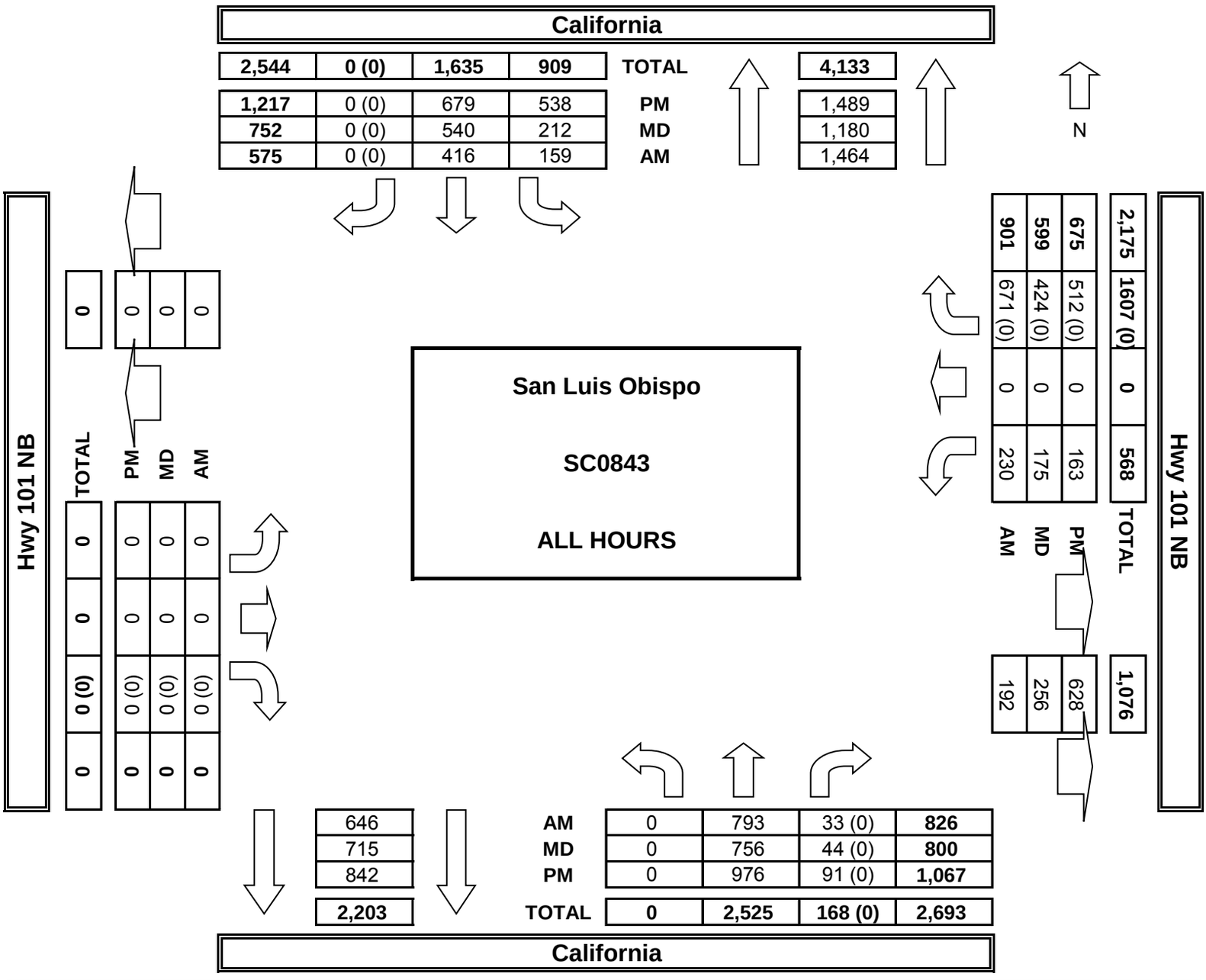
▲ N
◄ W E ►
S ▼

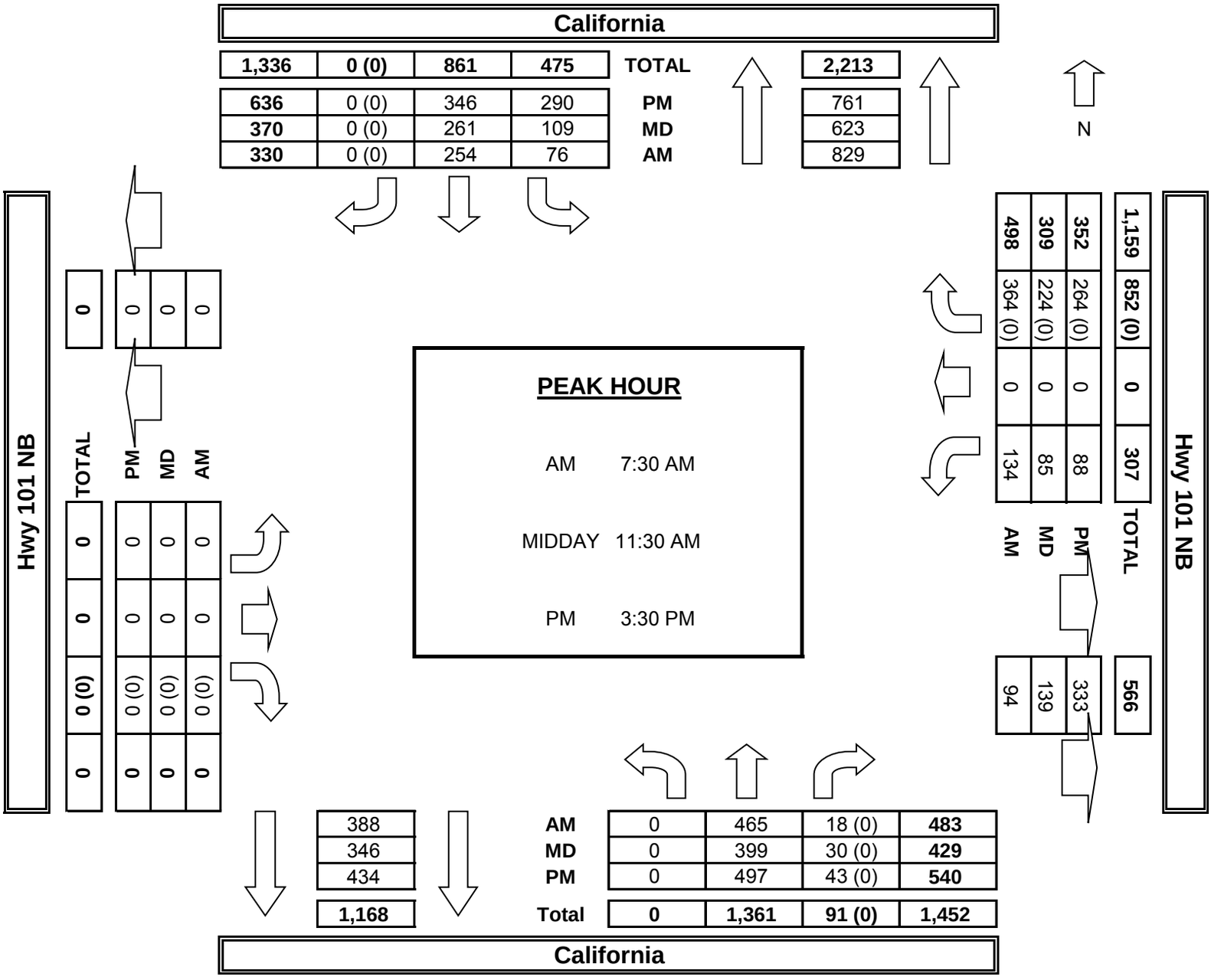
		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Hwy 101 NB			WESTBOUND Hwy 101 NB			
	LANES:	NL X	NT 1	NR 1	SL 1	ST 1	SR X	EL X	ET X	ER X	WL 1	WT X	WR 1	TOTAL
AM	7:00 AM	0	5	0	0	1	0	0	0	0	0	0	0	6
	7:15 AM	0	2	1	0	0	0	0	0	0	0	0	1	4
	7:30 AM	0	13	0	0	2	0	0	0	0	0	0	0	15
	7:45 AM	0	19	0	0	7	0	0	0	0	0	0	0	26
	8:00 AM	0	25	0	0	0	0	0	0	0	0	0	0	25
	8:15 AM	0	6	0	0	2	0	0	0	0	0	0	0	8
	8:30 AM	0	7	0	0	1	0	0	0	0	0	0	0	8
	8:45 AM	0	14	0	0	2	0	0	0	0	0	0	1	17
	VOLUMES	0	91	1	0	15	0	0	0	0	0	0	2	109
	APPROACH %	0%	99%	1%	0%	100%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	92	/	93	15	/	15	0	/	1	2	/	0	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	63	0	0	11	0	0	0	0	0	0	0	74
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.630			0.393			0.000			0.000		0.712
	APP/DEPART	63	/	63	11	/	11	0	/	0	0	/	0	0
MD	11:00 AM	0	6	0	0	7	0	0	0	0	0	0	0	13
	11:15 AM	0	1	0	0	6	0	0	0	0	0	0	0	7
	11:30 AM	0	0	0	0	3	0	0	0	0	0	0	0	3
	11:45 AM	0	13	0	0	6	0	0	0	0	0	0	0	19
	12:00 PM	0	13	0	0	4	0	0	0	0	0	0	0	17
	12:15 PM	0	4	0	0	4	0	0	0	0	0	0	0	8
	12:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	4
	12:45 PM	0	5	0	0	2	0	0	0	0	0	0	0	7
	VOLUMES	0	44	0	0	34	0	0	0	0	0	0	0	78
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	44	/	44	34	/	34	0	/	0	0	/	0	0
	BEGIN PEAK HR		11:45 AM											
	VOLUMES	0	32	0	0	16	0	0	0	0	0	0	0	48
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.615			0.667			0.000			0.000		0.632
	APP/DEPART	32	/	32	16	/	16	0	/	0	0	/	0	0
PM	03:30 PM	0	2	0	0	4	0	0	0	0	0	0	0	6
	3:45 PM	0	7	0	0	1	0	0	0	0	0	0	0	8
	4:00 PM	0	4	0	0	4	0	0	0	0	0	0	0	8
	4:15 PM	0	1	0	0	4	0	0	0	0	0	0	0	5
	4:30 PM	0	3	0	0	7	0	0	0	0	0	0	1	11
	4:45 PM	0	4	0	0	3	0	0	0	0	0	0	0	7
	5:00 PM	0	4	0	0	6	0	0	0	0	0	0	0	10
	5:15 PM	0	3	0	0	13	0	0	0	0	0	0	0	16
	VOLUMES	0	28	0	0	42	0	0	0	0	0	0	1	71
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	28	/	29	42	/	42	0	/	0	1	/	0	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	14	0	0	29	0	0	0	0	0	0	1	44
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	
	PEAK HR FACTOR		0.875			0.558			0.000			0.250		0.688
	APP/DEPART	14	/	15	29	/	29	0	/	0	1	/	0	0



AimTD LLC

TURNING MOVEMENT COUNTS




California
1,336
0 (0)
861
475
TOTAL
2,213
636
0 (0)
346
290
PM
761
370
0 (0)
261
109
MD
623
330
0 (0)
254
76
AM
829
N
Hwy 101 NB
Hwy 101 NB
TOTAL
PM
MD
AM
0
0
0
0
0
0
0
0
0
0
0
0
0 (0)
0 (0)
0 (0)
0 (0)
0
0
0
0
1,159
852 (0)
0
307
498
364 (0)
0
134
309
224 (0)
0
85
352
264 (0)
0
88
PEAK HOUR
AM 7:30 AM
MIDDAY 11:30 AM
PM 3:30 PM
566
94
139
333
388
346
434
1,168
AM
MD
PM
Total
0
0
0
0
465
399
497
1,361
18 (0)
30 (0)
43 (0)
91 (0)
483
429
540
1,452
California

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Mill

PROJECT #: SC0843
LOCATION #: 107
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
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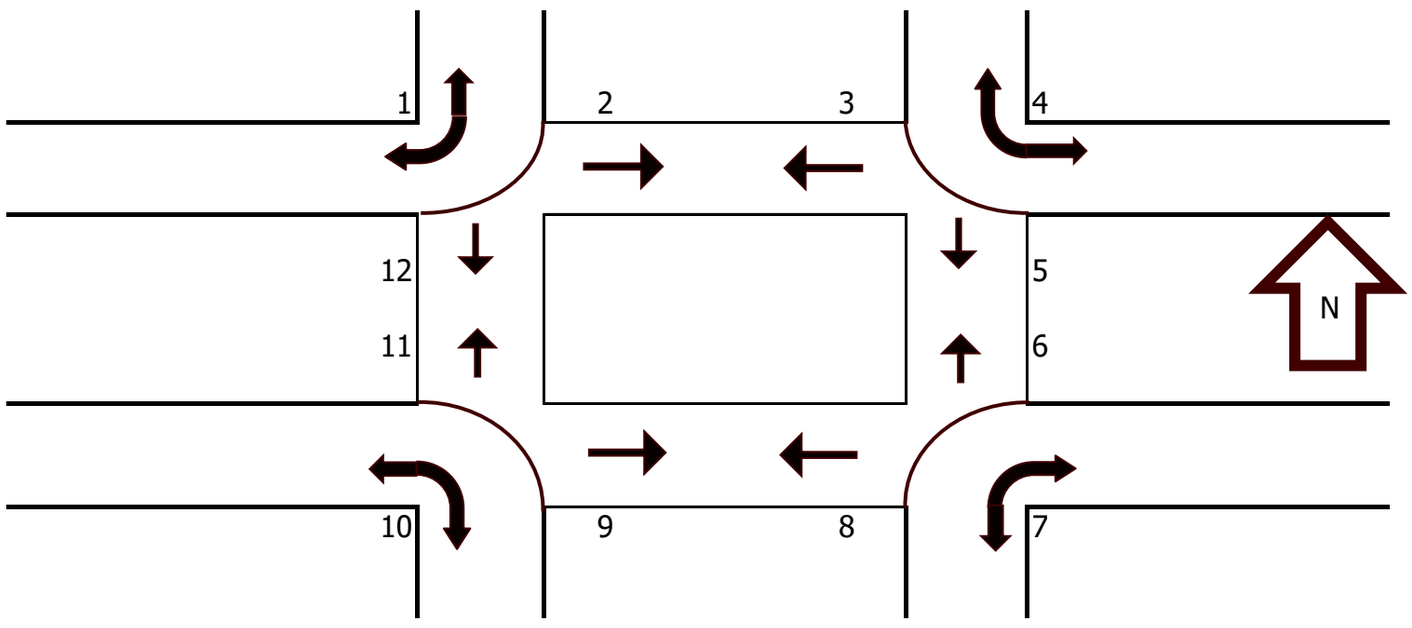
☑ Add U-Turns to Left Turns

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Mill			WESTBOUND Mill				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 0.5	ER 0.5	WL 0.5	WT 0.5	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:30 AM	2	131	6	23	169	17	3	15	2	3	7	15	393	0	0	0	0	0
	7:45 AM	8	169	8	18	246	17	2	12	3	5	16	29	533	0	0	0	0	0
	8:00 AM	3	128	4	13	208	12	2	9	2	9	19	22	431	0	0	0	0	0
	8:15 AM	4	157	5	15	183	13	3	12	3	2	9	17	423	0	0	0	0	0
	8:30 AM	2	150	2	12	208	8	4	7	4	6	11	19	433	0	0	0	0	0
	8:45 AM	4	135	6	10	176	12	1	13	5	6	14	19	401	0	0	0	0	0
	9:00 AM	5	126	4	4	118	11	3	4	1	2	12	11	301	0	0	0	0	0
	9:15 AM	2	101	5	6	149	4	2	4	3	2	5	11	294	0	0	0	0	0
	VOLUMES	30	1,097	40	101	1,457	94	20	76	23	35	93	143	3,209	0	0	0	0	0
	APPROACH %	3%	94%	3%	6%	88%	6%	17%	64%	19%	13%	34%	53%						
	APP/DEPART	1,167	/	1,260	1,652	/	1,515	119	/	217	271	/	217	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	17	604	19	58	845	50	11	40	12	22	55	87	1,820					
	APPROACH %	3%	94%	3%	6%	89%	5%	17%	63%	19%	13%	34%	53%						
	PEAK HR FACTOR		0.865			0.848			0.875			0.820		0.854					
	APP/DEPART	640	/	702	953	/	879	63	/	117	164	/	122	0					
MD	11:00 AM	4	132	5	10	163	5	4	6	4	4	7	16	360	0	0	0	0	0
	11:15 AM	1	137	5	5	163	4	7	2	5	2	4	13	348	0	0	0	0	0
	11:30 AM	6	160	5	10	189	10	8	7	1	4	7	10	417	0	0	0	0	0
	11:45 AM	3	168	4	11	159	9	4	9	1	5	11	12	396	0	0	0	0	0
	12:00 PM	4	185	2	11	187	11	11	9	6	4	11	19	460	0	0	0	0	0
	12:15 PM	2	178	3	10	171	8	12	3	3	5	11	17	423	0	0	0	0	0
	12:30 PM	2	170	4	8	188	11	9	5	5	3	9	16	430	0	0	0	0	0
	12:45 PM	5	180	8	14	160	8	4	4	8	3	18	13	425	0	0	0	0	0
	VOLUMES	27	1,310	36	79	1,380	66	59	45	33	30	78	116	3,259	0	0	0	0	0
	APPROACH %	2%	95%	3%	5%	90%	4%	43%	33%	24%	13%	35%	52%						
	APP/DEPART	1,373	/	1,485	1,525	/	1,443	137	/	160	224	/	171	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	13	713	17	43	706	38	36	21	22	15	49	65	1,738					
	APPROACH %	2%	96%	2%	5%	90%	5%	46%	27%	28%	12%	38%	50%						
	PEAK HR FACTOR		0.962			0.941			0.760			0.949		0.945					
	APP/DEPART	743	/	814	787	/	743	79	/	81	129	/	100	0					
PM	04:00 PM	3	203	4	7	167	9	16	6	5	2	18	17	457	0	0	0	0	0
	4:15 PM	4	190	4	9	169	4	5	5	6	5	9	19	429	0	0	0	0	0
	4:30 PM	3	201	6	7	184	4	4	7	3	5	12	15	451	0	0	0	0	0
	4:45 PM	7	224	3	10	191	7	5	11	6	7	11	27	509	0	0	0	0	0
	5:00 PM	4	271	5	9	187	7	22	17	2	4	19	49	596	0	0	0	0	0
	5:15 PM	2	227	13	7	191	7	8	9	2	8	14	28	516	0	0	0	0	0
	5:30 PM	4	230	5	7	143	6	9	13	6	2	15	27	467	0	0	0	0	0
	5:45 PM	2	173	6	7	142	4	8	1	5	3	14	14	379	0	0	0	0	0
	VOLUMES	29	1,719	46	63	1,374	48	77	69	35	36	112	196	3,804	0	0	0	0	0
	APPROACH %	2%	96%	3%	4%	93%	3%	43%	38%	19%	10%	33%	57%						
	APP/DEPART	1,794	/	1,992	1,485	/	1,445	181	/	178	344	/	189	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	17	952	26	33	712	27	44	50	16	21	59	131	2,088					
	APPROACH %	2%	96%	3%	4%	92%	3%	40%	45%	15%	10%	28%	62%						
	PEAK HR FACTOR		0.888			0.928			0.671			0.733		0.876					
	APP/DEPART	995	/	1,127	772	/	749	110	/	109	211	/	103	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	2	0	0	6	0	0	3	0	0	1	12
	7:45 AM	0	0	4	0	1	12	0	1	8	0	0	3	29
	8:00 AM	0	1	2	0	0	4	0	0	5	0	0	0	12
	8:15 AM	0	0	0	0	0	3	0	0	2	0	0	2	7
	8:30 AM	0	3	1	0	0	3	0	0	1	0	2	0	10
	8:45 AM	0	2	1	0	1	6	0	1	3	0	0	0	14
	9:00 AM	0	0	1	0	1	1	0	0	3	0	2	0	8
	9:15 AM	0	0	3	0	0	2	0	1	0	0	0	1	7
	TOTAL	0	6	14	0	3	37	0	3	25	0	4	7	99
MD	11:00 AM	0	2	0	0	0	1	0	0	1	3	3	1	11
	11:15 AM	0	0	0	0	0	0	1	0	2	0	3	3	9
	11:30 AM	0	0	0	0	0	3	0	1	2	0	3	1	10
	11:45 AM	0	2	0	0	0	6	0	0	1	0	4	0	13
	12:00 PM	0	3	0	0	1	3	0	1	0	0	1	1	10
	12:15 PM	0	2	3	0	2	1	1	1	0	0	2	5	17
	12:30 PM	0	0	0	0	1	1	0	0	1	0	1	0	4
	12:45 PM	0	3	0	0	4	4	1	2	5	0	4	3	26
	TOTAL	0	12	3	0	8	19	3	5	12	3	21	14	100
PM	4:00 PM	0	2	3	0	5	3	0	4	1	0	2	2	22
	4:15 PM	0	2	0	0	1	2	0	1	5	0	1	2	14
	4:30 PM	0	6	0	1	3	2	0	2	3	2	5	2	26
	4:45 PM	0	1	1	1	2	1	1	2	0	0	1	1	11
	5:00 PM	0	10	4	10	10	3	2	5	1	0	0	4	49
	5:15 PM	0	0	4	2	3	1	1	4	1	0	0	2	18
	5:30 PM	1	1	1	1	2	5	0	3	1	3	1	0	19
	5:45 PM	0	0	1	0	2	5	0	3	0	1	0	0	12
	TOTAL	1	22	14	15	28	22	4	24	12	6	10	13	171



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Mill

PROJECT #: SC0843
LOCATION #: 107
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

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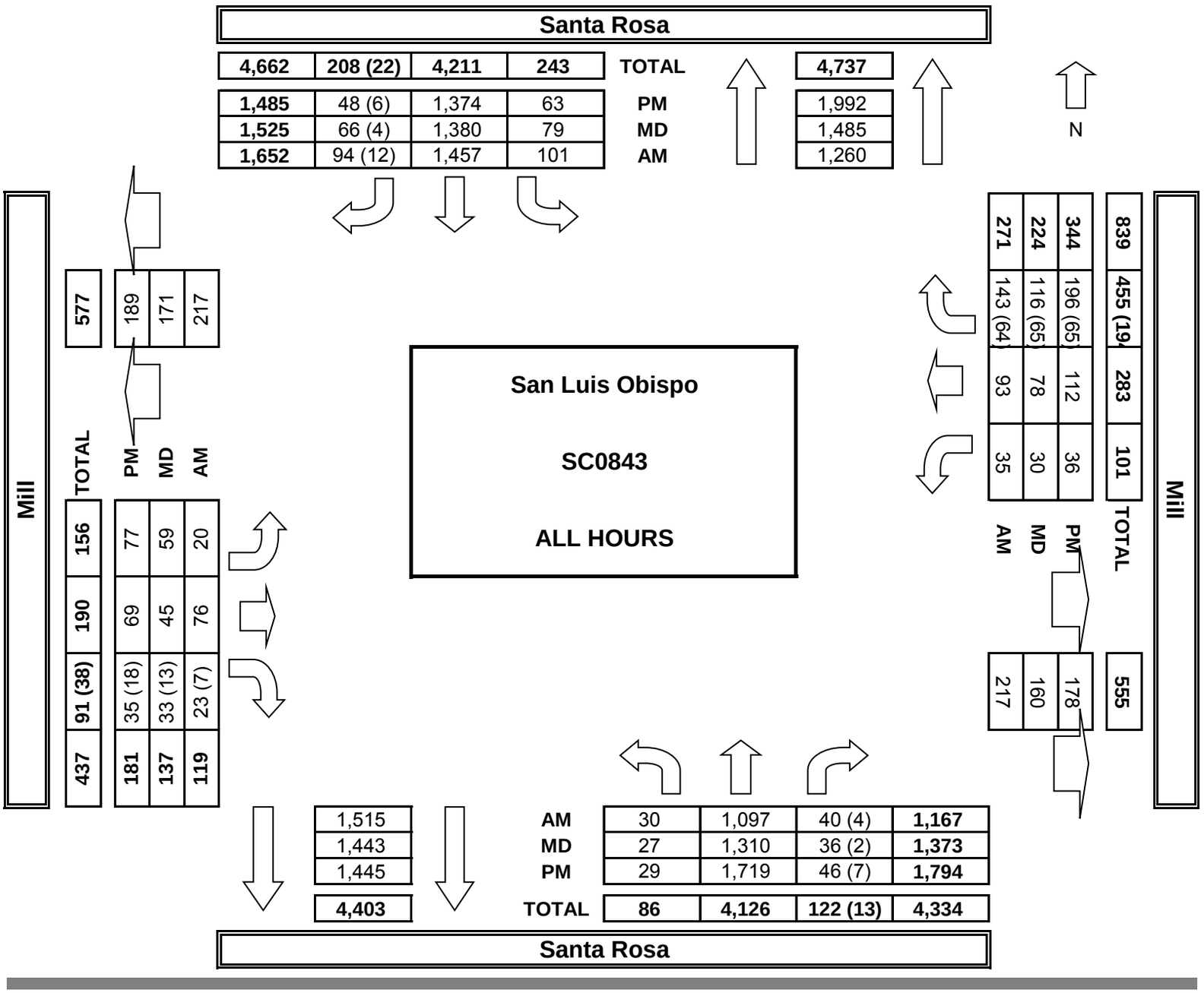
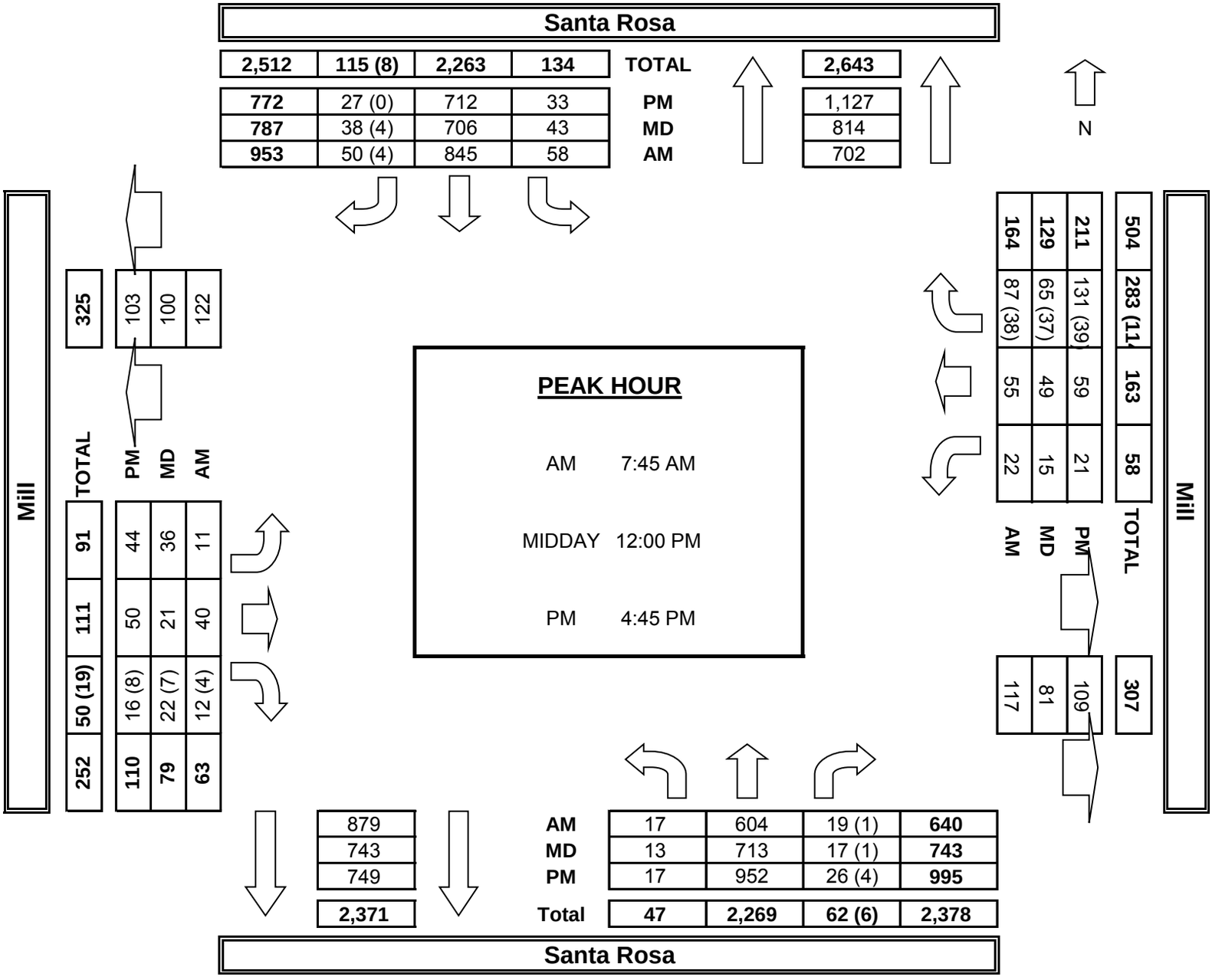
		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Mill			WESTBOUND Mill			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 0.5	ER 0.5	WL 0.5	WT 0.5	WR 1	TOTAL
AM	7:30 AM	0	0	0	0	0	0	2	0	1	0	2	0	5
	7:45 AM	0	13	4	0	1	0	0	7	0	0	0	0	25
	8:00 AM	0	1	1	0	1	0	1	2	0	0	0	0	6
	8:15 AM	0	2	0	0	1	0	0	2	0	1	0	0	6
	8:30 AM	0	0	0	0	1	1	0	1	0	0	1	0	4
	8:45 AM	0	4	1	0	3	0	1	3	0	0	1	0	13
	9:00 AM	0	2	0	0	0	1	1	2	0	0	1	0	7
	9:15 AM	0	2	0	0	1	0	1	1	0	1	1	0	7
	VOLUMES	0	24	6	0	8	2	6	18	1	2	6	0	73
	APPROACH %	0%	80%	20%	0%	80%	20%	24%	72%	4%	25%	75%	0%	
	APP/DEPART	30	/	30	10	/	11	25	/	24	8	/	8	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	16	5	0	3	0	3	11	1	1	2	0	42
	APPROACH %	0%	76%	24%	0%	100%	0%	20%	73%	7%	33%	67%	0%	
	PEAK HR FACTOR		0.309			0.750			0.536			0.375		0.420
	APP/DEPART	21	/	19	3	/	5	15	/	16	3	/	2	0
MD	11:00 AM	0	2	0	0	2	0	0	1	0	0	0	0	5
	11:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	11:30 AM	0	1	0	0	4	0	0	4	0	0	1	0	10
	11:45 AM	0	3	0	0	0	0	0	3	0	0	1	0	7
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	1	0	0	2	0	0	1	0	0	0	0	4
	12:30 PM	0	1	1	0	0	0	0	1	0	0	0	0	3
	12:45 PM	0	1	0	0	3	0	1	0	0	0	0	0	5
	VOLUMES	0	10	1	0	12	0	1	10	0	0	2	0	36
	APPROACH %	0%	91%	9%	0%	100%	0%	9%	91%	0%	0%	100%	0%	
	APP/DEPART	11	/	11	12	/	12	11	/	11	2	/	2	0
	BEGIN PEAK HR		11:00 AM											
	VOLUMES	0	7	0	0	7	0	0	8	0	0	2	0	24
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.583			0.438			0.500			0.500		0.600
	APP/DEPART	7	/	7	7	/	7	8	/	8	2	/	2	0
PM	04:00 PM	0	0	0	0	0	0	1	0	0	0	3	0	4
	4:15 PM	0	4	0	0	2	1	0	2	0	0	1	0	10
	4:30 PM	0	1	0	0	0	0	1	3	0	0	1	0	6
	4:45 PM	0	2	0	0	2	2	0	0	0	1	2	0	9
	5:00 PM	0	0	0	0	1	0	0	1	0	0	4	0	6
	5:15 PM	0	2	0	0	2	1	0	1	0	0	4	0	10
	5:30 PM	0	2	0	0	0	0	1	1	0	0	1	0	5
	5:45 PM	0	1	0	0	2	0	0	0	0	0	1	0	4
	VOLUMES	0	12	0	0	9	4	3	8	0	1	17	0	54
	APPROACH %	0%	100%	0%	0%	69%	31%	27%	73%	0%	6%	94%	0%	
	APP/DEPART	12	/	15	13	/	10	11	/	8	18	/	21	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	5	0	0	5	3	1	5	0	1	11	0	31
	APPROACH %	0%	100%	0%	0%	63%	38%	17%	83%	0%	8%	92%	0%	
	PEAK HR FACTOR		0.313			0.500			0.375			0.750		0.775
	APP/DEPART	5	/	6	8	/	6	6	/	5	12	/	14	0

AimTD LLC

TURNING MOVEMENT COUNTS




Santa Rosa
2,512
115 (8)
2,263
134
TOTAL
2,643
772
27 (0)
712
33
PM
1,127
787
38 (4)
706
43
MD
814
953
50 (4)
845
58
AM
702
N
Mill
325
103
100
122
TOTAL
PM
MD
AM
91
44
36
11
111
50
21
40
50 (19)
16 (8)
22 (7)
12 (4)
252
110
79
63
PEAK HOUR
AM 7:45 AM
MIDDAY 12:00 PM
PM 4:45 PM
164
129
211
87 (38)
65 (37)
131 (39)
55
49
59
22
15
21
504
283 (11
163
58
Mill
AM
MD
PM
TOTAL
117
81
109
307
879
743
749
2,371
AM
MD
PM
Total
17
604
19 (1)
640
13
713
17 (1)
743
17
952
26 (4)
995
47
2,269
62 (6)
2,378
Santa Rosa

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Palm

PROJECT #: SC0843
LOCATION #: 108
CONTROL: SIGNAL

NOTES:

AM PM MD OTHER OTHER

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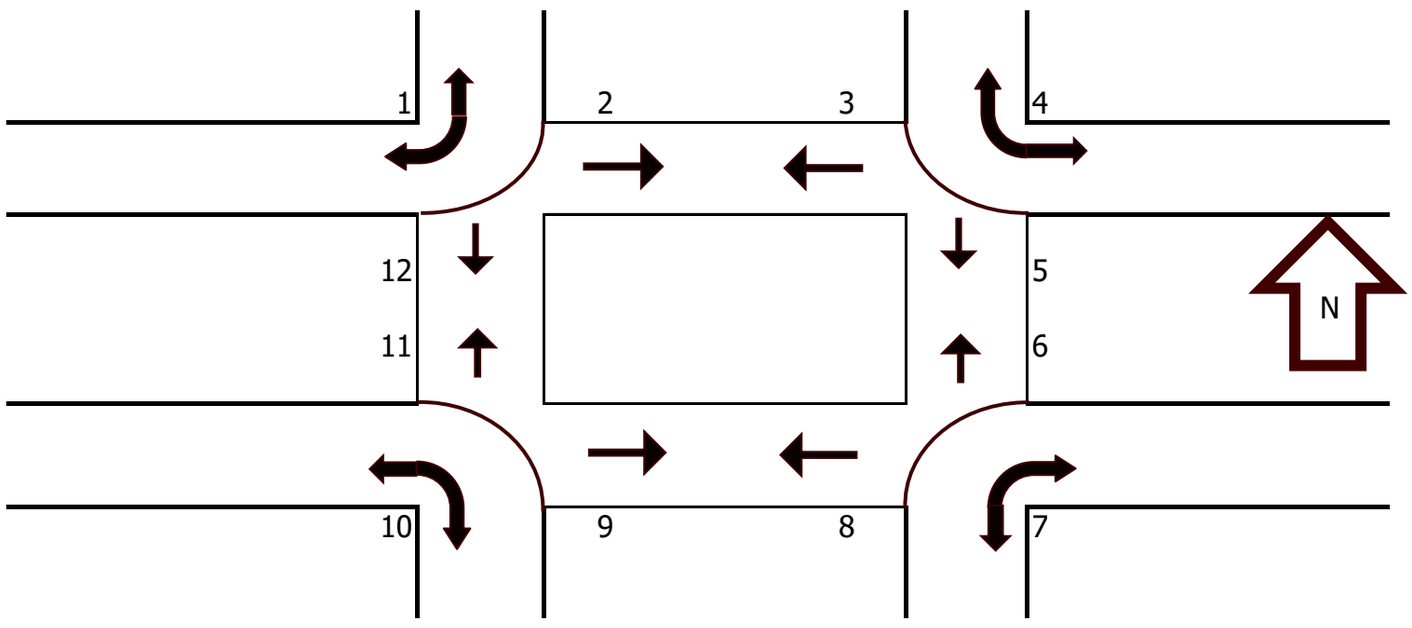
☑ Add U-Turns to Left Turns

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Palm			WESTBOUND Palm				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 0	WT 1	WR 0	TOTAL	NB X	SB 0	EB 0	WB 0	TTL
AM	7:30 AM	3	124	3	4	167	8	8	1	7	1	4	1	331	0	0	0	0	0
	7:45 AM	7	145	2	13	229	13	23	7	18	3	11	10	481	0	0	0	0	0
	8:00 AM	5	152	3	6	193	16	17	12	10	1	6	5	426	0	0	0	0	0
	8:15 AM	3	141	2	7	164	19	12	5	4	0	5	4	366	0	0	0	0	0
	8:30 AM	4	122	2	2	189	14	14	6	5	0	2	3	363	0	0	0	0	0
	8:45 AM	5	115	5	8	160	13	17	0	4	2	3	5	337	0	0	0	0	0
	9:00 AM	4	121	3	3	116	10	9	8	11	1	1	2	289	0	0	0	0	0
	9:15 AM	6	95	0	5	137	13	14	0	10	1	2	4	287	0	0	0	0	0
	VOLUMES	37	1,015	20	48	1,355	106	114	39	69	9	34	34	2,880	0	0	0	0	0
	APPROACH %	3%	95%	2%	3%	90%	7%	51%	18%	31%	12%	44%	44%						
	APP/DEPART	1,072	/	1,163	1,509	/	1,433	222	/	107	77	/	177	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	19	560	9	28	775	62	66	30	37	4	24	22	1,636					
	APPROACH %	3%	95%	2%	3%	90%	7%	50%	23%	28%	8%	48%	44%						
	PEAK HR FACTOR		0.919			0.848			0.693			0.521		0.850					
	APP/DEPART	588	/	648	865	/	816	133	/	67	50	/	105	0					
MD	11:30 AM	6	131	2	6	179	18	19	4	21	0	3	5	394	0	0	0	0	0
	11:45 AM	5	130	1	2	146	21	20	11	15	0	2	6	359	0	0	0	0	0
	12:00 PM	6	131	0	2	152	20	16	11	19	1	3	12	373	0	0	0	0	0
	12:15 PM	5	148	2	2	170	11	17	2	5	1	4	5	372	0	0	0	0	0
	12:30 PM	8	142	6	5	175	13	20	5	15	2	2	4	397	0	0	0	0	0
	12:45 PM	5	151	2	3	152	12	31	7	18	0	6	5	392	0	0	0	0	0
	1:00 PM	9	149	2	5	166	21	22	14	10	1	4	6	409	0	0	0	0	0
	1:15 PM	7	161	1	2	128	14	25	8	11	3	3	5	368	0	0	0	0	0
	VOLUMES	51	1,143	16	27	1,268	130	170	62	114	8	27	48	3,064	0	0	0	0	0
	APPROACH %	4%	94%	1%	2%	89%	9%	49%	18%	33%	10%	33%	58%						
	APP/DEPART	1,210	/	1,361	1,425	/	1,390	346	/	105	83	/	208	0					
	BEGIN PEAK HR		12:15 PM																
	VOLUMES	27	590	12	15	663	57	90	28	48	4	16	20	1,570					
	APPROACH %	4%	94%	2%	2%	90%	8%	54%	17%	29%	10%	40%	50%						
	PEAK HR FACTOR		0.983			0.952			0.741			0.909		0.960					
	APP/DEPART	629	/	700	735	/	715	166	/	55	40	/	100	0					
PM	04:00 PM	4	173	3	4	160	18	22	6	8	1	6	8	413	0	0	0	0	0
	4:15 PM	3	175	4	2	170	10	27	5	13	0	2	3	414	0	0	0	0	0
	4:30 PM	5	215	3	2	161	13	23	8	24	1	7	9	471	0	0	0	0	0
	4:45 PM	6	199	2	3	178	15	27	6	11	2	3	7	459	0	0	0	0	0
	5:00 PM	4	236	9	4	172	15	30	10	15	0	9	19	523	0	0	0	0	0
	5:15 PM	2	211	5	3	171	11	19	3	13	3	8	7	456	0	0	0	0	0
	5:30 PM	10	185	4	0	158	13	22	7	13	1	4	6	423	0	0	0	0	0
	5:45 PM	5	153	3	0	133	10	11	6	13	2	4	3	343	0	0	0	0	0
	VOLUMES	39	1,547	33	18	1,303	105	181	51	110	10	43	62	3,502	0	0	0	0	0
	APPROACH %	2%	96%	2%	1%	91%	7%	53%	15%	32%	9%	37%	54%						
	APP/DEPART	1,619	/	1,790	1,426	/	1,423	342	/	102	115	/	187	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	17	861	19	12	682	54	99	27	63	6	27	42	1,909					
	APPROACH %	2%	96%	2%	2%	91%	7%	52%	14%	33%	8%	36%	56%						
	PEAK HR FACTOR		0.901			0.954			0.859			0.670		0.913					
	APP/DEPART	897	/	1,002	748	/	751	189	/	58	75	/	98	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	2	0	7	0	0	0	11	0	3	0	23
	7:45 AM	1	0	6	0	3	2	1	4	18	0	8	0	43
	8:00 AM	0	0	1	0	2	0	0	1	19	0	2	0	25
	8:15 AM	3	0	4	0	3	0	0	1	10	0	5	1	27
	8:30 AM	2	1	0	0	1	2	0	1	11	0	0	1	19
	8:45 AM	1	0	3	0	2	0	0	2	7	0	3	2	20
	9:00 AM	0	0	1	0	0	0	1	0	8	0	2	1	13
	9:15 AM	1	1	0	0	4	1	1	2	8	0	2	0	20
	TOTAL	8	2	17	0	22	5	3	11	92	0	25	5	190
MD	11:30 AM	1	1	1	0	0	2	0	5	2	0	3	1	16
	11:45 AM	1	2	3	0	3	3	2	7	2	0	2	2	27
	12:00 PM	0	2	1	0	5	3	0	17	7	0	2	4	41
	12:15 PM	0	0	2	0	1	3	0	4	6	0	6	3	25
	12:30 PM	0	2	0	0	2	1	0	5	3	0	3	0	16
	12:45 PM	0	2	0	0	2	2	0	6	2	0	3	4	21
	1:00 PM	0	1	1	0	4	1	3	5	9	0	3	1	28
	1:15 PM	0	1	4	0	3	2	0	4	7	0	9	1	31
	TOTAL	2	11	12	0	20	17	5	53	38	0	31	16	205
PM	4:00 PM	0	1	3	0	4	7	0	14	5	0	2	3	39
	4:15 PM	0	3	1	0	2	1	1	3	2	1	2	2	18
	4:30 PM	0	0	0	0	2	2	0	7	2	0	8	1	22
	4:45 PM	0	2	1	0	1	6	2	19	1	0	4	3	39
	5:00 PM	0	4	1	0	5	6	0	21	5	0	4	7	53
	5:15 PM	0	4	0	0	2	2	0	12	1	0	2	3	26
	5:30 PM	0	0	6	0	2	3	2	5	0	0	10	0	28
	5:45 PM	0	0	1	0	5	1	0	3	0	0	0	0	10
	TOTAL	0	14	13	0	23	28	5	84	16	1	32	19	235



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Palm

PROJECT #: SC0843
LOCATION #: 108
CONTROL: SIGNAL

NOTES:

AM
PM
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OTHER
OTHER

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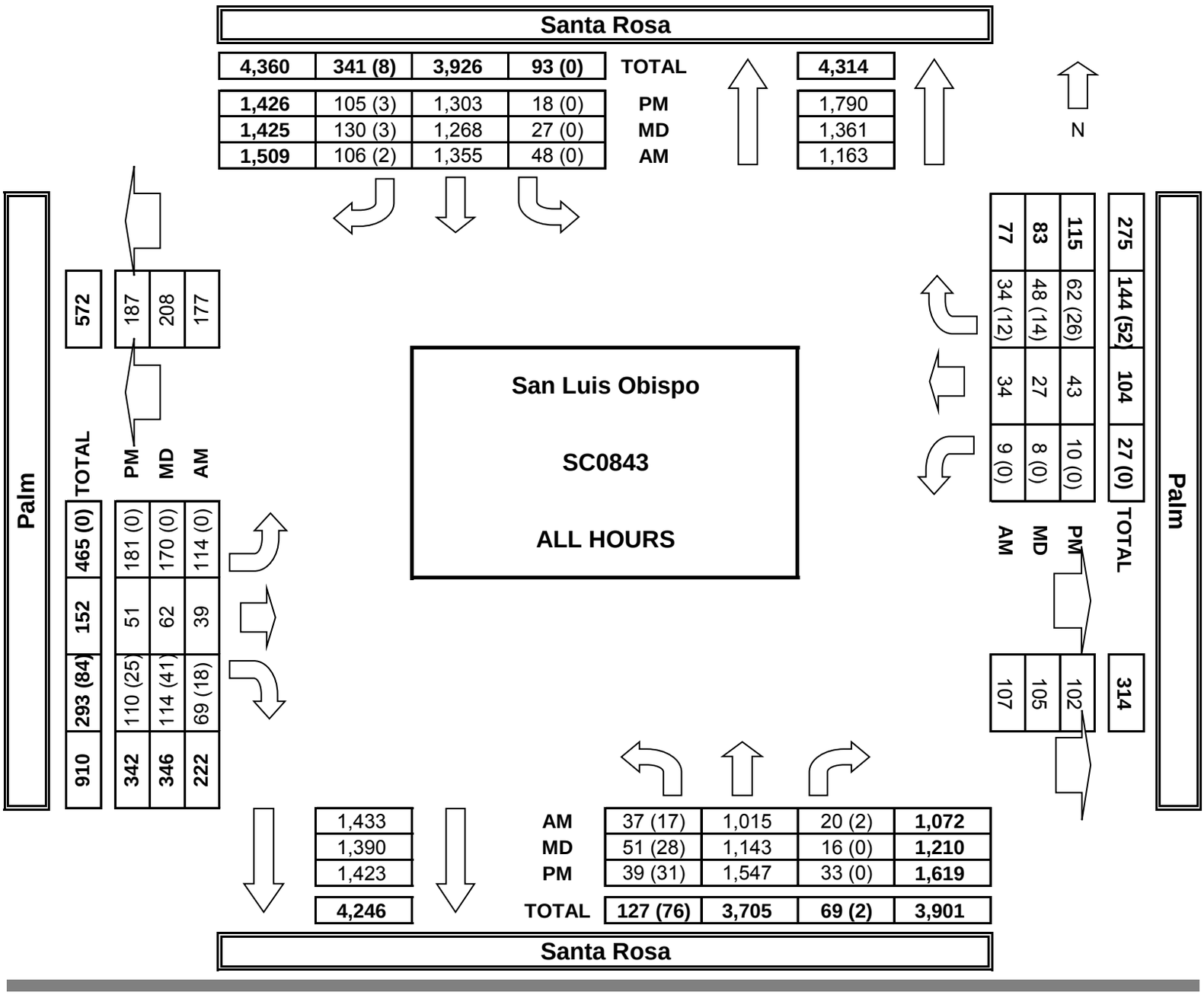
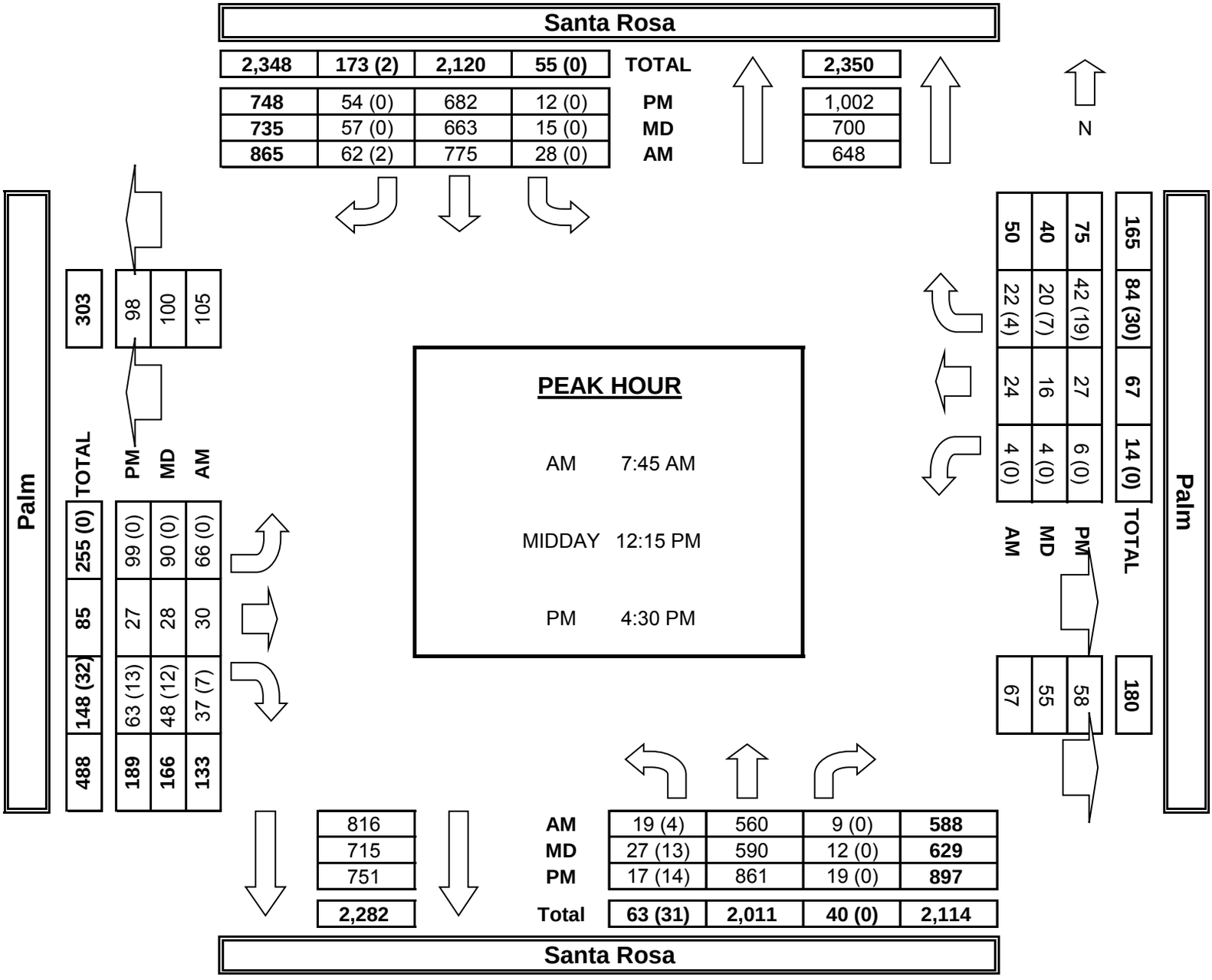
		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Palm			WESTBOUND Palm			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 0	WT 1	WR 0	TOTAL
AM	7:30 AM	0	0	0	0	0	0	1	0	1	0	0	0	2
	7:45 AM	1	13	0	0	2	0	2	0	0	0	0	0	18
	8:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
	8:15 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
	8:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	2
	8:45 AM	0	3	0	0	2	1	2	0	0	0	0	0	8
	9:00 AM	0	2	0	0	0	0	0	0	0	0	1	1	4
	9:15 AM	0	3	0	0	2	0	0	0	0	0	0	0	5
	VOLUMES	1	25	0	0	9	1	5	1	1	0	1	1	45
	APPROACH %	4%	96%	0%	0%	90%	10%	71%	14%	14%	0%	50%	50%	
	APP/DEPART	26	/	31	10	/	10	7	/	1	2	/	3	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	1	17	0	0	5	0	2	1	0	0	0	0	26
	APPROACH %	6%	94%	0%	0%	100%	0%	67%	33%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.321			0.625			0.375			0.000		0.361
	APP/DEPART	18	/	19	5	/	5	3	/	1	0	/	1	0
MD	11:30 AM	0	1	0	0	4	1	0	0	0	0	0	0	6
	11:45 AM	0	3	0	0	0	0	1	0	0	0	1	0	5
	12:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	12:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	12:30 PM	0	1	0	0	0	0	0	0	0	0	0	1	2
	12:45 PM	0	0	0	0	3	0	0	0	0	0	1	1	5
	1:00 PM	0	0	0	0	1	0	1	0	0	0	0	0	2
	1:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
	VOLUMES	0	7	0	0	11	1	2	0	0	0	2	2	25
	APPROACH %	0%	100%	0%	0%	92%	8%	100%	0%	0%	0%	50%	50%	
	APP/DEPART	7	/	11	12	/	11	2	/	0	4	/	3	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	0	5	0	0	6	1	1	0	0	0	1	0	14
	APPROACH %	0%	100%	0%	0%	86%	14%	100%	0%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.417			0.350			0.250			0.250		0.583
	APP/DEPART	5	/	6	7	/	6	1	/	0	1	/	2	0
PM	04:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
	4:15 PM	0	1	0	0	1	0	2	0	0	0	0	0	4
	4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
	4:45 PM	0	2	0	0	2	0	0	2	0	0	1	1	8
	5:00 PM	0	0	0	0	2	0	0	1	0	0	0	0	3
	5:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
	5:30 PM	0	2	0	0	1	0	0	0	0	0	0	0	3
	5:45 PM	0	1	0	0	2	0	1	0	0	0	0	0	4
	VOLUMES	0	9	0	0	9	1	3	3	0	0	1	1	27
	APPROACH %	0%	100%	0%	0%	90%	10%	50%	50%	0%	0%	50%	50%	
	APP/DEPART	9	/	13	10	/	9	6	/	3	2	/	2	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	4	0	0	6	0	2	3	0	0	1	1	17
	APPROACH %	0%	100%	0%	0%	100%	0%	40%	60%	0%	0%	50%	50%	
	PEAK HR FACTOR		0.500			0.750			0.625			0.250		0.531
	APP/DEPART	4	/	7	6	/	6	5	/	3	2	/	1	0

AimTD LLC

TURNING MOVEMENT COUNTS




Santa Rosa
2,348
173 (2)
2,120
55 (0)
TOTAL
2,350
748
54 (0)
682
12 (0)
PM
1,002
735
57 (0)
663
15 (0)
MD
700
865
62 (2)
775
28 (0)
AM
648
N
Palm
303
98
100
105
TOTAL
PM
MD
AM
255 (0)
99 (0)
90 (0)
66 (0)
85
27
28
30
148 (32)
63 (13)
48 (12)
37 (7)
488
189
166
133
PEAK HOUR
AM 7:45 AM
MIDDAY 12:15 PM
PM 4:30 PM
165
84 (30)
67
14 (0)
TOTAL
75
42 (19)
27
6 (0)
PM
40
20 (7)
16
4 (0)
MD
50
22 (4)
24
4 (0)
AM
180
58
55
67
Palm
816
715
751
2,282
AM
MD
PM
Total
19 (4)
560
9 (0)
588
27 (13)
590
12 (0)
629
17 (14)
861
19 (0)
897
63 (31)
2,011
40 (0)
2,114
Santa Rosa

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Monterey

PROJECT #: SC0843
LOCATION #: 109
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

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S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Monterey			WESTBOUND Monterey				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL	NB X	SB X	EB 0	WB 0	TTL
AM	7:30 AM	0	88	16	25	110	4	8	14	8	20	15	30	338	0	0	0	0	0
	7:45 AM	2	105	15	45	193	14	6	13	3	28	32	36	492	0	0	0	0	0
	8:00 AM	1	97	15	29	118	14	5	16	4	22	20	40	381	0	0	0	0	0
	8:15 AM	4	118	29	34	145	9	8	17	6	20	21	34	445	0	0	0	0	0
	8:30 AM	3	97	22	31	166	7	3	16	1	27	28	39	440	0	0	0	0	0
	8:45 AM	0	87	19	26	137	16	7	11	5	22	30	24	384	0	0	0	0	0
	9:00 AM	0	90	23	29	112	5	6	9	0	33	21	20	348	0	0	0	0	0
	9:15 AM	3	72	21	26	101	9	8	9	5	29	31	19	333	0	0	0	0	0
	VOLUMES	13	754	160	245	1,082	78	51	105	32	201	198	242	3,161	0	0	0	0	0
	APPROACH %	1%	81%	17%	17%	77%	6%	27%	56%	17%	31%	31%	38%						
	APP/DEPART	927	/	1,047	1,405	/	1,315	188	/	510	641	/	289	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	10	417	81	139	622	44	22	62	14	97	101	149	1,758					
	APPROACH %	2%	82%	16%	17%	77%	5%	22%	63%	14%	28%	29%	43%						
	PEAK HR FACTOR		0.841			0.799			0.790			0.904		0.893					
	APP/DEPART	508	/	588	805	/	733	98	/	282	347	/	155	0					
MD	11:30 AM	6	75	32	32	115	14	11	17	11	23	32	37	405	0	0	0	0	0
	11:45 AM	8	94	26	21	142	9	12	23	13	38	47	36	469	0	0	0	0	0
	12:00 PM	5	109	33	31	168	15	8	20	10	32	43	34	508	1	0	0	0	1
	12:15 PM	6	104	44	22	148	15	6	19	18	42	43	49	516	0	0	0	0	0
	12:30 PM	3	98	44	36	121	19	9	12	7	35	53	39	476	0	0	0	0	0
	12:45 PM	4	133	37	36	126	18	16	21	10	44	45	37	527	0	0	0	0	0
	1:00 PM	4	120	33	22	118	10	18	22	14	37	38	33	469	0	0	0	0	0
	1:15 PM	2	107	33	34	132	10	15	17	8	26	41	32	457	0	0	0	0	0
	VOLUMES	38	840	282	234	1,070	110	95	151	91	277	342	297	3,827	1	0	0	0	1
	APPROACH %	3%	72%	24%	17%	76%	8%	28%	45%	27%	30%	37%	32%						
	APP/DEPART	1,160	/	1,232	1,414	/	1,439	337	/	667	916	/	489	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	18	444	158	125	563	67	39	72	45	153	184	159	2,027					
	APPROACH %	3%	72%	25%	17%	75%	9%	25%	46%	29%	31%	37%	32%						
	PEAK HR FACTOR		0.891			0.882			0.830			0.925		0.962					
	APP/DEPART	620	/	642	755	/	762	156	/	355	496	/	268	0					
PM	04:00 PM	5	162	38	40	133	11	8	18	13	30	38	29	525	0	0	0	0	0
	4:15 PM	3	126	31	28	108	11	5	22	8	36	58	37	473	0	0	0	0	0
	4:30 PM	3	176	27	46	153	13	8	16	6	32	30	34	544	0	0	0	0	0
	4:45 PM	2	154	42	28	135	10	10	15	5	39	46	33	519	0	0	0	0	0
	5:00 PM	3	195	33	37	142	8	5	17	8	36	41	36	561	0	0	0	0	0
	5:15 PM	2	184	43	45	129	11	8	16	5	27	36	36	542	0	0	0	0	0
	5:30 PM	4	161	30	35	117	13	8	10	4	38	26	37	483	0	0	0	0	0
	5:45 PM	4	130	21	27	118	16	7	18	10	30	38	28	447	0	0	0	0	0
	VOLUMES	26	1,288	265	286	1,035	93	59	132	59	268	313	270	4,094	0	0	0	0	0
	APPROACH %	2%	82%	17%	20%	73%	7%	24%	53%	24%	31%	37%	32%						
	APP/DEPART	1,579	/	1,617	1,414	/	1,362	250	/	683	851	/	432	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	10	709	145	156	559	42	31	64	24	134	153	139	2,166					
	APPROACH %	1%	82%	17%	21%	74%	6%	26%	54%	20%	31%	36%	33%						
	PEAK HR FACTOR		0.935			0.893			0.992			0.903		0.965					
	APP/DEPART	864	/	879	757	/	717	119	/	365	426	/	205	0					

Santa Rosa

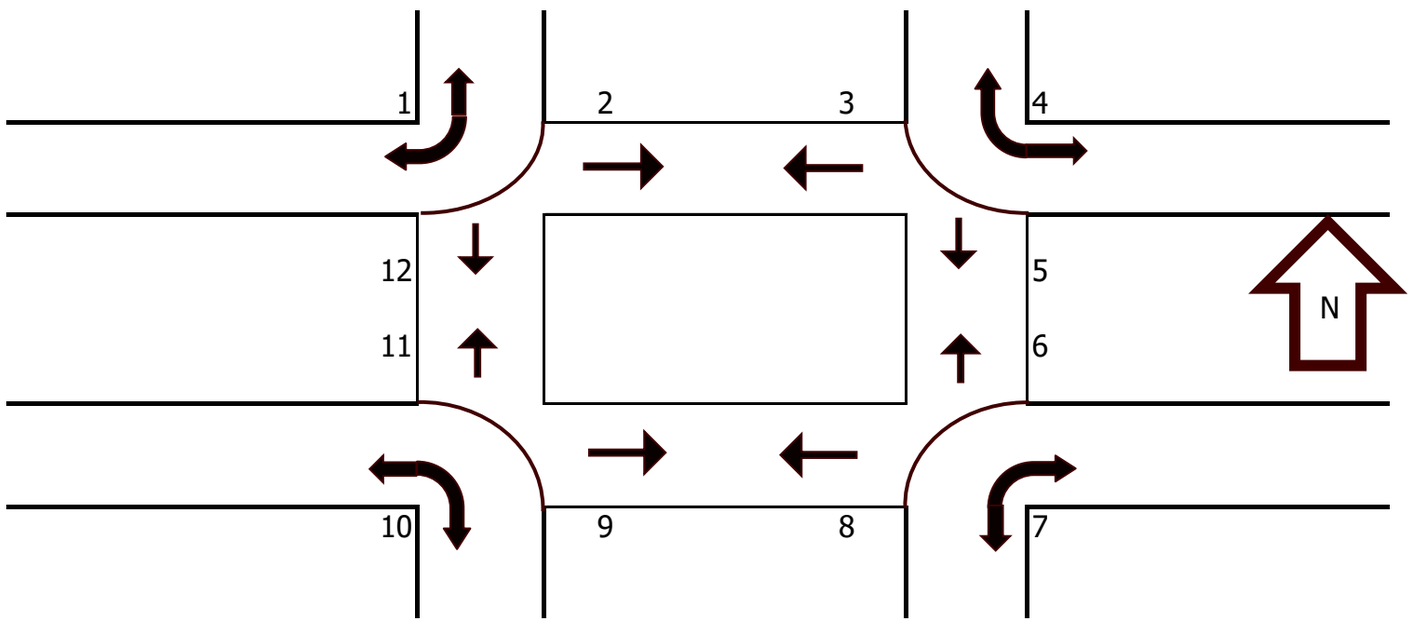
NORTH SIDE

Monterey WEST SIDE EAST SIDE **Monterey**

SOUTH SIDE

Santa Rosa

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	8	2	0	0	1	2	4	1	0	3	6	27
	7:45 AM	0	7	0	0	0	3	0	12	0	0	1	3	26
	8:00 AM	0	7	1	0	2	5	0	9	0	0	3	6	33
	8:15 AM	0	7	6	0	0	3	0	12	5	0	5	4	42
	8:30 AM	0	17	3	0	1	3	0	12	0	0	3	4	43
	8:45 AM	0	7	10	0	2	0	0	9	2	0	3	3	36
	9:00 AM	0	11	1	0	1	0	0	2	4	0	4	2	25
	9:15 AM	1	6	3	0	1	2	0	11	2	0	1	0	27
	TOTAL	1	70	26	0	7	17	2	71	14	0	23	28	259
MD	11:30 AM	0	3	9	0	5	5	0	8	16	0	4	8	58
	11:45 AM	0	8	21	0	2	4	0	9	8	0	10	10	72
	12:00 PM	1	21	14	0	2	3	0	10	10	0	10	25	96
	12:15 PM	4	9	10	0	2	5	0	6	8	0	4	5	53
	12:30 PM	0	8	8	0	1	2	0	1	21	0	6	5	52
	12:45 PM	0	12	21	0	5	1	0	16	9	0	16	11	91
	1:00 PM	0	14	10	0	2	2	0	20	12	0	9	8	77
	1:15 PM	0	8	6	0	5	7	0	20	10	0	11	8	75
	TOTAL	5	83	99	0	24	29	0	90	94	0	70	80	574
PM	4:00 PM	0	1	11	0	2	3	2	8	5	0	7	2	41
	4:15 PM	0	3	8	0	2	1	0	8	4	0	7	3	36
	4:30 PM	0	6	7	0	0	3	0	2	9	1	5	3	36
	4:45 PM	0	3	25	0	3	5	0	12	8	0	2	0	58
	5:00 PM	0	9	16	0	5	7	0	8	19	0	14	7	85
	5:15 PM	0	4	7	0	4	3	0	12	10	0	7	1	48
	5:30 PM	0	8	8	0	2	7	0	12	10	0	3	6	56
	5:45 PM	0	7	4	0	2	1	0	8	5	0	4	3	34
	TOTAL	0	41	86	0	20	30	2	70	70	1	49	25	394



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Monterey

PROJECT #: SC0843
LOCATION #: 109
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

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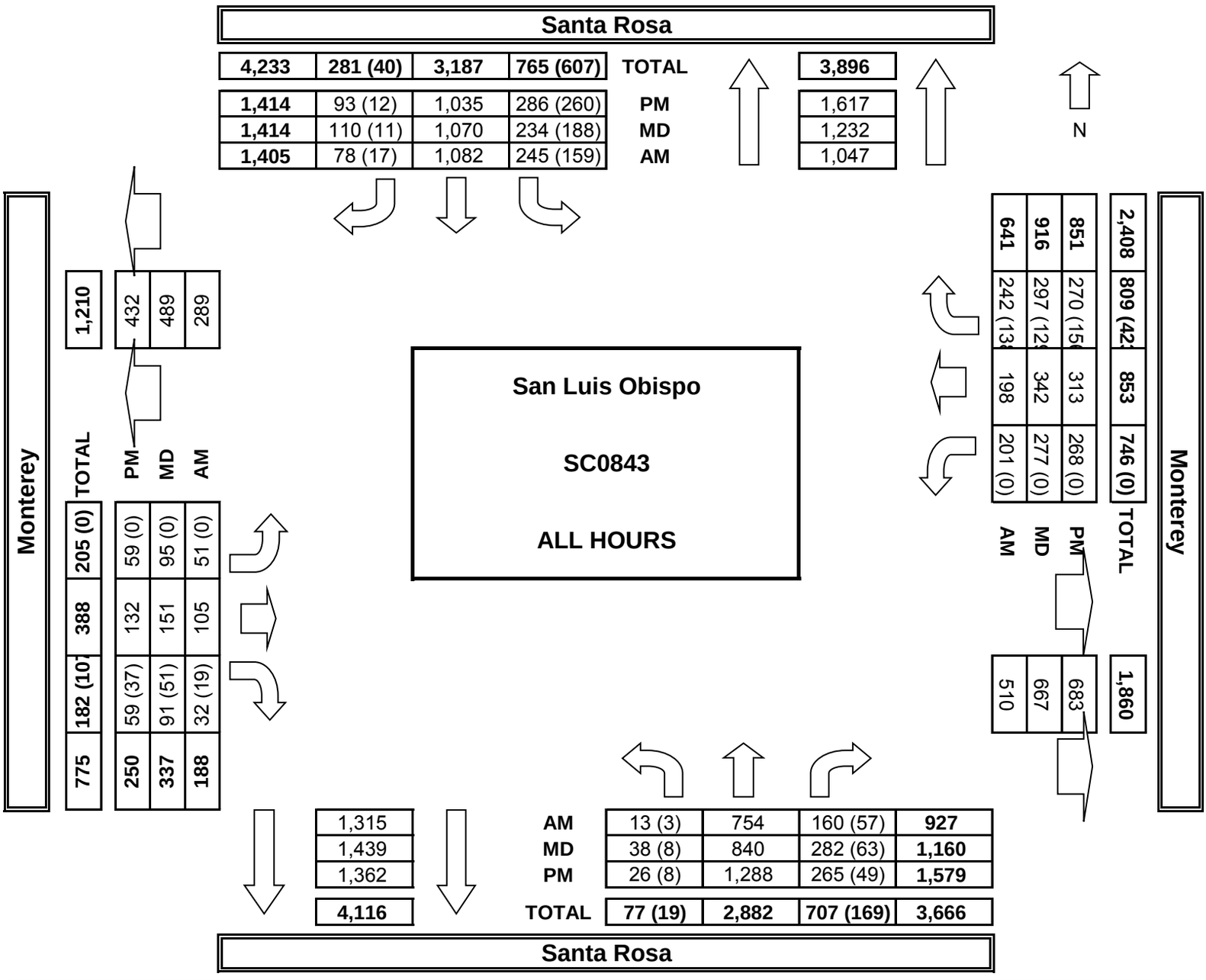
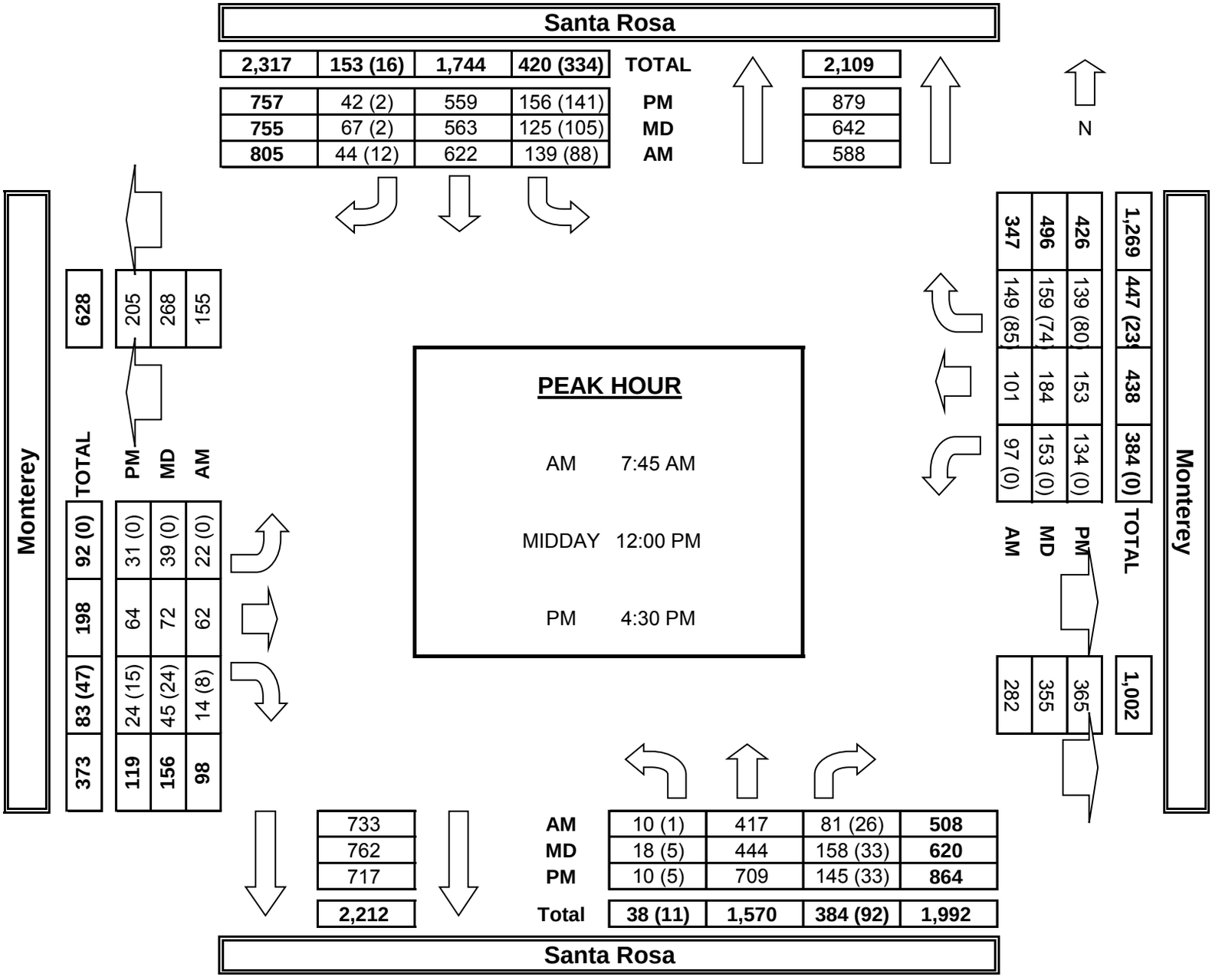
		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Monterey			WESTBOUND Monterey			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL
AM	7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	7:45 AM	1	2	0	1	0	0	0	1	0	0	1	0	6
	8:00 AM	0	1	0	0	1	0	0	1	1	0	1	0	5
	8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	8:45 AM	0	3	1	0	1	0	0	0	0	0	1	0	6
	9:00 AM	0	1	0	0	1	0	0	0	0	0	2	0	4
	9:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	2
	VOLUMES	1	9	1	1	4	0	0	4	1	0	5	0	26
	APPROACH %	9%	82%	9%	20%	80%	0%	0%	80%	20%	0%	100%	0%	
	APP/DEPART	11	/	9	5	/	5	5	/	6	5	/	6	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	5	1	0	3	0	0	1	0	0	3	0	13
	APPROACH %	0%	83%	17%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.375			0.750			0.125			0.375		0.542
	APP/DEPART	6	/	5	3	/	3	1	/	2	3	/	3	0
MD	11:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	3	0	0	0	0	0	0	0	0	3
	12:15 PM	0	1	0	0	0	0	0	0	0	0	2	0	3
	12:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
	12:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
	1:00 PM	1	0	0	0	0	0	0	1	0	1	1	0	4
	1:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
	VOLUMES	1	6	0	3	0	0	0	2	0	1	5	0	18
	APPROACH %	14%	86%	0%	100%	0%	0%	0%	100%	0%	17%	83%	0%	
	APP/DEPART	7	/	6	3	/	1	2	/	5	6	/	6	0
	BEGIN PEAK HR		12:15 PM											
	VOLUMES	1	5	0	0	0	0	0	1	0	1	3	0	11
	APPROACH %	17%	83%	0%	0%	0%	0%	0%	100%	0%	25%	75%	0%	
	PEAK HR FACTOR		0.750			0.000			0.250			0.500		0.688
	APP/DEPART	6	/	5	0	/	1	1	/	1	4	/	4	0
PM	04:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
	4:15 PM	0	1	1	0	0	0	0	0	0	0	1	0	3
	4:30 PM	0	1	0	0	2	0	0	2	0	0	0	0	5
	4:45 PM	0	0	0	0	2	0	0	3	0	0	2	0	7
	5:00 PM	0	1	0	0	0	0	0	1	0	2	1	0	5
	5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:30 PM	1	0	0	0	3	0	0	0	0	0	1	0	5
	5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
	VOLUMES	1	3	1	0	7	0	0	7	0	2	9	0	30
	APPROACH %	20%	60%	20%	0%	100%	0%	0%	100%	0%	18%	82%	0%	
	APP/DEPART	5	/	3	7	/	9	7	/	8	11	/	10	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	3	1	0	4	0	0	6	0	2	4	0	20
	APPROACH %	0%	75%	25%	0%	100%	0%	0%	100%	0%	33%	67%	0%	
	PEAK HR FACTOR		0.500			0.500			0.500			0.500		0.714
	APP/DEPART	4	/	3	4	/	6	6	/	7	6	/	4	0

AimTD LLC

TURNING MOVEMENT COUNTS




Santa Rosa
2,317 | 153 (16) | 1,744 | 420 (334) | TOTAL
757 | 42 (2) | 559 | 156 (141) | PM
755 | 67 (2) | 563 | 125 (105) | MD
805 | 44 (12) | 622 | 139 (88) | AM
2,109
879
642
588
N
Monterey
628
205 | 268 | 155
TOTAL
PM
MD
AM
92 (0) | 31 (0) | 39 (0) | 22 (0)
198 | 64 | 72 | 62
83 (47) | 24 (15) | 45 (24) | 14 (8)
373 | 119 | 156 | 98
PEAK HOUR
AM 7:45 AM
MIDDAY 12:00 PM
PM 4:30 PM
1,269 | 447 (23 | 438 | 384 (0)
347 | 496 | 426
149 (85) | 159 (74) | 139 (80)
101 | 184 | 153
97 (0) | 153 (0) | 134 (0)
TOTAL
AM
MD
PM
282 | 355 | 365
1,002
Monterey
733
762
717
2,212
AM | 10 (1) | 417 | 81 (26) | 508
MD | 18 (5) | 444 | 158 (33) | 620
PM | 10 (5) | 709 | 145 (33) | 864
Total | 38 (11) | 1,570 | 384 (92) | 1,992
Santa Rosa

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Higuera

PROJECT #: SC0843
LOCATION #: 110
CONTROL: SIGNAL

NOTES:

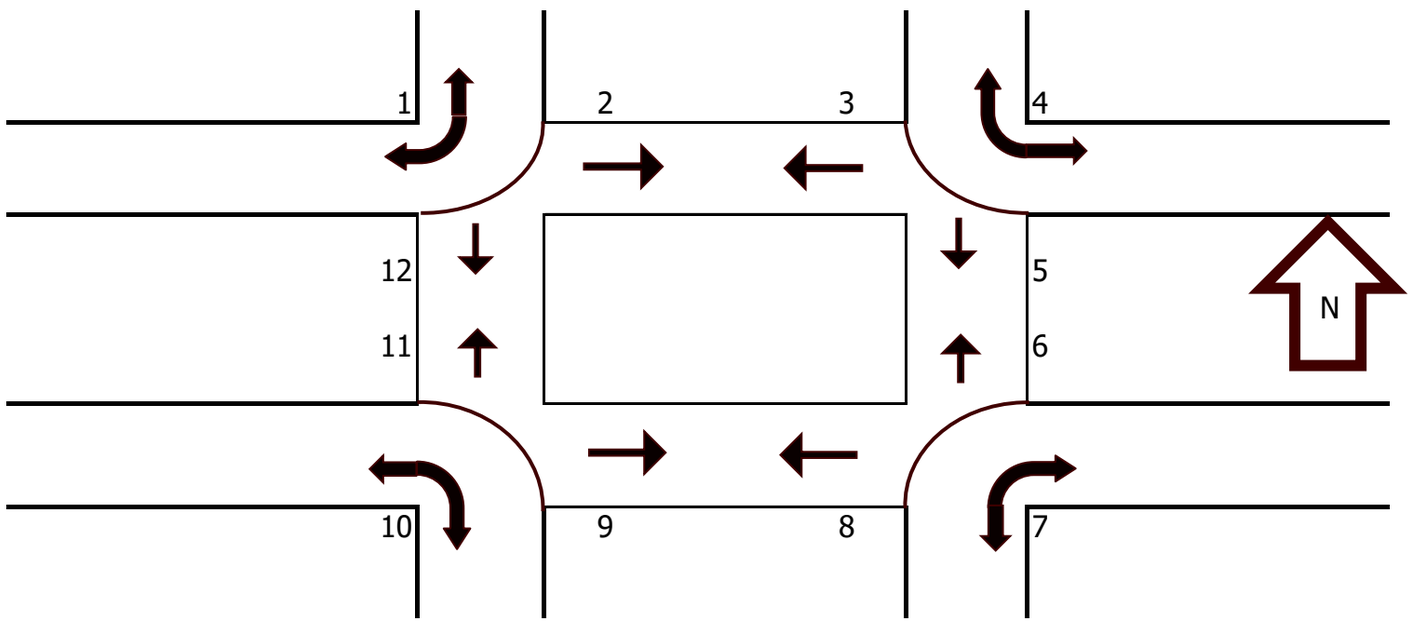
AM PM MD OTHER OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Higuera			WESTBOUND Higuera				U-TURNS				
	LANES:	NL 1	NT 2	NR X	SL X	ST 1	SR 1	EL X	ET X	ER X	WL 0.5	WT 2.5	WR 1	TOTAL	NB 0	SB 0	EB X	WB X	TTL
AM	7:30 AM	9	121	0	0	70	50	0	0	0	3	24	10	287	0	0	0	0	0
	7:45 AM	9	136	0	0	129	81	0	0	0	5	44	13	417	0	0	0	0	0
	8:00 AM	8	112	0	0	100	69	0	0	0	2	29	9	329	0	0	0	0	0
	8:15 AM	11	123	0	0	104	59	0	0	0	3	25	9	334	0	0	0	0	0
	8:30 AM	11	99	0	0	115	73	0	0	0	4	26	8	336	0	0	0	0	0
	8:45 AM	8	81	0	0	107	62	0	0	0	3	23	6	290	0	0	0	0	0
	9:00 AM	7	81	0	0	96	41	0	0	0	3	23	5	256	0	0	0	0	0
	9:15 AM	14	69	0	0	77	71	0	0	0	3	19	8	261	0	0	0	0	0
	VOLUMES	77	822	0	0	798	506	0	0	0	26	213	68	2,510	0	0	0	0	0
	APPROACH %	9%	91%	0%	0%	61%	39%	0%	0%	0%	8%	69%	22%						
	APP/DEPART	899	/	890	1,304	/	824	0	/	0	307	/	796	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	39	470	0	0	448	282	0	0	0	14	124	39	1,416					
	APPROACH %	8%	92%	0%	0%	61%	39%	0%	0%	0%	8%	70%	22%						
	PEAK HR FACTOR		0.878			0.869			0.000			0.714		0.849					
	APP/DEPART	509	/	509	730	/	462	0	/	0	177	/	445	0					
MD	11:30 AM	21	118	0	0	89	92	0	0	0	12	26	14	372	0	0	0	0	0
	11:45 AM	24	126	0	0	77	81	0	0	0	4	27	8	347	0	0	0	0	0
	12:00 PM	19	139	0	0	109	81	0	0	0	6	30	16	400	0	0	0	0	0
	12:15 PM	29	133	0	0	117	76	0	0	0	12	31	19	417	0	0	0	0	0
	12:30 PM	20	134	0	0	121	77	0	0	0	8	35	11	406	0	0	0	0	0
	12:45 PM	16	147	0	0	98	81	0	0	0	5	32	20	399	0	0	0	0	0
	1:00 PM	23	124	0	0	103	76	0	0	0	6	33	10	375	0	0	0	0	0
	1:15 PM	19	139	0	0	88	66	0	0	0	7	24	12	355	0	0	0	0	0
	VOLUMES	171	1,060	0	0	802	630	0	0	0	60	238	110	3,071	0	0	0	0	0
	APPROACH %	14%	86%	0%	0%	56%	44%	0%	0%	0%	15%	58%	27%						
	APP/DEPART	1,231	/	1,170	1,432	/	862	0	/	0	408	/	1,039	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	84	553	0	0	445	315	0	0	0	31	128	66	1,622					
	APPROACH %	13%	87%	0%	0%	59%	41%	0%	0%	0%	14%	57%	29%						
	PEAK HR FACTOR		0.977			0.960			0.000			0.907		0.972					
	APP/DEPART	637	/	619	760	/	476	0	/	0	225	/	527	0					
PM	03:30 PM	14	133	0	0	99	75	0	0	0	8	49	19	397	0	0	0	0	0
	3:45 PM	23	156	0	0	88	72	0	0	0	10	33	18	400	0	0	0	0	0
	4:00 PM	14	135	0	0	91	107	0	0	0	10	37	21	415	0	0	0	0	0
	4:15 PM	13	147	0	0	95	75	0	0	0	4	18	5	357	0	0	0	0	0
	4:30 PM	5	193	0	0	89	92	0	0	0	11	38	10	438	0	0	0	0	0
	4:45 PM	24	182	0	0	95	95	0	0	0	6	32	7	441	0	0	0	0	0
	5:00 PM	17	215	0	0	90	86	0	0	0	7	36	24	475	0	0	0	0	0
	5:15 PM	7	211	0	0	96	78	0	0	0	6	44	13	455	0	0	0	0	0
	VOLUMES	117	1,372	0	0	743	680	0	0	0	62	287	117	3,378	0	0	0	0	0
	APPROACH %	8%	92%	0%	0%	52%	48%	0%	0%	0%	13%	62%	25%						
	APP/DEPART	1,489	/	1,489	1,423	/	805	0	/	0	466	/	1,084	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	53	801	0	0	370	351	0	0	0	30	150	54	1,809					
	APPROACH %	6%	94%	0%	0%	51%	49%	0%	0%	0%	13%	64%	23%						
	PEAK HR FACTOR		0.920			0.949			0.000			0.873		0.952					
	APP/DEPART	854	/	855	721	/	400	0	/	0	234	/	554	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	12	1	0	1	0	0	3	0	0	3	20
	7:45 AM	0	0	21	3	0	5	0	0	3	2	2	5	41
	8:00 AM	1	1	4	1	0	2	0	0	1	0	0	5	15
	8:15 AM	0	0	4	0	0	2	0	2	0	1	1	2	12
	8:30 AM	0	0	4	0	2	1	0	1	3	0	1	5	17
	8:45 AM	0	1	5	0	0	3	0	5	3	0	2	3	22
	9:00 AM	0	0	4	1	0	1	0	2	6	0	2	0	16
	9:15 AM	0	1	3	2	2	1	3	4	6	0	1	2	25
	TOTAL	1	3	57	8	4	16	3	14	25	3	9	25	168
MD	11:30 AM	3	2	3	0	2	4	0	2	8	0	2	7	33
	11:45 AM	0	1	9	1	1	3	0	3	10	0	2	4	34
	12:00 PM	6	0	4	0	5	3	0	5	9	0	8	2	42
	12:15 PM	2	3	8	0	3	6	0	7	12	3	8	0	52
	12:30 PM	0	7	3	0	1	3	0	10	6	1	15	9	55
	12:45 PM	3	5	6	0	2	4	0	6	8	0	11	6	51
	1:00 PM	1	4	8	5	2	3	1	6	9	0	5	8	52
	1:15 PM	3	2	2	1	5	2	0	5	2	0	6	0	28
	TOTAL	18	24	43	7	21	28	1	44	64	4	57	36	347
PM	3:30 PM	4	4	13	0	0	12	2	8	5	0	8	7	63
	3:45 PM	1	4	7	0	2	3	0	17	3	0	5	2	44
	4:00 PM	3	7	1	2	3	5	0	10	4	0	7	2	44
	4:15 PM	0	4	6	0	5	2	0	5	7	0	2	2	33
	4:30 PM	0	8	3	0	2	2	0	5	6	0	4	0	30
	4:45 PM	1	2	3	0	1	2	1	3	5	0	3	1	22
	5:00 PM	2	22	4	0	4	3	0	7	6	0	9	3	60
	5:15 PM	0	9	6	0	2	6	0	14	2	0	4	6	49
	TOTAL	11	60	43	2	19	35	3	69	38	0	42	23	345



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Jan 27, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Higuera

PROJECT #: SC0843
LOCATION #: 110
CONTROL: SIGNAL

NOTES:

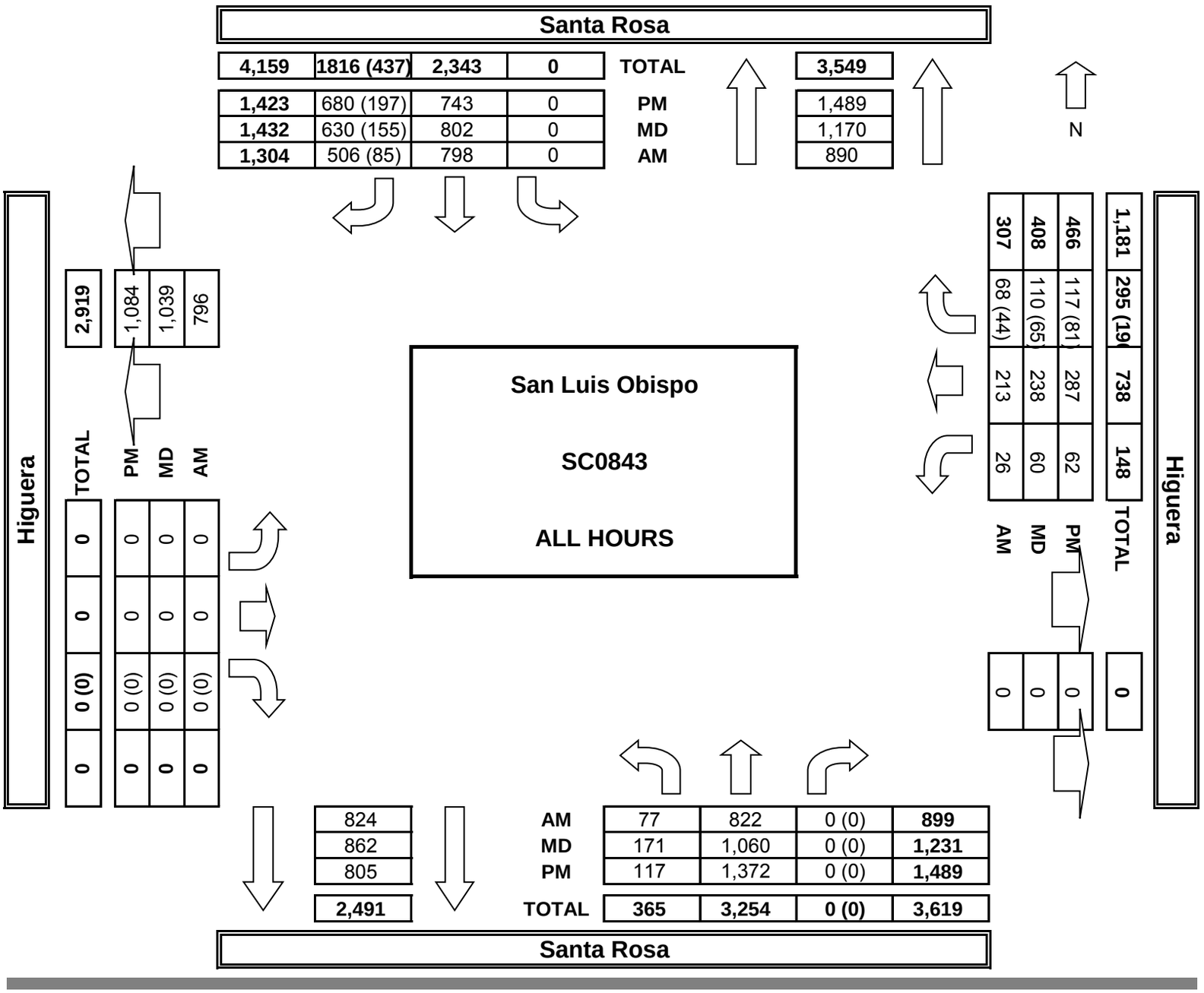
AM
PM
MD
OTHER
OTHER

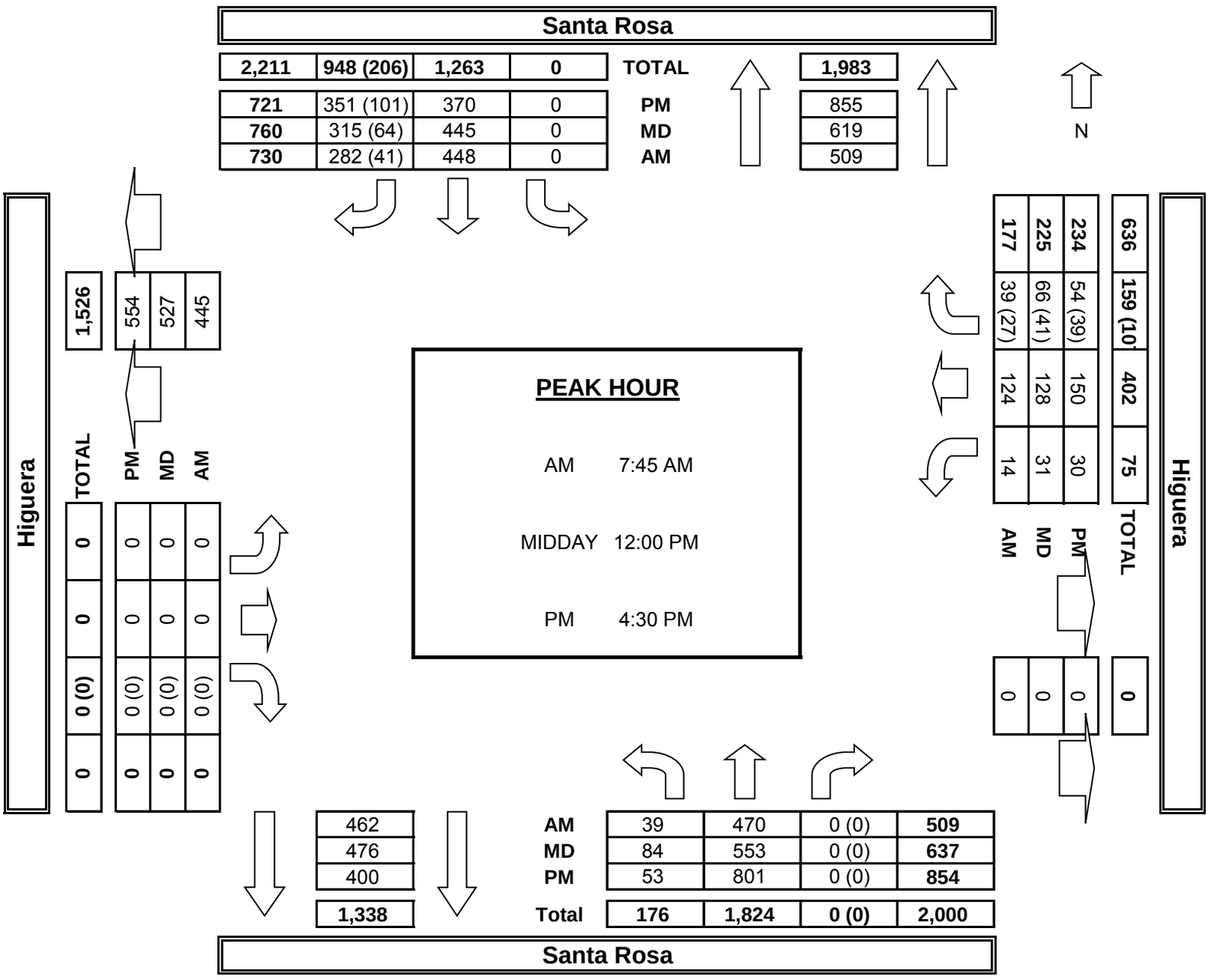
N ▲
◄ W
E ►
S ▼

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Higuera			WESTBOUND Higuera			
	LANES:	NL 1	NT 2	NR X	SL X	ST 1	SR 1	EL X	ET X	ER X	WL 0.5	WT 2.5	WR 1	TOTAL
AM	7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	7:45 AM	0	12	0	0	2	0	0	1	0	0	0	0	15
	8:00 AM	0	2	0	0	1	0	0	0	0	0	2	1	6
	8:15 AM	0	3	0	0	1	0	0	0	0	0	0	0	4
	8:30 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
	8:45 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
	9:00 AM	0	3	0	0	1	1	0	0	0	0	1	0	6
	9:15 AM	0	3	0	0	1	0	0	0	0	0	1	0	5
	VOLUMES	0	25	0	0	8	1	0	1	0	0	6	1	42
	APPROACH %	0%	100%	0%	0%	89%	11%	0%	100%	0%	0%	86%	14%	
	APP/DEPART	25	/	26	9	/	8	1	/	1	7	/	7	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	0	17	0	0	5	0	0	1	0	0	3	1	27
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	75%	25%	
	PEAK HR FACTOR		0.354			0.625			0.250			0.333		0.450
	APP/DEPART	17	/	18	5	/	5	1	/	1	4	/	3	0
MD	11:30 AM	2	3	0	0	4	0	0	0	0	0	1	0	10
	11:45 AM	0	1	0	2	0	1	0	0	0	0	2	0	6
	12:00 PM	0	1	0	0	1	0	0	0	0	0	3	0	5
	12:15 PM	0	0	0	0	6	1	0	0	0	0	1	0	8
	12:30 PM	1	1	0	0	0	0	0	0	0	0	1	0	3
	12:45 PM	0	1	0	0	2	3	0	0	0	0	1	0	7
	1:00 PM	0	0	0	0	0	1	0	0	0	0	2	0	3
	1:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
	VOLUMES	3	7	0	2	14	6	0	0	0	0	12	0	44
	APPROACH %	30%	70%	0%	9%	64%	27%	0%	0%	0%	0%	100%	0%	
	APP/DEPART	10	/	7	22	/	14	0	/	2	12	/	21	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	2	5	0	2	11	2	0	0	0	0	7	0	29
	APPROACH %	29%	71%	0%	13%	73%	13%	0%	0%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.350			0.536			0.000			0.583		0.725
	APP/DEPART	7	/	5	15	/	11	0	/	2	7	/	11	0
PM	03:30 PM	0	0	0	0	2	2	0	0	0	0	2	0	6
	3:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	4:00 PM	0	1	0	0	0	0	0	0	0	0	4	0	5
	4:15 PM	0	0	0	0	1	2	1	0	0	0	2	0	6
	4:30 PM	1	1	0	0	2	1	0	0	0	0	0	0	5
	4:45 PM	0	1	0	0	2	0	0	0	0	0	0	1	4
	5:00 PM	0	0	0	0	2	0	0	0	0	0	3	1	6
	5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
	VOLUMES	1	4	0	0	11	5	1	0	0	0	11	2	35
	APPROACH %	20%	80%	0%	0%	69%	31%	100%	0%	0%	0%	85%	15%	
	APP/DEPART	5	/	7	16	/	11	1	/	0	13	/	17	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	1	2	0	0	7	3	1	0	0	0	5	2	21
	APPROACH %	33%	67%	0%	0%	70%	30%	100%	0%	0%	0%	71%	29%	
	PEAK HR FACTOR		0.375			0.833			0.250			0.438		0.875
	APP/DEPART	3	/	5	10	/	7	1	/	0	7	/	9	0

AimTD LLC

TURNING MOVEMENT COUNTS




Santa Rosa
2,211
948 (206)
1,263
0
TOTAL
1,983
721
351 (101)
370
0
PM
855
760
315 (64)
445
0
MD
619
730
282 (41)
448
0
AM
509
N
Higuera
1,526
554
527
445
TOTAL
PM
MD
AM
0
0
0
0
0
0
0
0
0
0 (0)
0 (0)
0 (0)
0
0
0
0
PEAK HOUR
AM 7:45 AM
MIDDAY 12:00 PM
PM 4:30 PM
177
225
234
636
39 (27)
66 (41)
54 (39)
159 (10
124
128
150
402
14
31
30
75
AM
MD
PM
TOTAL
0
0
0
0
Higuera
462
476
400
1,338
AM
MD
PM
Total
39
84
53
176
470
553
801
1,824
0 (0)
0 (0)
0 (0)
0 (0)
509
637
854
2,000
Santa Rosa

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Johnson
EAST & WEST: Monterey

PROJECT #: SC0843
LOCATION #: 59
CONTROL: SIGNAL

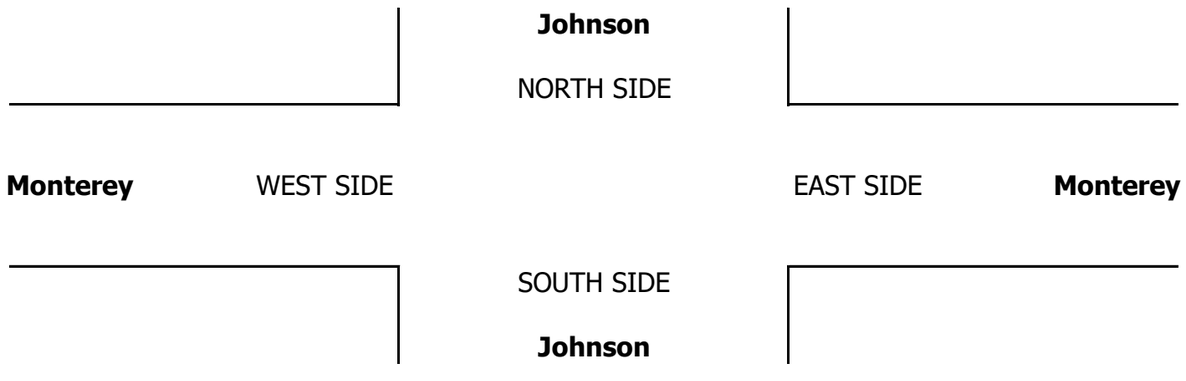
NOTES:

AM PM MD OTHER OTHER

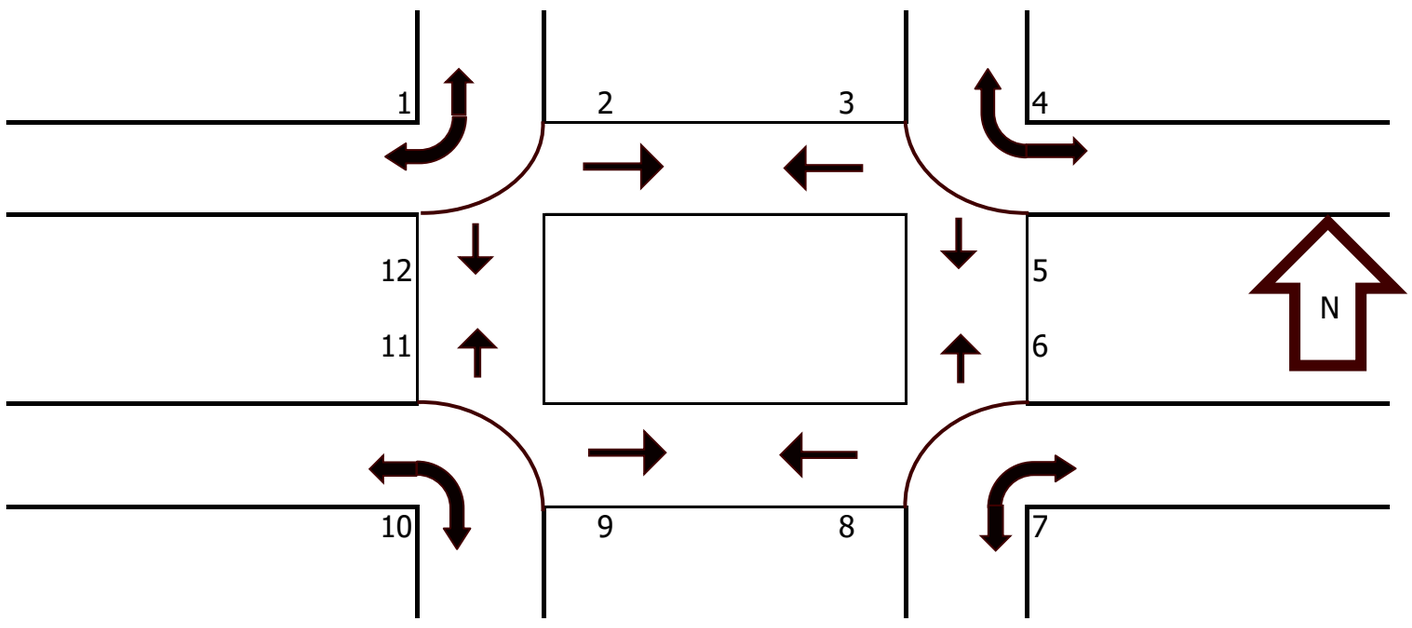
▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Johnson			SOUTHBOUND Johnson			EASTBOUND Monterey			WESTBOUND Monterey				U-TURNS				
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 0.5	SR 0.5	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:15 AM	12	15	11	2	18	1	2	27	21	38	53	3	203	0	0	0	0	0
	7:30 AM	16	24	36	5	33	0	0	49	27	53	80	1	324	0	0	0	0	0
	7:45 AM	33	64	57	3	61	1	0	52	27	62	79	4	443	0	0	0	0	0
	8:00 AM	30	52	28	3	28	2	4	35	22	44	66	2	316	0	0	0	0	0
	8:15 AM	23	37	28	1	31	4	2	43	24	47	61	2	303	0	0	0	0	0
	8:30 AM	29	21	21	6	23	5	2	46	16	49	59	2	279	0	0	0	0	0
	8:45 AM	19	24	14	3	14	3	0	50	21	49	56	5	258	0	0	0	0	0
	9:00 AM	22	25	11	5	18	3	2	40	20	31	65	4	246	0	0	0	0	0
	VOLUMES	184	262	206	28	226	19	12	342	178	373	519	23	2,372	0	0	0	0	0
	APPROACH %	28%	40%	32%	10%	83%	7%	2%	64%	33%	41%	57%	3%						
	APP/DEPART	652	/	297	273	/	777	532	/	576	915	/	722	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	102	177	149	12	153	7	6	179	100	206	286	9	1,386					
	APPROACH %	24%	41%	35%	7%	89%	4%	2%	63%	35%	41%	57%	2%						
	PEAK HR FACTOR		0.695			0.662			0.902			0.864		0.782					
	APP/DEPART	428	/	192	172	/	459	285	/	340	501	/	395	0					
MD	11:30 AM	30	19	22	3	25	3	1	52	21	15	76	2	269	0	0	0	0	0
	11:45 AM	27	27	21	2	39	4	4	46	17	23	75	4	289	0	0	0	0	0
	12:00 PM	24	30	21	5	26	1	10	55	25	20	76	9	302	0	0	0	0	0
	12:15 PM	37	29	26	10	22	4	7	64	28	28	85	8	348	0	0	0	0	0
	12:30 PM	27	39	12	6	19	0	3	72	27	27	81	4	317	0	0	0	0	0
	12:45 PM	24	24	19	11	29	4	5	69	26	21	68	4	304	0	0	0	0	0
	1:00 PM	23	23	26	4	23	3	4	56	16	35	80	4	297	0	0	0	0	0
	1:15 PM	27	26	19	1	27	6	3	59	14	19	69	6	276	0	0	0	0	0
	VOLUMES	219	217	166	42	210	25	37	473	174	188	610	41	2,402	0	0	0	0	0
	APPROACH %	36%	36%	28%	15%	76%	9%	5%	69%	25%	22%	73%	5%						
	APP/DEPART	602	/	295	277	/	572	684	/	681	839	/	854	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	112	122	78	32	96	9	25	260	106	96	310	25	1,271					
	APPROACH %	36%	39%	25%	23%	70%	7%	6%	66%	27%	22%	72%	6%						
	PEAK HR FACTOR		0.848			0.778			0.958			0.890		0.913					
	APP/DEPART	312	/	172	137	/	298	391	/	370	431	/	431	0					
PM	02:45 PM	24	29	20	4	26	5	3	67	27	26	77	5	313	0	0	0	0	0
	3:00 PM	32	30	28	7	34	2	3	65	21	41	72	6	341	0	0	0	0	0
	3:15 PM	37	52	39	2	27	3	3	67	21	32	78	3	364	0	0	0	0	0
	3:30 PM	25	44	34	7	23	1	2	75	21	35	72	4	343	0	0	0	0	0
	3:45 PM	23	45	36	6	35	3	2	69	26	34	87	3	369	0	0	0	0	0
	4:00 PM	28	28	27	3	21	1	7	61	24	20	74	1	295	0	0	0	0	0
	4:15 PM	35	37	26	5	37	7	5	63	22	37	79	2	355	0	0	0	0	0
	4:30 PM	32	33	31	5	27	4	1	70	19	25	58	5	310	0	0	0	0	0
	VOLUMES	236	298	241	39	230	26	26	537	181	250	597	29	2,690	0	0	0	0	0
	APPROACH %	30%	38%	31%	13%	78%	9%	3%	72%	24%	29%	68%	3%						
	APP/DEPART	775	/	353	295	/	661	744	/	817	876	/	859	0					
	BEGIN PEAK HR		3:00 PM																
	VOLUMES	117	171	137	22	119	9	10	276	89	142	309	16	1,417					
	APPROACH %	28%	40%	32%	15%	79%	6%	3%	74%	24%	30%	66%	3%						
	PEAK HR FACTOR		0.830			0.852			0.957			0.942		0.960					
	APP/DEPART	425	/	197	150	/	350	375	/	435	467	/	435	0					



		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:15 AM	1	4	3	1	0	1	0	1	1	2	2	1	17
	7:30 AM	0	1	2	0	0	2	1	2	1	2	0	0	11
	7:45 AM	0	3	0	0	3	3	0	3	2	1	0	1	16
	8:00 AM	0	1	0	0	3	0	0	4	0	0	0	0	8
	8:15 AM	0	0	0	0	1	0	0	2	1	0	2	2	8
	8:30 AM	0	1	2	0	2	2	0	1	1	1	0	1	11
	8:45 AM	0	1	1	1	0	0	0	0	2	0	0	1	6
	9:00 AM	0	1	1	0	3	4	0	1	2	0	0	0	12
	TOTAL	1	12	9	2	12	12	1	14	10	6	4	6	89
MD	11:30 AM	1	1	7	0	0	3	0	1	5	1	4	1	24
	11:45 AM	0	9	0	0	4	3	0	1	4	1	4	2	28
	12:00 PM	1	6	10	1	2	6	0	3	3	0	6	6	44
	12:15 PM	0	9	11	2	6	1	0	3	2	0	5	4	43
	12:30 PM	1	20	4	0	6	3	0	4	4	0	1	10	53
	12:45 PM	2	12	14	0	1	2	0	6	3	0	5	5	50
	1:00 PM	1	5	5	0	3	6	0	3	10	0	3	1	37
	1:15 PM	0	2	4	1	1	4	0	2	1	0	1	1	17
	TOTAL	6	64	55	4	23	28	0	23	32	2	29	30	296
PM	2:45 PM	0	3	2	0	3	1	0	0	2	0	0	1	12
	3:00 PM	0	6	1	0	0	0	0	4	2	0	2	1	16
	3:15 PM	0	6	4	0	5	1	0	9	3	0	4	0	32
	3:30 PM	0	4	3	0	3	1	0	2	4	0	0	4	21
	3:45 PM	0	5	1	0	1	0	0	4	1	0	0	0	12
	4:00 PM	0	3	1	0	0	0	1	3	0	1	2	2	13
	4:15 PM	0	1	1	0	0	0	0	3	2	1	0	0	8
	4:30 PM	2	3	2	0	2	3	0	1	2	1	1	2	19
	TOTAL	2	31	15	0	14	6	1	26	16	3	9	10	133



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:				
Tue, Feb 23, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
	NORTH & SOUTH:	Johnson	LOCATION #:	59
	EAST & WEST:	Monterey	CONTROL:	SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

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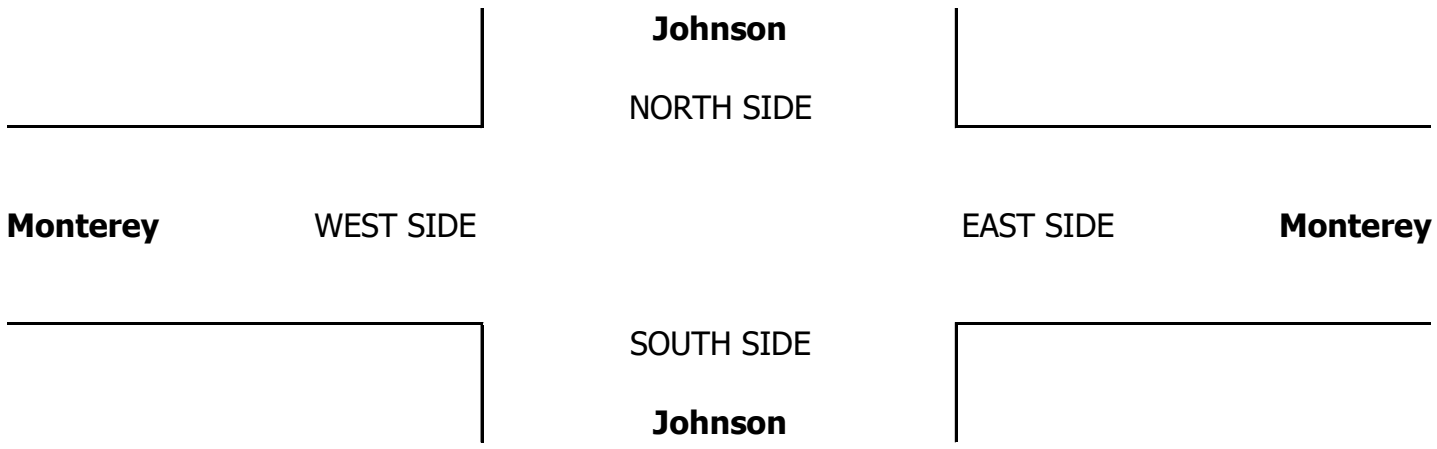
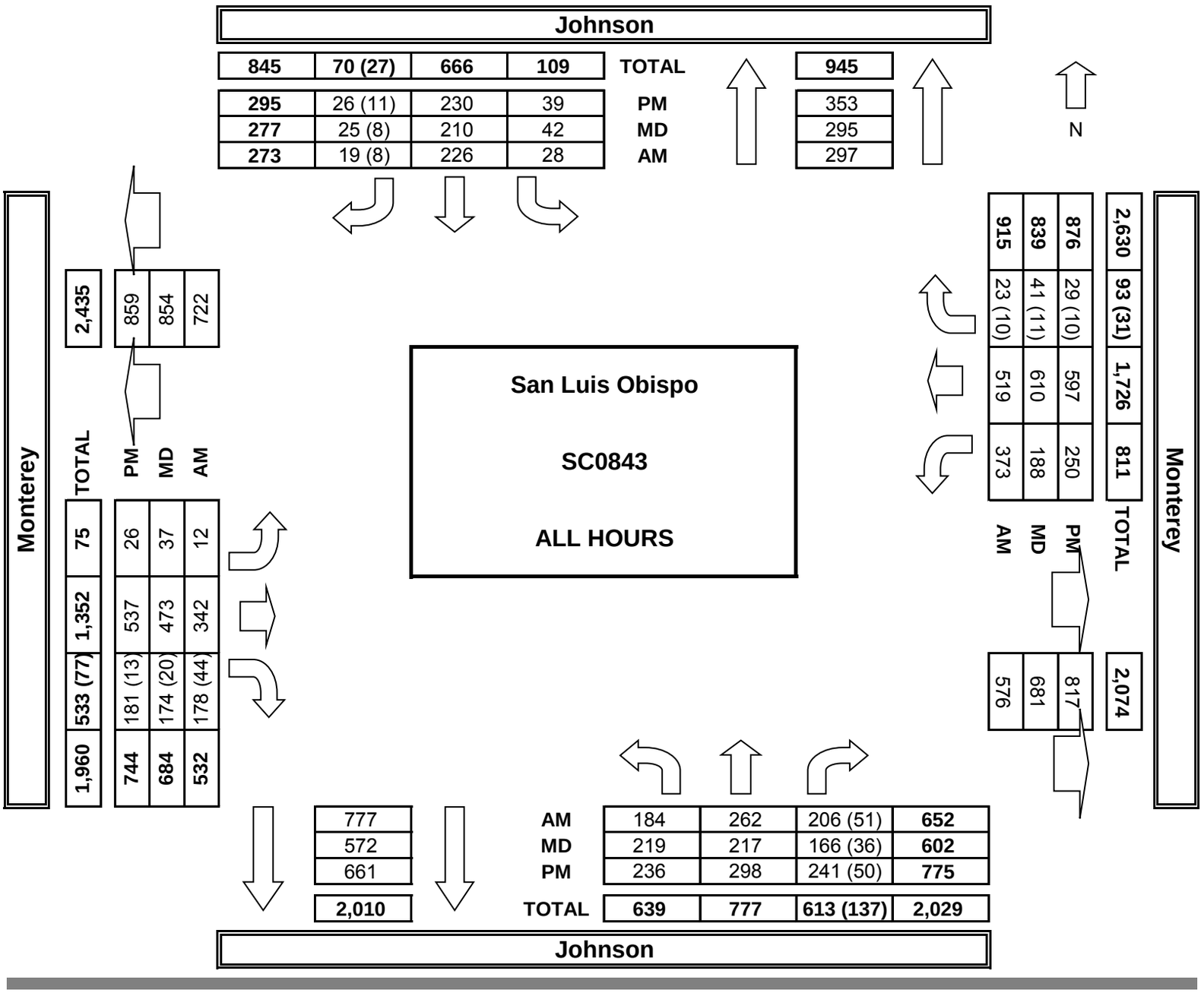
S ▼

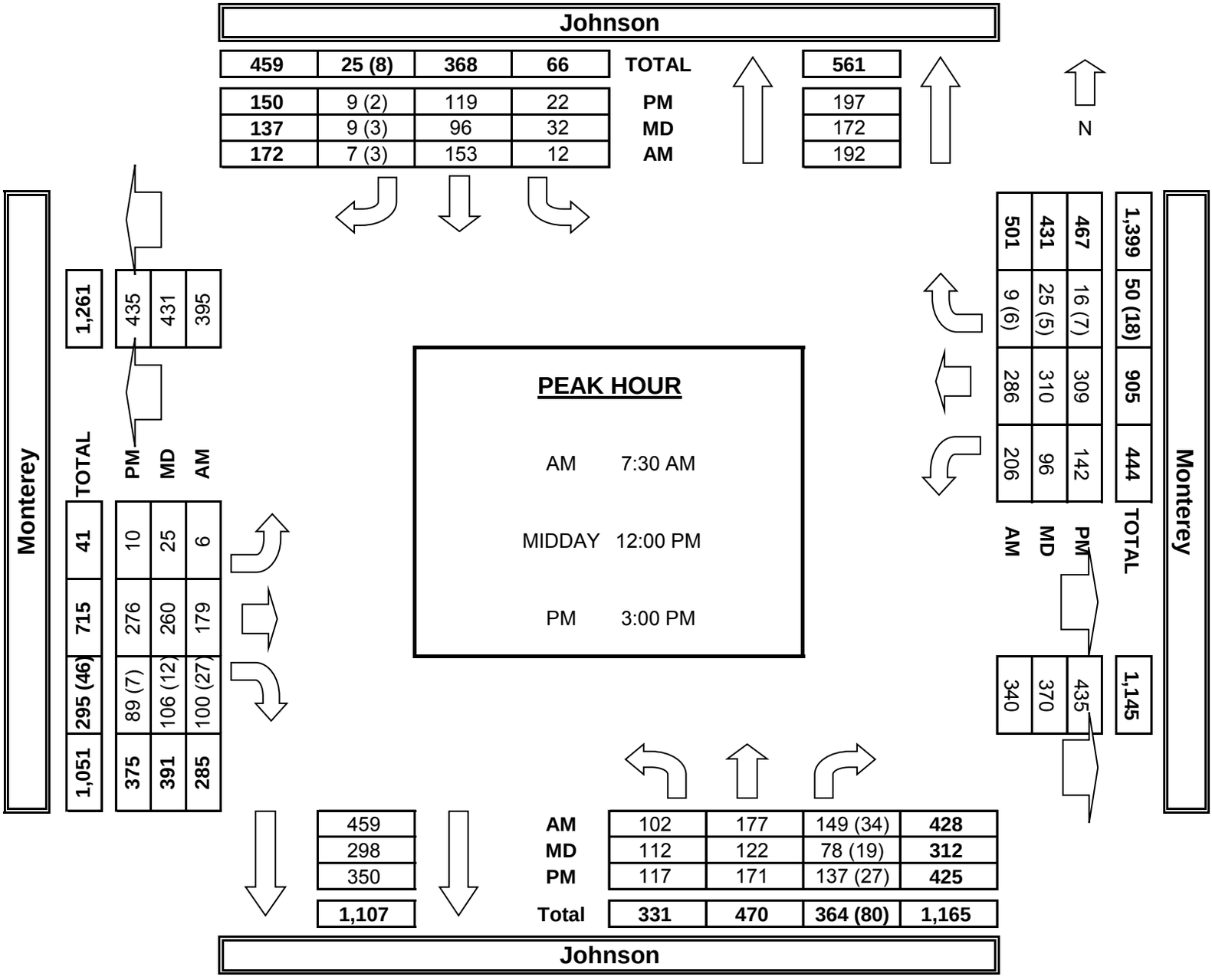
		NORTHBOUND Johnson			SOUTHBOUND Johnson			EASTBOUND Monterey			WESTBOUND Monterey			
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 0.5	SR 0.5	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL
AM	7:15 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
	7:30 AM	0	0	0	0	1	0	0	2	1	0	1	0	5
	7:45 AM	0	0	0	0	1	0	0	6	0	0	0	0	7
	8:00 AM	1	0	0	0	0	0	0	0	0	0	1	0	2
	8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	8:30 AM	0	1	0	0	1	0	0	1	0	0	2	0	5
	8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
	9:00 AM	1	0	0	0	0	0	0	0	0	0	2	0	3
	VOLUMES	2	1	0	0	4	0	0	12	1	0	7	0	27
	APPROACH %	67%	33%	0%	0%	100%	0%	0%	92%	8%	0%	100%	0%	
	APP/DEPART	3	/	1	4	/	5	13	/	12	7	/	9	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	1	0	0	0	2	0	0	9	1	0	3	0	16
	APPROACH %	100%	0%	0%	0%	100%	0%	0%	90%	10%	0%	100%	0%	
	PEAK HR FACTOR		0.250			0.500			0.417			0.750		0.571
	APP/DEPART	1	/	0	2	/	3	10	/	9	3	/	4	0
MD	11:30 AM	0	1	0	0	0	0	0	1	0	1	4	0	7
	11:45 AM	0	0	0	0	0	0	0	2	0	0	3	0	5
	12:00 PM	0	0	0	0	0	0	0	3	0	0	2	0	5
	12:15 PM	1	0	0	0	1	0	0	0	0	0	4	0	6
	12:30 PM	0	0	0	0	1	0	0	0	0	0	4	0	5
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:00 PM	1	0	0	0	1	0	0	0	0	0	2	0	4
	1:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
	VOLUMES	2	1	0	0	3	0	0	6	0	1	21	0	34
	APPROACH %	67%	33%	0%	0%	100%	0%	0%	100%	0%	5%	95%	0%	
	APP/DEPART	3	/	1	3	/	4	6	/	6	22	/	23	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	1	1	0	0	1	0	0	6	0	1	13	0	23
	APPROACH %	50%	50%	0%	0%	100%	0%	0%	100%	0%	7%	93%	0%	
	PEAK HR FACTOR		0.500			0.250			0.500			0.700		0.821
	APP/DEPART	2	/	1	1	/	2	6	/	6	14	/	14	0
PM	02:45 PM	1	0	0	0	0	0	0	1	0	1	0	0	3
	3:00 PM	0	0	0	0	0	0	0	0	0	0	5	0	5
	3:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	3:30 PM	0	0	0	0	1	0	0	1	0	0	2	0	4
	3:45 PM	1	0	0	0	0	0	0	0	0	0	1	0	2
	4:00 PM	0	0	0	0	1	0	0	1	0	0	5	0	7
	4:15 PM	0	0	0	0	0	0	2	0	0	0	4	0	6
	4:30 PM	0	0	0	0	0	0	0	1	1	0	0	0	2
	VOLUMES	2	0	0	0	2	0	2	5	1	1	17	0	30
	APPROACH %	100%	0%	0%	0%	100%	0%	25%	63%	13%	6%	94%	0%	
	APP/DEPART	2	/	2	2	/	4	8	/	5	18	/	19	0
	BEGIN PEAK HR		3:30 PM											
	VOLUMES	1	0	0	0	2	0	2	2	0	0	12	0	19
	APPROACH %	100%	0%	0%	0%	100%	0%	50%	50%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.250			0.500			0.500			0.600		0.679
	APP/DEPART	1	/	2	2	/	2	4	/	2	12	/	13	0



AimTD LLC

TURNING MOVEMENT COUNTS




Johnson
459
25 (8)
368
66
TOTAL
561
150
9 (2)
119
22
PM
197
137
9 (3)
96
32
MD
172
172
7 (3)
153
12
AM
192
N
Monterey
1,261
435
431
395
TOTAL
PM
MD
AM
41
10
25
6
715
276
260
179
295 (46)
89 (7)
106 (12)
100 (27)
1,051
375
391
285
PEAK HOUR
AM 7:30 AM
MIDDAY 12:00 PM
PM 3:00 PM
1,399
50 (18)
905
444
TOTAL
467
16 (7)
309
142
431
25 (5)
310
96
501
9 (6)
286
206
AM
MD
PM
1,145
435
370
340
Monterey
459
298
350
1,107
AM
MD
PM
Total
102
177
149 (34)
428
112
122
78 (19)
312
117
171
137 (27)
425
331
470
364 (80)
1,165
Johnson

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Feb 23, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: California
EAST & WEST: Monterey

PROJECT #: SC0843
LOCATION #: 21
CONTROL: SIGNAL

NOTES:

AM PM MD OTHER OTHER

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☑ Add U-Turns to Left Turns

		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Monterey			WESTBOUND Monterey				U-TURNS				
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL	NB 0	SB 0	EB X	WB X	TTL
AM	7:15 AM	1	60	41	3	30	6	4	33	1	34	96	7	316	0	0	0	0	0
	7:30 AM	3	91	34	3	85	7	19	52	9	39	108	5	455	0	0	0	0	0
	7:45 AM	20	83	33	2	54	21	26	95	3	33	100	6	476	0	0	0	0	0
	8:00 AM	4	76	44	3	38	13	20	53	2	28	105	6	392	0	0	0	0	0
	8:15 AM	3	75	36	0	47	14	7	56	3	41	106	4	392	0	0	0	0	0
	8:30 AM	6	71	32	2	45	16	19	44	4	44	95	4	382	0	0	0	0	0
	8:45 AM	2	83	41	1	38	7	9	52	4	28	107	9	381	0	0	0	0	0
	9:00 AM	7	54	26	3	42	16	10	36	2	33	84	7	320	0	0	0	0	0
	VOLUMES	46	593	287	17	379	100	114	421	28	280	801	48	3,114	0	0	0	0	0
	APPROACH %	5%	64%	31%	3%	76%	20%	20%	75%	5%	25%	71%	4%						
	APP/DEPART	926	/	755	496	/	687	563	/	725	1,129	/	947	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	30	325	147	8	224	55	72	256	17	141	419	21	1,715					
	APPROACH %	6%	65%	29%	3%	78%	19%	21%	74%	5%	24%	72%	4%						
	PEAK HR FACTOR		0.923			0.755			0.696			0.956		0.901					
	APP/DEPART	502	/	418	287	/	382	345	/	411	581	/	504	0					
MD	11:00 AM	8	55	27	2	48	29	11	48	6	16	72	7	329	0	0	0	0	0
	11:15 AM	6	60	23	3	39	29	21	48	4	22	84	10	349	0	0	0	0	0
	11:30 AM	10	54	33	4	33	23	13	50	12	23	76	4	335	0	0	0	0	0
	11:45 AM	12	67	35	5	38	21	22	42	3	28	72	10	355	0	0	0	0	0
	12:00 PM	12	82	22	3	50	28	22	63	4	21	64	9	380	0	0	0	0	0
	12:15 PM	6	53	21	3	64	28	16	73	7	23	82	9	385	0	0	0	0	0
	12:30 PM	6	63	24	5	52	33	16	65	8	25	72	4	373	0	0	0	0	0
	12:45 PM	16	63	27	8	56	19	24	61	4	28	58	8	372	0	0	0	0	0
	VOLUMES	76	497	212	33	380	210	145	450	48	186	580	61	2,878	0	0	0	0	0
	APPROACH %	10%	63%	27%	5%	61%	34%	23%	70%	7%	22%	70%	7%						
	APP/DEPART	785	/	703	623	/	614	643	/	695	827	/	866	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	40	261	94	19	222	108	78	262	23	97	276	30	1,510					
	APPROACH %	10%	66%	24%	5%	64%	31%	21%	72%	6%	24%	68%	7%						
	PEAK HR FACTOR		0.851			0.918			0.945			0.884		0.981					
	APP/DEPART	395	/	369	349	/	342	363	/	375	403	/	424	0					
PM	03:45 PM	10	84	48	3	60	24	27	77	6	44	82	8	473	0	0	0	0	0
	4:00 PM	11	73	47	5	54	27	21	70	10	42	72	2	434	0	0	0	0	0
	4:15 PM	7	63	42	3	82	28	15	68	4	35	78	7	432	0	0	0	0	0
	4:30 PM	6	73	42	4	53	32	19	81	3	40	53	7	413	0	0	0	0	0
	4:45 PM	10	62	49	13	70	20	21	102	9	35	57	6	454	0	0	0	0	0
	5:00 PM	5	82	43	3	54	35	24	106	4	46	69	11	482	0	0	0	0	0
	5:15 PM	4	75	50	5	72	32	19	107	2	49	84	7	506	0	0	0	0	0
	5:30 PM	11	78	55	4	61	28	21	84	7	42	62	7	460	0	0	0	0	0
	VOLUMES	64	590	376	40	506	226	167	695	45	333	557	55	3,654	0	0	0	0	0
	APPROACH %	6%	57%	37%	5%	66%	29%	18%	77%	5%	35%	59%	6%						
	APP/DEPART	1,030	/	812	772	/	884	907	/	1,111	945	/	847	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	30	297	197	25	257	115	85	399	22	172	272	31	1,902					
	APPROACH %	6%	57%	38%	6%	65%	29%	17%	79%	4%	36%	57%	7%						
	PEAK HR FACTOR		0.910			0.911			0.944			0.848		0.940					
	APP/DEPART	524	/	413	397	/	451	506	/	621	475	/	417	0					

California

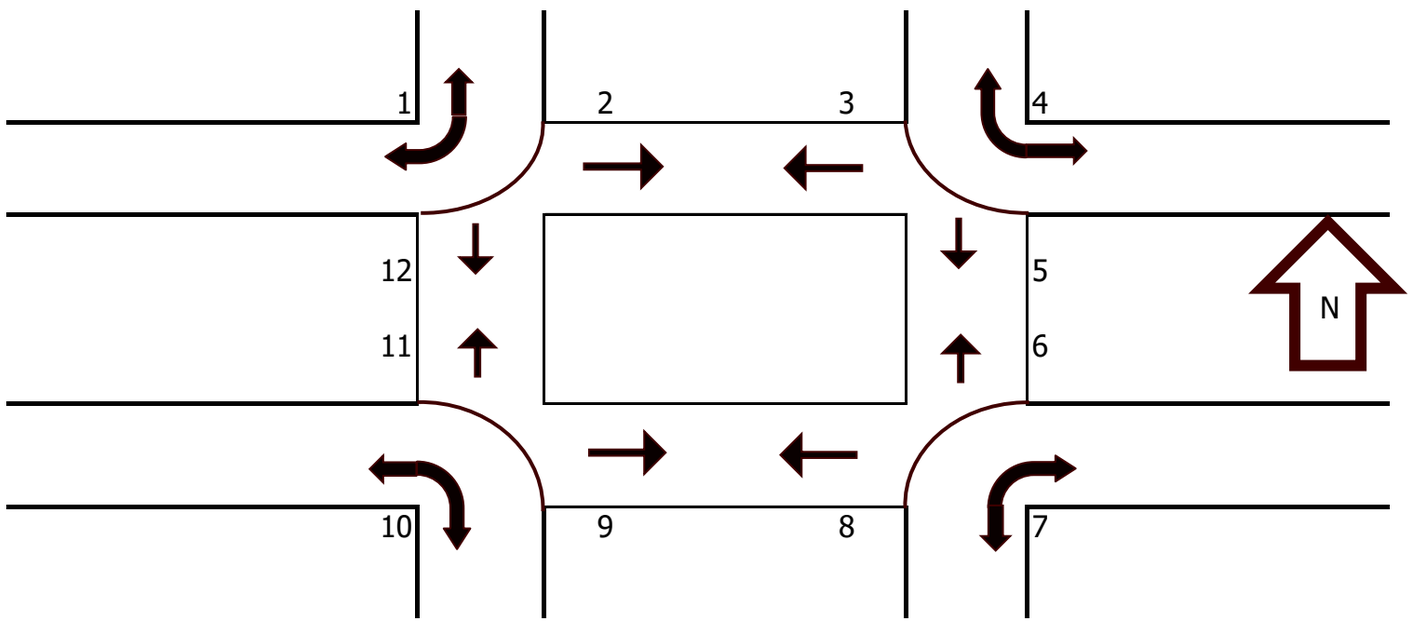
NORTH SIDE

Monterey WEST SIDE EAST SIDE **Monterey**

SOUTH SIDE

California

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:15 AM	0	0	4	1	1	0	1	1	1	0	1	0	10
	7:30 AM	0	1	3	0	0	1	1	0	0	1	1	2	10
	7:45 AM	1	0	1	0	0	4	0	2	3	0	0	2	13
	8:00 AM	0	0	1	0	1	2	0	3	3	0	0	0	10
	8:15 AM	0	1	1	0	0	1	0	2	0	1	0	0	6
	8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	8:45 AM	0	1	0	0	0	0	0	2	0	0	1	0	4
	9:00 AM	0	0	1	0	0	0	1	1	3	0	0	0	6
	TOTAL	1	3	11	1	3	8	3	11	10	2	3	4	60
MD	11:00 AM	2	0	2	0	1	0	0	1	2	0	0	0	8
	11:15 AM	1	0	1	0	0	0	0	4	4	1	1	1	13
	11:30 AM	1	2	0	0	0	0	0	3	1	4	0	1	12
	11:45 AM	0	1	0	0	5	0	0	2	3	0	0	2	13
	12:00 PM	0	1	1	0	8	1	2	5	3	7	2	3	33
	12:15 PM	0	1	4	0	0	10	0	1	0	2	2	5	25
	12:30 PM	2	1	1	0	0	0	4	0	1	9	1	0	19
	12:45 PM	1	1	1	0	1	0	0	4	3	0	2	0	13
	TOTAL	7	7	10	0	15	11	6	20	17	23	8	12	136
PM	3:45 PM	1	0	2	0	4	0	0	8	2	4	0	0	21
	4:00 PM	0	0	1	0	1	2	0	0	2	2	0	0	8
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	4	4
	4:30 PM	2	2	2	0	0	2	0	0	0	0	0	0	8
	4:45 PM	1	2	3	0	3	1	0	1	8	3	3	2	27
	5:00 PM	0	1	3	0	7	2	0	1	5	0	1	3	23
	5:15 PM	0	2	2	0	1	2	0	1	4	1	0	0	13
	5:30 PM	3	0	1	0	0	1	2	0	3	2	0	1	13
	TOTAL	7	7	14	0	16	10	2	11	24	12	4	10	117



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:				
Tue, Feb 23, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
	NORTH & SOUTH:	California	LOCATION #:	21
	EAST & WEST:	Monterey	CONTROL:	SIGNAL

NOTES:

AM PM MD OTHER OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND California			SOUTHBOUND California			EASTBOUND Monterey			WESTBOUND Monterey			
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL
AM	7:15 AM	0	0	0	0	0	0	1	0	0	0	1	0	2
	7:30 AM	0	9	1	0	4	0	1	1	0	0	3	0	19
	7:45 AM	0	8	0	0	5	0	2	1	0	0	0	0	16
	8:00 AM	0	7	0	0	0	1	0	0	0	0	0	0	8
	8:15 AM	0	2	1	0	1	0	0	1	0	1	0	0	6
	8:30 AM	0	3	0	0	2	1	1	0	0	0	1	0	8
	8:45 AM	0	7	0	0	0	0	1	0	0	0	0	0	8
	9:00 AM	0	3	0	0	2	1	0	0	0	0	0	0	6
	VOLUMES	0	39	2	0	14	3	6	3	0	1	5	0	73
	APPROACH %	0%	95%	5%	0%	82%	18%	67%	33%	0%	17%	83%	0%	
	APP/DEPART	41	/	45	17	/	15	9	/	5	6	/	8	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	26	2	0	10	1	3	3	0	1	3	0	49
	APPROACH %	0%	93%	7%	0%	91%	9%	50%	50%	0%	25%	75%	0%	
	PEAK HR FACTOR		0.700			0.550			0.500			0.333		0.645
	APP/DEPART	28	/	29	11	/	11	6	/	5	4	/	4	0
MD	11:00 AM	0	2	0	0	1	2	0	1	0	1	0	0	7
	11:15 AM	0	1	0	0	2	1	0	1	0	1	1	0	7
	11:30 AM	0	1	0	0	1	2	0	1	0	0	2	0	7
	11:45 AM	1	6	0	0	3	1	0	0	0	0	1	0	12
	12:00 PM	0	5	0	0	1	0	0	2	0	0	2	0	10
	12:15 PM	0	2	1	0	1	1	0	0	0	2	1	0	8
	12:30 PM	0	1	1	0	0	0	0	0	0	0	1	0	3
	12:45 PM	0	4	0	0	2	0	0	0	0	0	0	0	6
	VOLUMES	1	22	2	0	11	7	0	5	0	4	8	0	60
	APPROACH %	4%	88%	8%	0%	61%	39%	0%	100%	0%	33%	67%	0%	
	APP/DEPART	25	/	22	18	/	15	5	/	7	12	/	16	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	1	14	1	0	6	4	0	3	0	2	6	0	37
	APPROACH %	6%	88%	6%	0%	60%	40%	0%	100%	0%	25%	75%	0%	
	PEAK HR FACTOR		0.571			0.625			0.375			0.667		0.771
	APP/DEPART	16	/	14	10	/	8	3	/	4	8	/	11	0
PM	03:45 PM	0	2	0	0	1	0	0	0	0	0	2	0	5
	4:00 PM	0	1	0	0	4	4	0	2	0	0	0	0	11
	4:15 PM	0	2	0	0	2	1	0	0	0	0	1	0	6
	4:30 PM	1	0	0	0	1	0	0	1	0	1	0	0	4
	4:45 PM	0	0	0	0	2	0	0	0	0	0	2	0	4
	5:00 PM	0	2	0	0	2	1	0	0	0	0	2	0	7
	5:15 PM	0	1	0	0	6	10	0	0	0	0	0	0	17
	5:30 PM	0	1	0	0	4	1	0	2	0	1	1	0	10
	VOLUMES	1	9	0	0	22	17	0	5	0	2	8	0	64
	APPROACH %	10%	90%	0%	0%	56%	44%	0%	100%	0%	20%	80%	0%	
	APP/DEPART	10	/	9	39	/	24	5	/	5	10	/	26	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	0	4	0	0	14	12	0	2	0	1	5	0	38
	APPROACH %	0%	100%	0%	0%	54%	46%	0%	100%	0%	17%	83%	0%	
	PEAK HR FACTOR		0.500			0.406			0.250			0.750		0.559
	APP/DEPART	4	/	4	26	/	15	2	/	2	6	/	17	0

California

NORTH SIDE

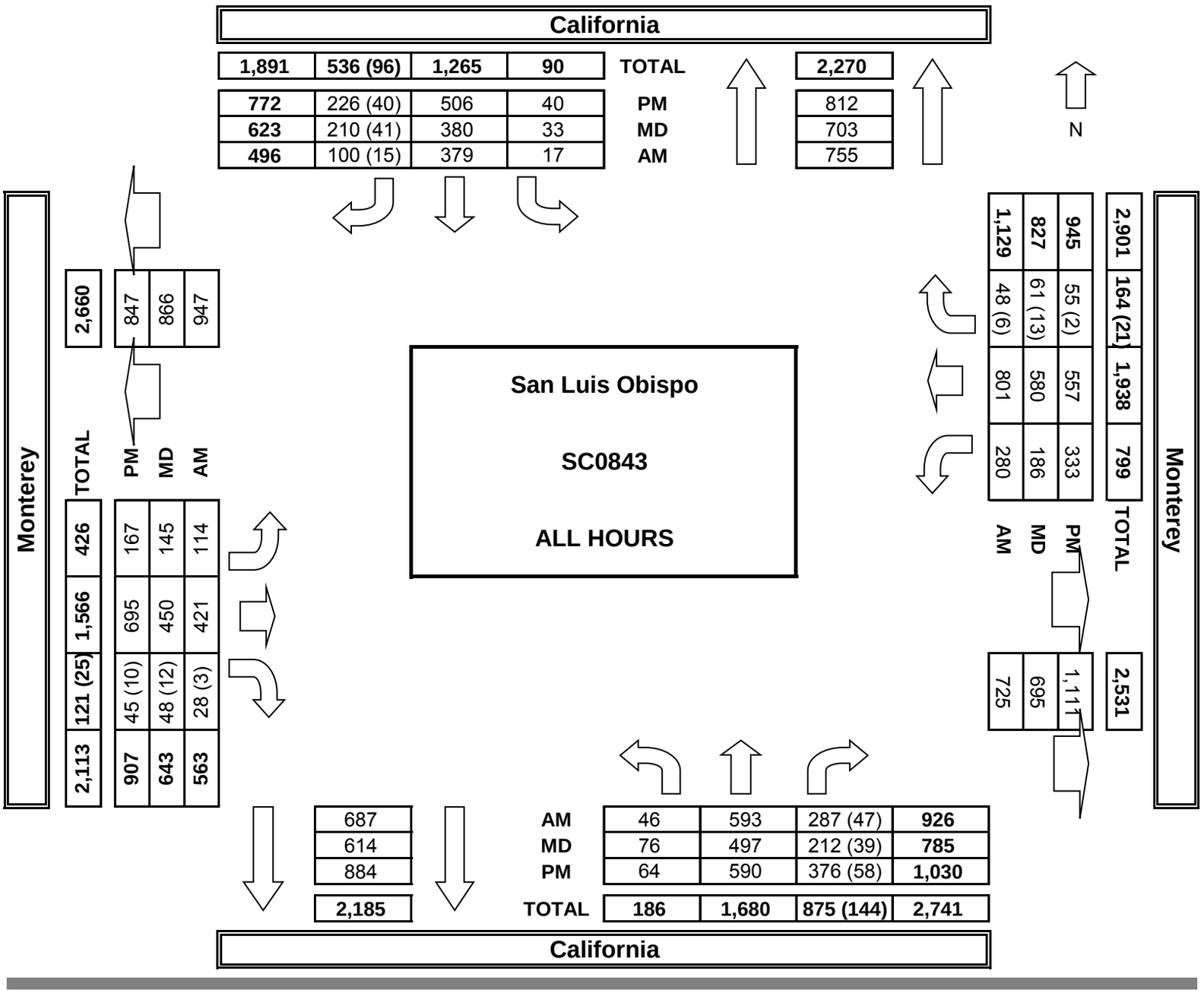
Monterey WEST SIDE EAST SIDE **Monterey**

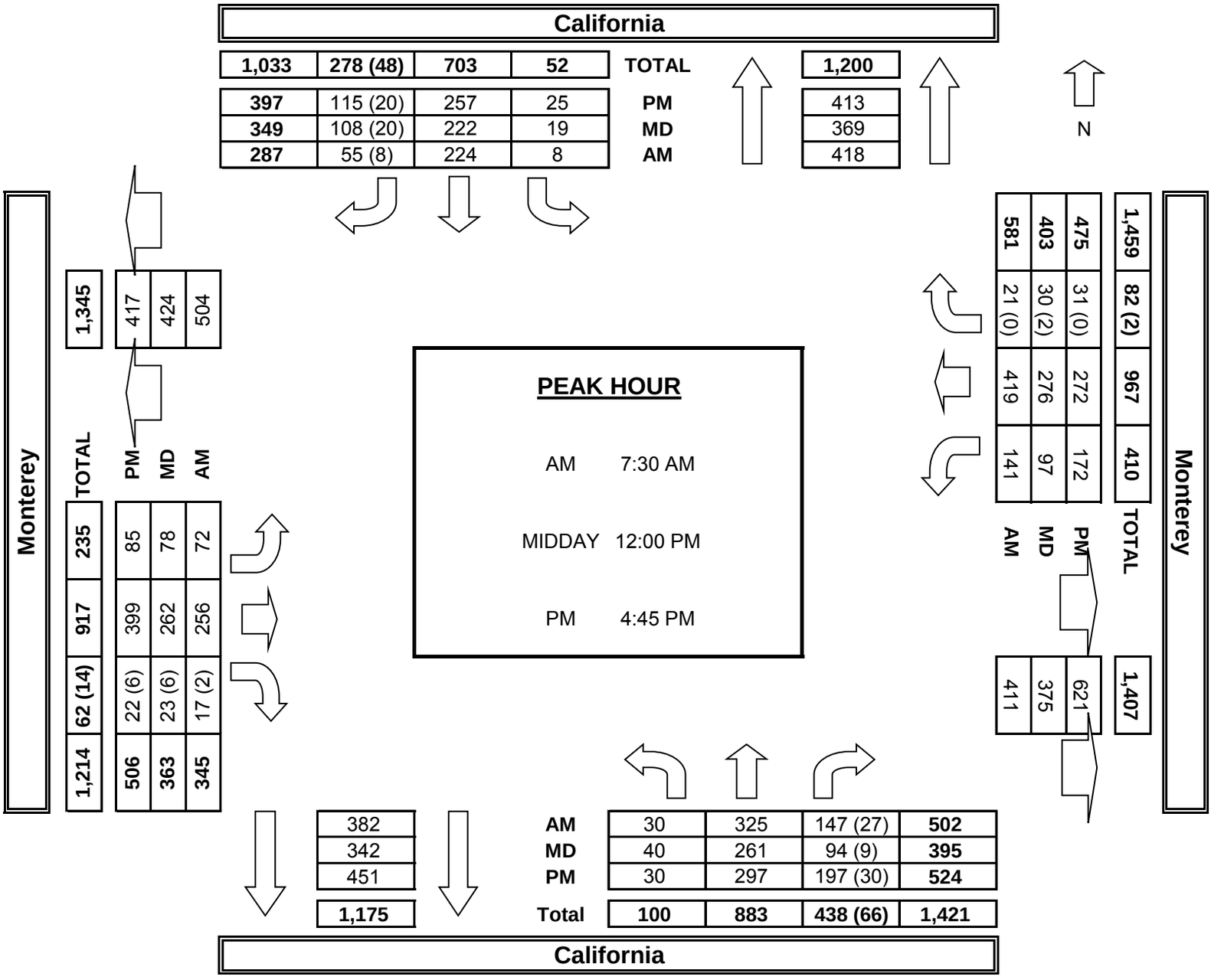
SOUTH SIDE

California

AimTD LLC

TURNING MOVEMENT COUNTS




California
1,033
278 (48)
703
52
TOTAL
1,200
397
115 (20)
257
25
PM
413
349
108 (20)
222
19
MD
369
287
55 (8)
224
8
AM
418
N
Monterey
1,345
417
424
504
TOTAL
PM
MD
AM
235
85
78
72
917
399
262
256
62 (14)
22 (6)
23 (6)
17 (2)
1,214
506
363
345
PEAK HOUR
AM 7:30 AM
MIDDAY 12:00 PM
PM 4:45 PM
581
403
475
1,459
21 (0)
30 (2)
31 (0)
82 (2)
419
276
272
967
141
97
172
410
AM
MD
PM
TOTAL
411
375
621
1,407
Monterey
382
342
451
1,175
AM
MD
PM
Total
30
325
147 (27)
502
40
261
94 (9)
395
30
297
197 (30)
524
100
883
438 (66)
1,421
California

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Broad
EAST & WEST: Palm

PROJECT #: SC0843
LOCATION #: 3
CONTROL: STOP ALL

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

	NORTHBOUND Broad			SOUTHBOUND Broad			EASTBOUND Palm			WESTBOUND Palm				U-TURNS				
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM																		
7:00 AM	0	3	2	2	5	1	1	4	0	1	7	1	27	0	0	0	0	0
7:15 AM	0	1	2	2	1	2	2	2	0	4	6	4	26	0	0	0	1	1
7:30 AM	1	0	4	5	3	1	4	5	0	10	9	6	48	0	0	0	1	1
7:45 AM	0	5	2	12	18	10	5	7	0	13	11	3	86	0	0	0	0	0
8:00 AM	1	6	1	28	36	10	0	7	1	15	9	5	119	0	0	0	0	0
8:15 AM	0	2	1	12	14	5	6	7	1	8	9	4	69	0	0	0	0	0
8:30 AM	0	0	6	12	13	5	1	4	0	11	9	2	63	0	0	0	0	0
8:45 AM	1	1	8	11	5	6	4	3	1	15	10	1	66	0	0	0	0	0
VOLUMES	3	18	26	84	95	40	23	39	3	77	70	26	504	0	0	0	2	2
APPROACH %	6%	38%	55%	38%	43%	18%	35%	60%	5%	45%	40%	15%						
APP/DEPART	47	/	67	219	/	173	65	/	151	173	/	113	0					
BEGIN PEAK HR		7:45 AM																
VOLUMES	1	13	10	64	81	30	12	25	2	47	38	14	337					
APPROACH %	4%	54%	42%	37%	46%	17%	31%	64%	5%	47%	38%	14%						
PEAK HR FACTOR		0.750			0.591			0.696			0.853		0.708					
APP/DEPART	24	/	39	175	/	130	39	/	99	99	/	69	0					
MD																		
11:00 AM	0	4	12	7	7	7	2	10	0	14	30	1	94	0	0	0	0	0
11:15 AM	1	3	17	9	7	5	0	5	4	12	21	0	84	0	0	0	0	0
11:30 AM	1	5	20	10	14	4	3	12	3	19	17	5	113	0	0	0	1	1
11:45 AM	1	9	9	10	8	7	2	12	1	20	19	3	101	0	0	0	0	0
12:00 PM	3	8	15	10	9	9	2	12	1	16	23	8	116	0	0	0	1	1
12:15 PM	2	5	19	11	9	10	3	13	4	12	25	6	119	0	1	0	0	1
12:30 PM	2	1	18	13	5	3	1	8	3	17	18	4	93	1	0	0	0	1
12:45 PM	3	4	13	13	7	8	5	18	2	11	24	5	113	0	0	0	0	0
VOLUMES	13	39	123	83	66	53	18	90	18	121	177	32	833	1	1	0	2	4
APPROACH %	7%	22%	70%	41%	33%	26%	14%	71%	14%	37%	54%	10%						
APP/DEPART	175	/	90	202	/	204	126	/	297	330	/	242	0					
BEGIN PEAK HR		11:30 AM																
VOLUMES	7	27	63	41	40	30	10	49	9	67	84	22	449					
APPROACH %	7%	28%	65%	37%	36%	27%	15%	72%	13%	39%	49%	13%						
PEAK HR FACTOR		0.933			0.925			0.850			0.920		0.943					
APP/DEPART	97	/	60	111	/	114	68	/	154	173	/	121	0					
PM																		
03:00 PM	2	12	25	18	25	18	9	24	7	13	29	4	186	0	0	0	0	0
3:15 PM	3	19	24	12	14	10	10	6	4	15	28	3	148	0	0	0	0	0
3:30 PM	6	22	20	8	13	12	1	8	3	18	28	8	147	0	0	0	0	0
3:45 PM	1	12	14	10	15	15	2	9	5	19	21	2	125	0	0	0	0	0
4:00 PM	3	11	13	16	12	17	2	15	1	14	36	5	145	0	0	0	0	0
4:15 PM	3	12	23	10	11	14	0	12	2	16	16	4	123	0	0	0	0	0
4:30 PM	6	14	17	6	7	6	2	10	1	14	38	4	125	0	0	0	0	0
4:45 PM	1	13	20	6	7	15	3	7	3	22	21	3	121	0	0	0	0	0
VOLUMES	25	115	156	86	104	107	29	91	26	131	217	33	1,120	0	0	0	0	0
APPROACH %	8%	39%	53%	29%	35%	36%	20%	62%	18%	34%	57%	9%						
APP/DEPART	296	/	177	297	/	261	146	/	333	381	/	349	0					
BEGIN PEAK HR		3:00 PM																
VOLUMES	12	65	83	48	67	55	22	47	19	65	106	17	606					
APPROACH %	8%	41%	52%	28%	39%	32%	25%	53%	22%	35%	56%	9%						
PEAK HR FACTOR		0.833			0.697			0.550			0.870		0.815					
APP/DEPART	160	/	104	170	/	151	88	/	178	188	/	173	0					

Broad

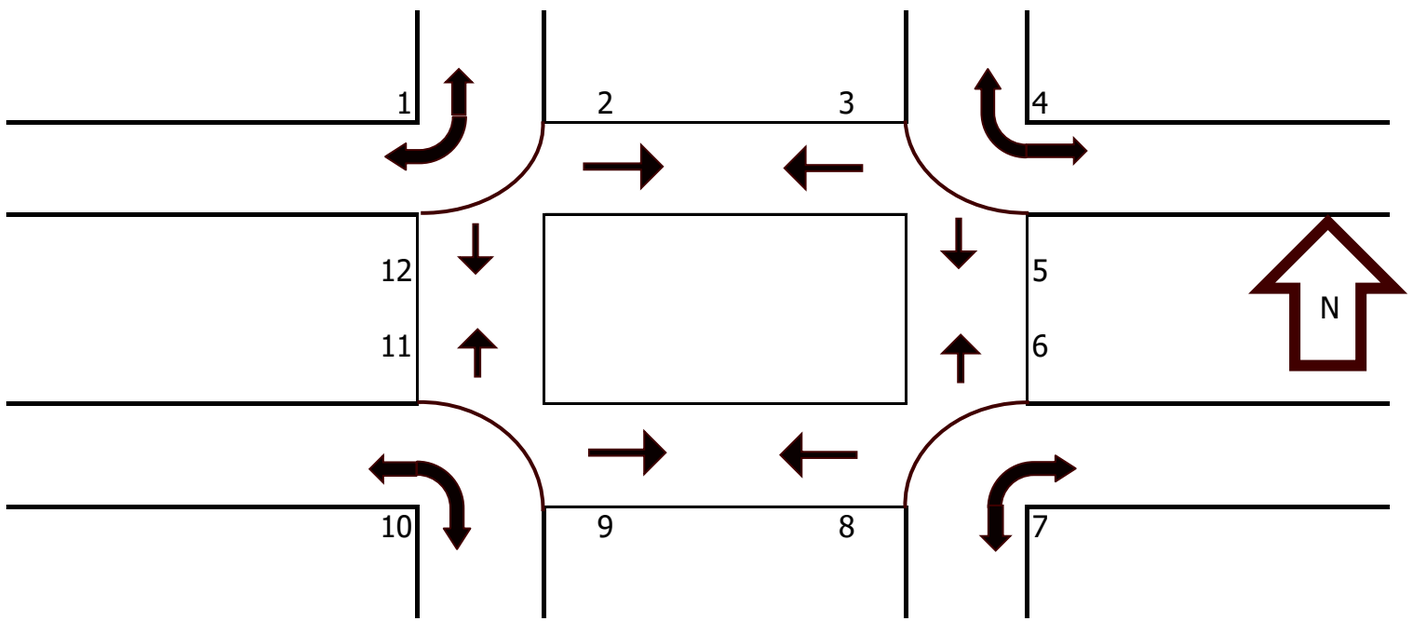
NORTH SIDE

Palm WEST SIDE EAST SIDE **Palm**

SOUTH SIDE

Broad

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:00 AM	0	0	1	0	0	0	0	1	0	0	1	0	3
	7:15 AM	0	3	0	0	1	1	0	2	0	0	2	0	9
	7:30 AM	0	0	0	0	0	0	0	2	1	0	6	2	11
	7:45 AM	0	2	1	4	2	0	0	0	3	0	10	6	28
	8:00 AM	3	0	4	5	1	1	2	6	4	1	14	5	46
	8:15 AM	0	33	5	0	3	1	0	2	6	0	15	14	79
	8:30 AM	1	0	3	0	5	0	1	2	0	1	14	7	34
	8:45 AM	2	1	1	0	0	0	0	2	7	0	8	15	36
	TOTAL	6	39	15	9	12	3	3	17	21	2	70	49	246
MD	11:00 AM	0	0	0	0	2	2	9	127	0	1	119	1	261
	11:15 AM	0	0	1	0	7	1	11	1	0	0	2	2	25
	11:30 AM	0	1	0	0	2	8	11	1	251	1	0	269	544
	11:45 AM	0	1	0	1	3	0	2	2	2	0	4	0	15
	12:00 PM	3	2	1	0	6	0	7	11	5	2	2	6	45
	12:15 PM	2	1	1	0	2	4	7	7	2	0	3	3	32
	12:30 PM	1	0	2	0	1	3	7	2	2	0	5	5	28
	12:45 PM	5	1	2	1	6	3	6	2	5	0	4	2	37
	TOTAL	11	6	7	2	29	21	60	153	267	4	139	288	987
PM	3:00 PM	5	20	5	2	0	5	4	8	7	0	36	6	98
	3:15 PM	2	8	7	2	1	1	5	1	1	0	10	5	43
	3:30 PM	2	3	3	0	1	3	2	3	2	0	11	3	33
	3:45 PM	1	1	0	0	2	2	6	0	1	0	6	9	28
	4:00 PM	5	8	3	1	1	2	10	0	6	0	6	4	46
	4:15 PM	0	2	1	0	0	0	3	9	2	0	2	1	20
	4:30 PM	1	0	0	0	0	3	3	3	1	0	1	5	17
	4:45 PM	1	3	1	0	5	0	1	2	2	0	3	2	20
	TOTAL	17	45	20	5	10	16	34	26	22	0	75	35	305



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Broad
EAST & WEST: Palm

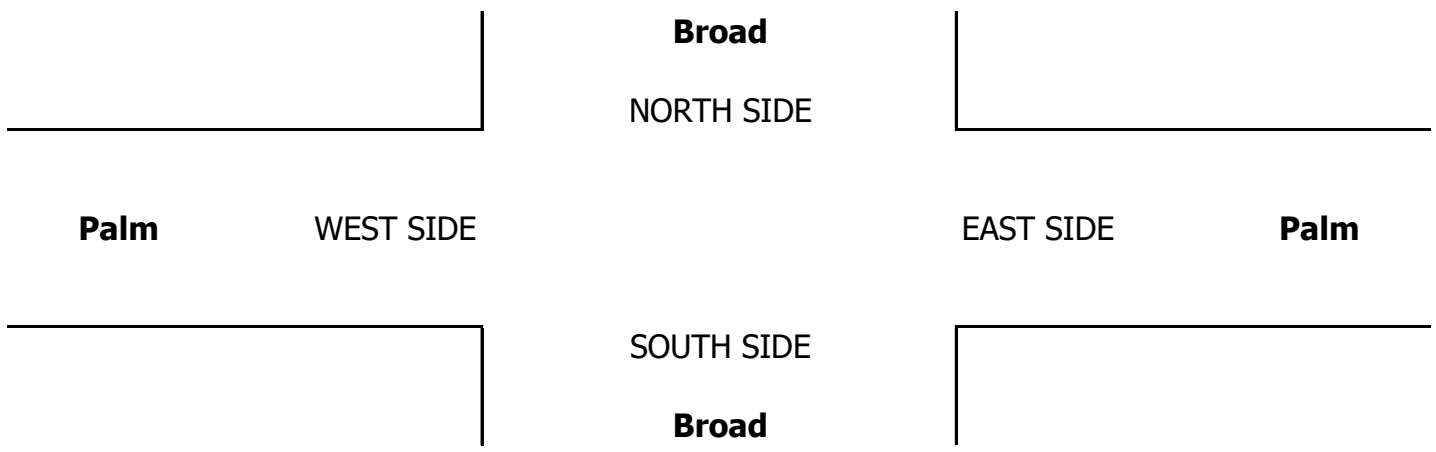
PROJECT #: SC0843
LOCATION #: 3
CONTROL: STOP ALL

NOTES:

AM
PM
MD
OTHER
OTHER

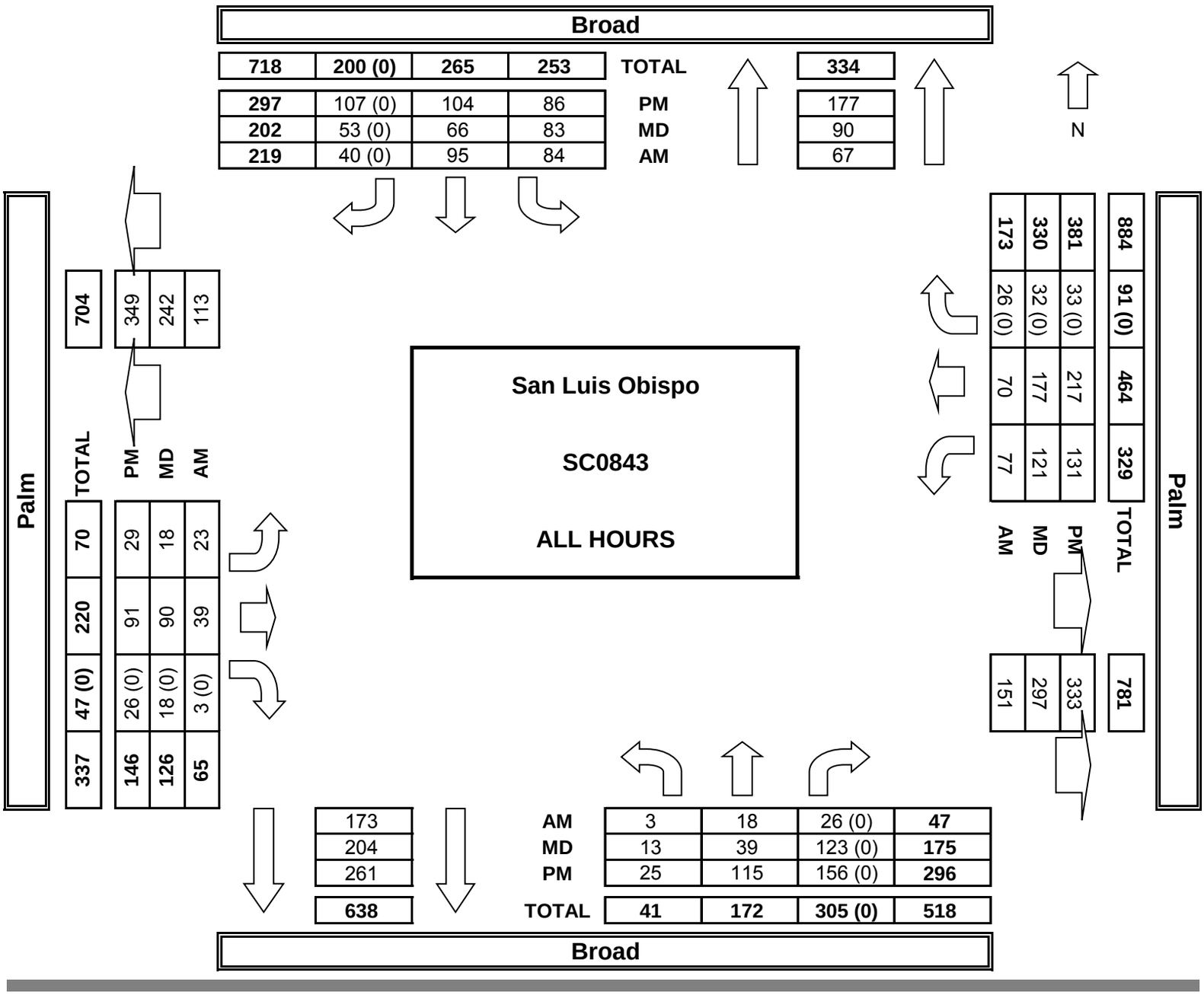
N
W
E
S

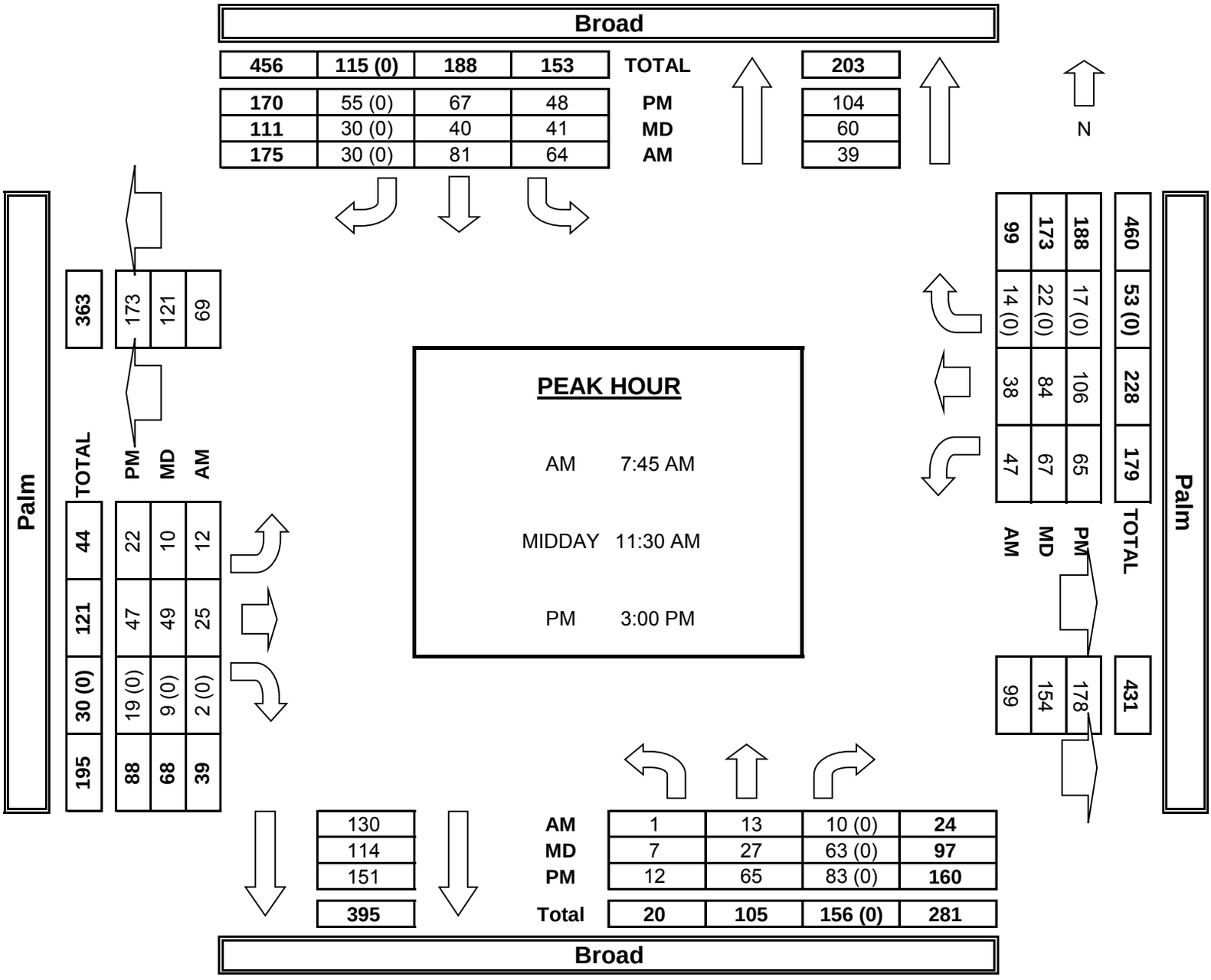
		NORTHBOUND Broad			SOUTHBOUND Broad			EASTBOUND Palm			WESTBOUND Palm			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
	VOLUMES	0	1	1	0	0	0	0	0	0	1	0	0	3
	APPROACH %	0%	50%	50%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
	APP/DEPART	2	/	1	0	/	1	0	/	1	1	/	0	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	0	0	1	0	0	0	0	0	0	1	0	0	2
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR		0.250			0.000			0.000			0.250		0.500
	APP/DEPART	1	/	0	0	/	1	0	/	1	1	/	0	0
MD	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	2
	11:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
	12:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	12:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	12:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	VOLUMES	0	1	1	0	0	0	0	1	0	2	2	0	7
	APPROACH %	0%	50%	50%	0%	0%	0%	0%	100%	0%	50%	50%	0%	
	APP/DEPART	2	/	1	0	/	2	1	/	2	4	/	2	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	0	1	0	0	0	0	0	1	0	2	1	0	5
	APPROACH %	0%	100%	0%	0%	0%	0%	0%	100%	0%	67%	33%	0%	
	PEAK HR FACTOR		0.250			0.000			0.250			0.750		0.625
	APP/DEPART	1	/	1	0	/	2	1	/	1	3	/	1	0
PM	03:00 PM	0	1	0	0	1	0	0	0	0	0	3	0	5
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	2	0	1	0	0	0	0	0	0	0	3
	4:00 PM	0	1	1	0	3	1	0	0	0	2	1	0	9
	4:15 PM	0	0	1	0	0	0	0	0	0	0	1	0	2
	4:30 PM	0	0	3	0	0	0	0	0	0	0	0	0	3
	4:45 PM	0	0	0	0	0	0	0	2	0	2	0	0	4
	VOLUMES	0	2	7	0	5	1	0	2	0	4	5	0	26
	APPROACH %	0%	22%	78%	0%	83%	17%	0%	100%	0%	44%	56%	0%	
	APP/DEPART	9	/	2	6	/	9	2	/	9	9	/	6	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	1	5	0	3	1	0	2	0	4	2	0	18
	APPROACH %	0%	17%	83%	0%	75%	25%	0%	100%	0%	67%	33%	0%	
	PEAK HR FACTOR		0.500			0.250			0.250			0.500		0.500
	APP/DEPART	6	/	1	4	/	7	2	/	7	6	/	3	0



AimTD LLC

TURNING MOVEMENT COUNTS




Broad
456
115 (0)
188
153
TOTAL
203
170
55 (0)
67
48
PM
104
111
30 (0)
40
41
MD
60
175
30 (0)
81
64
AM
39
N
Palm
363
173
121
69
TOTAL
PM
MD
AM
44
22
10
12
121
47
49
25
30 (0)
19 (0)
9 (0)
2 (0)
195
88
68
39
PEAK HOUR
AM 7:45 AM
MIDDAY 11:30 AM
PM 3:00 PM
460
53 (0)
228
179
188
17 (0)
106
65
173
22 (0)
84
67
99
14 (0)
38
47
TOTAL
AM
MD
PM
431
178
154
99
Palm
130
114
151
395
AM
MD
PM
Total
1
13
10 (0)
24
7
27
63 (0)
97
12
65
83 (0)
160
20
105
156 (0)
281
Broad

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Chorro
EAST & WEST: Higuera

PROJECT #: SC0843
LOCATION #: 29
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
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☑ Add U-Turns to Left Turns

		NORTHBOUND Chorro			SOUTHBOUND Chorro			EASTBOUND Higuera			WESTBOUND Higuera				U-TURNS				
	LANES:	NL 1	NT 1	NR X	SL X	ST 1	SR 1	EL X	ET X	ER X	WL 0.5	WT 2	WR 0.5	TOTAL	NB 0	SB 0	EB X	WB X	TTL
AM	7:00 AM	6	13	0	0	5	12	0	0	0	5	35	3	79	0	0	0	0	0
	7:15 AM	7	28	0	0	13	19	0	0	0	4	51	3	125	0	0	0	0	0
	7:30 AM	2	25	0	0	27	25	0	0	0	4	60	4	147	0	0	0	0	0
	7:45 AM	4	31	0	0	31	22	0	0	0	7	63	4	162	0	0	0	0	0
	8:00 AM	2	41	0	0	25	28	0	0	0	6	81	5	188	0	0	0	0	0
	8:15 AM	4	40	0	0	40	26	0	0	0	5	58	9	182	0	0	0	0	0
	8:30 AM	8	24	0	0	40	31	0	0	0	11	88	4	206	0	0	0	0	0
	8:45 AM	6	21	0	0	28	34	0	0	0	9	86	2	186	0	0	0	0	0
	VOLUMES	39	223	0	0	209	197	0	0	0	51	522	34	1,275	0	0	0	0	0
	APPROACH %	15%	85%	0%	0%	51%	49%	0%	0%	0%	8%	86%	6%						
	APP/DEPART	262	/	257	406	/	260	0	/	0	607	/	758	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	20	126	0	0	133	119	0	0	0	31	313	20	762					
	APPROACH %	14%	86%	0%	0%	53%	47%	0%	0%	0%	9%	86%	5%						
	PEAK HR FACTOR		0.830			0.887			0.000			0.883		0.925					
	APP/DEPART	146	/	146	252	/	164	0	/	0	364	/	452	0					
MD	11:15 AM	9	33	0	0	30	27	0	0	0	25	141	24	289	0	0	0	0	0
	11:30 AM	10	43	0	0	35	36	0	0	0	26	124	20	294	0	0	0	0	0
	11:45 AM	18	42	0	0	34	40	0	0	0	25	126	19	304	0	0	0	0	0
	12:00 PM	20	44	0	0	33	46	0	0	0	21	151	19	334	0	0	0	0	0
	12:15 PM	15	53	0	0	27	32	0	0	0	25	135	26	313	0	0	0	0	0
	12:30 PM	21	41	0	0	41	41	0	0	0	25	134	13	316	0	0	0	0	0
	12:45 PM	18	61	0	0	48	40	0	0	0	19	151	14	351	0	0	0	0	0
	1:00 PM	21	44	0	0	45	36	0	0	0	21	155	13	335	0	0	0	0	0
	VOLUMES	132	361	0	0	293	298	0	0	0	187	1,117	148	2,536	0	0	0	0	0
	APPROACH %	27%	73%	0%	0%	50%	50%	0%	0%	0%	13%	77%	10%						
	APP/DEPART	493	/	509	591	/	480	0	/	0	1,452	/	1,547	0					
	BEGIN PEAK HR		12:15 PM																
	VOLUMES	75	199	0	0	161	149	0	0	0	90	575	66	1,315					
	APPROACH %	27%	73%	0%	0%	52%	48%	0%	0%	0%	12%	79%	9%						
	PEAK HR FACTOR		0.867			0.881			0.000			0.967		0.937					
	APP/DEPART	274	/	265	310	/	251	0	/	0	731	/	799	0					
PM	03:30 PM	13	33	0	0	51	30	0	0	0	17	126	14	284	0	0	0	0	0
	3:45 PM	8	34	0	0	45	39	0	0	0	19	137	18	300	0	0	0	0	0
	4:00 PM	11	38	0	0	46	31	0	0	0	27	113	17	283	0	0	0	0	0
	4:15 PM	16	32	0	0	40	54	0	0	0	16	143	12	313	0	0	0	0	0
	4:30 PM	15	47	0	0	21	45	0	0	0	16	139	8	291	0	0	0	0	0
	4:45 PM	12	33	0	0	39	44	0	0	0	24	124	16	292	0	0	0	0	0
	5:00 PM	16	54	0	0	42	40	0	0	0	19	136	16	323	0	0	0	0	0
	5:15 PM	12	41	0	0	31	43	0	0	0	22	119	21	289	0	0	0	0	0
	VOLUMES	103	312	0	0	315	326	0	0	0	160	1,037	122	2,375	0	0	0	0	0
	APPROACH %	25%	75%	0%	0%	49%	51%	0%	0%	0%	12%	79%	9%						
	APP/DEPART	415	/	434	641	/	475	0	/	0	1,319	/	1,466	0					
	BEGIN PEAK HR		4:15 PM																
	VOLUMES	59	166	0	0	142	183	0	0	0	75	542	52	1,219					
	APPROACH %	26%	74%	0%	0%	44%	56%	0%	0%	0%	11%	81%	8%						
	PEAK HR FACTOR		0.804			0.864			0.000			0.978		0.943					
	APP/DEPART	225	/	218	325	/	217	0	/	0	669	/	784	0					

Chorro

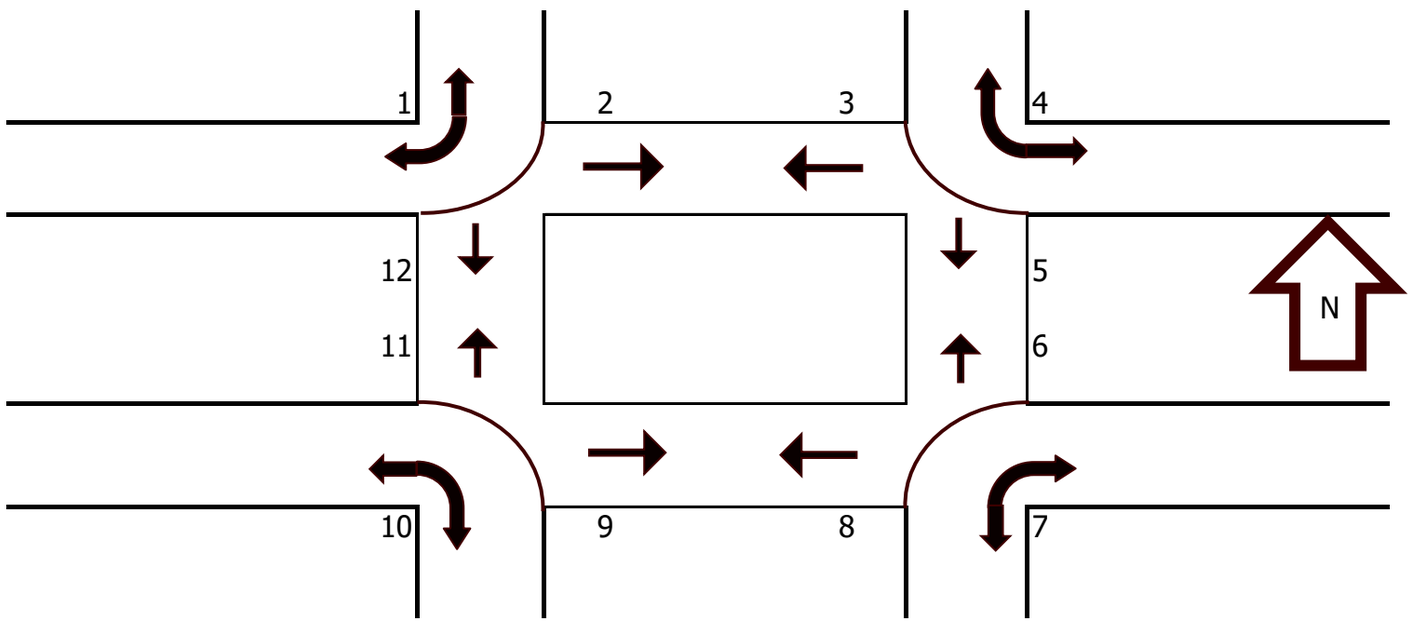
NORTH SIDE

Higuera WEST SIDE EAST SIDE **Higuera**

SOUTH SIDE

Chorro

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:00 AM	2	1	5	3	1	0	1	3	0	0	4	4	24
	7:15 AM	5	3	1	3	1	1	2	1	1	0	2	2	22
	7:30 AM	6	8	3	2	1	1	0	4	2	0	1	3	31
	7:45 AM	0	4	3	3	2	8	0	3	5	0	1	2	31
	8:00 AM	3	11	2	5	3	0	2	7	1	0	4	7	45
	8:15 AM	6	7	15	3	6	7	0	5	4	0	5	14	72
	8:30 AM	6	13	11	1	10	5	0	5	4	1	2	6	64
	8:45 AM	8	8	8	1	1	4	3	9	5	0	4	4	55
	TOTAL	36	55	48	21	25	26	8	37	22	1	23	42	344
MD	11:15 AM	6	16	44	5	13	24	3	28	41	1	12	24	217
	11:30 AM	8	24	55	13	17	15	0	40	48	0	45	37	302
	11:45 AM	4	54	51	5	34	22	0	50	52	0	17	23	312
	12:00 PM	7	34	66	5	33	29	0	47	66	0	33	31	351
	12:15 PM	2	59	65	2	24	48	7	43	84	0	30	27	391
	12:30 PM	17	47	61	8	38	38	2	56	84	0	30	24	405
	12:45 PM	0	90	75	26	36	57	0	62	64	0	43	17	470
	1:00 PM	3	68	69	5	43	37	2	62	59	0	26	40	414
	TOTAL	47	392	486	69	238	270	14	388	498	1	236	223	2,862
PM	3:30 PM	0	37	60	11	23	50	5	55	53	0	18	19	331
	3:45 PM	0	58	69	11	22	36	3	26	34	0	19	17	295
	4:00 PM	0	58	48	10	18	22	3	44	42	1	30	43	319
	4:15 PM	0	48	50	11	21	10	5	36	56	2	20	26	285
	4:30 PM	0	41	50	5	32	17	4	52	52	0	10	29	292
	4:45 PM	0	37	39	8	19	23	2	57	32	1	14	24	256
	5:00 PM	0	56	42	5	20	24	4	32	49	0	32	34	298
	5:15 PM	0	33	42	11	13	19	7	37	20	0	13	16	211
	TOTAL	0	368	400	72	168	201	33	339	338	4	156	208	2,287



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Chorro
EAST & WEST: Higuera

PROJECT #: SC0843
LOCATION #: 29
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

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		NORTHBOUND Chorro			SOUTHBOUND Chorro			EASTBOUND Higuera			WESTBOUND Higuera			
	LANES:	NL 1	NT 1	NR X	SL X	ST 1	SR 1	EL X	ET X	ER X	WL 0.5	WT 2	WR 0.5	TOTAL
AM	7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
	7:15 AM	0	1	0	0	1	0	0	0	0	0	2	0	4
	7:30 AM	0	0	0	0	3	0	0	0	0	0	1	0	4
	7:45 AM	0	1	0	0	3	3	0	0	0	0	1	0	8
	8:00 AM	0	0	0	0	4	0	0	0	0	0	3	0	7
	8:15 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
	8:30 AM	0	0	0	0	0	1	0	0	0	0	1	0	2
	8:45 AM	0	2	0	0	2	1	0	0	0	0	2	0	7
	VOLUMES	0	4	0	0	15	6	0	0	0	0	11	0	36
	APPROACH %	0%	100%	0%	0%	71%	29%	0%	0%	0%	0%	100%	0%	
	APP/DEPART	4	/	4	21	/	15	0	/	0	11	/	17	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	2	0	0	11	3	0	0	0	0	7	0	23
	APPROACH %	0%	100%	0%	0%	79%	21%	0%	0%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.500			0.583			0.000			0.583		0.719
	APP/DEPART	2	/	2	14	/	11	0	/	0	7	/	10	0
MD	11:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
	11:30 AM	0	2	0	0	1	2	0	0	0	0	1	0	6
	11:45 AM	1	0	0	0	1	2	0	0	0	2	2	0	8
	12:00 PM	0	4	0	0	1	0	0	0	0	0	5	0	10
	12:15 PM	0	1	0	0	1	1	0	0	0	1	2	0	6
	12:30 PM	0	1	0	0	0	2	0	0	0	0	3	0	6
	12:45 PM	0	1	0	0	3	0	0	0	0	2	2	1	9
	1:00 PM	0	0	0	0	3	5	0	0	0	1	2	2	13
	VOLUMES	1	9	0	0	10	12	0	0	0	6	19	3	60
	APPROACH %	10%	90%	0%	0%	45%	55%	0%	0%	0%	21%	68%	11%	
	APP/DEPART	10	/	12	22	/	16	0	/	0	28	/	32	0
	BEGIN PEAK HR		12:15 PM											
	VOLUMES	0	3	0	0	7	8	0	0	0	4	9	3	34
	APPROACH %	0%	100%	0%	0%	47%	53%	0%	0%	0%	25%	56%	19%	
	PEAK HR FACTOR		0.750			0.469			0.000			0.800		0.654
	APP/DEPART	3	/	6	15	/	11	0	/	0	16	/	17	0
PM	03:30 PM	1	0	0	0	0	1	0	0	0	0	2	0	4
	3:45 PM	0	1	0	0	1	0	0	0	0	0	5	1	8
	4:00 PM	0	2	0	0	0	1	0	0	0	2	2	2	9
	4:15 PM	0	1	0	0	1	0	0	0	0	0	4	1	7
	4:30 PM	1	0	0	0	0	1	0	0	0	0	2	1	5
	4:45 PM	0	0	0	0	2	2	0	0	0	0	3	0	7
	5:00 PM	0	1	0	0	5	1	0	0	0	1	3	0	11
	5:15 PM	0	2	0	0	3	1	0	0	0	2	6	0	14
	VOLUMES	2	7	0	0	12	7	0	0	0	5	27	5	65
	APPROACH %	22%	78%	0%	0%	63%	37%	0%	0%	0%	14%	73%	14%	
	APP/DEPART	9	/	12	19	/	17	0	/	0	37	/	36	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	1	3	0	0	10	5	0	0	0	3	14	1	37
	APPROACH %	25%	75%	0%	0%	67%	33%	0%	0%	0%	17%	78%	6%	
	PEAK HR FACTOR		0.500			0.625			0.000			0.563		0.661
	APP/DEPART	4	/	4	15	/	13	0	/	0	18	/	20	0

Chorro

NORTH SIDE

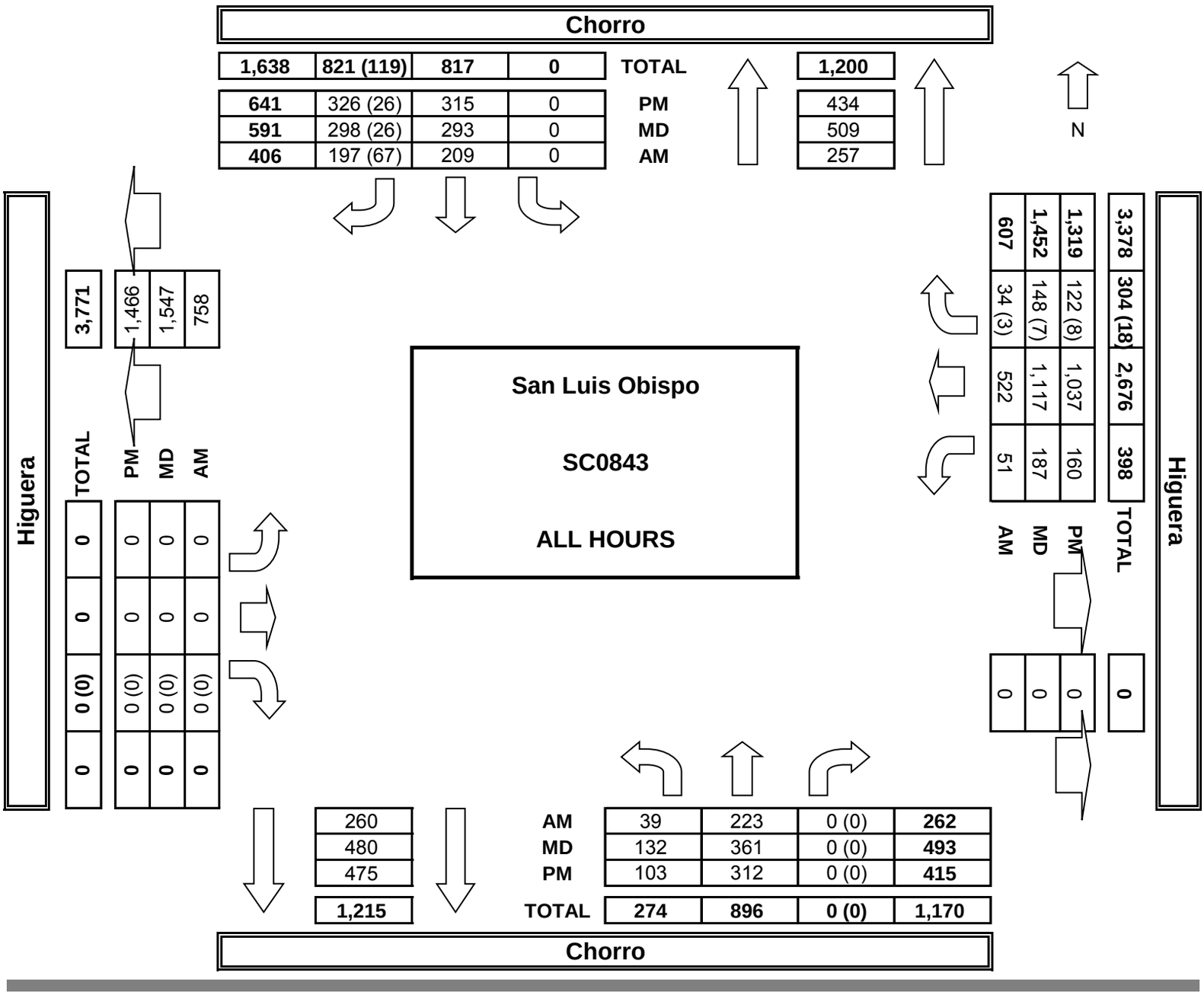
Higuera WEST SIDE EAST SIDE **Higuera**

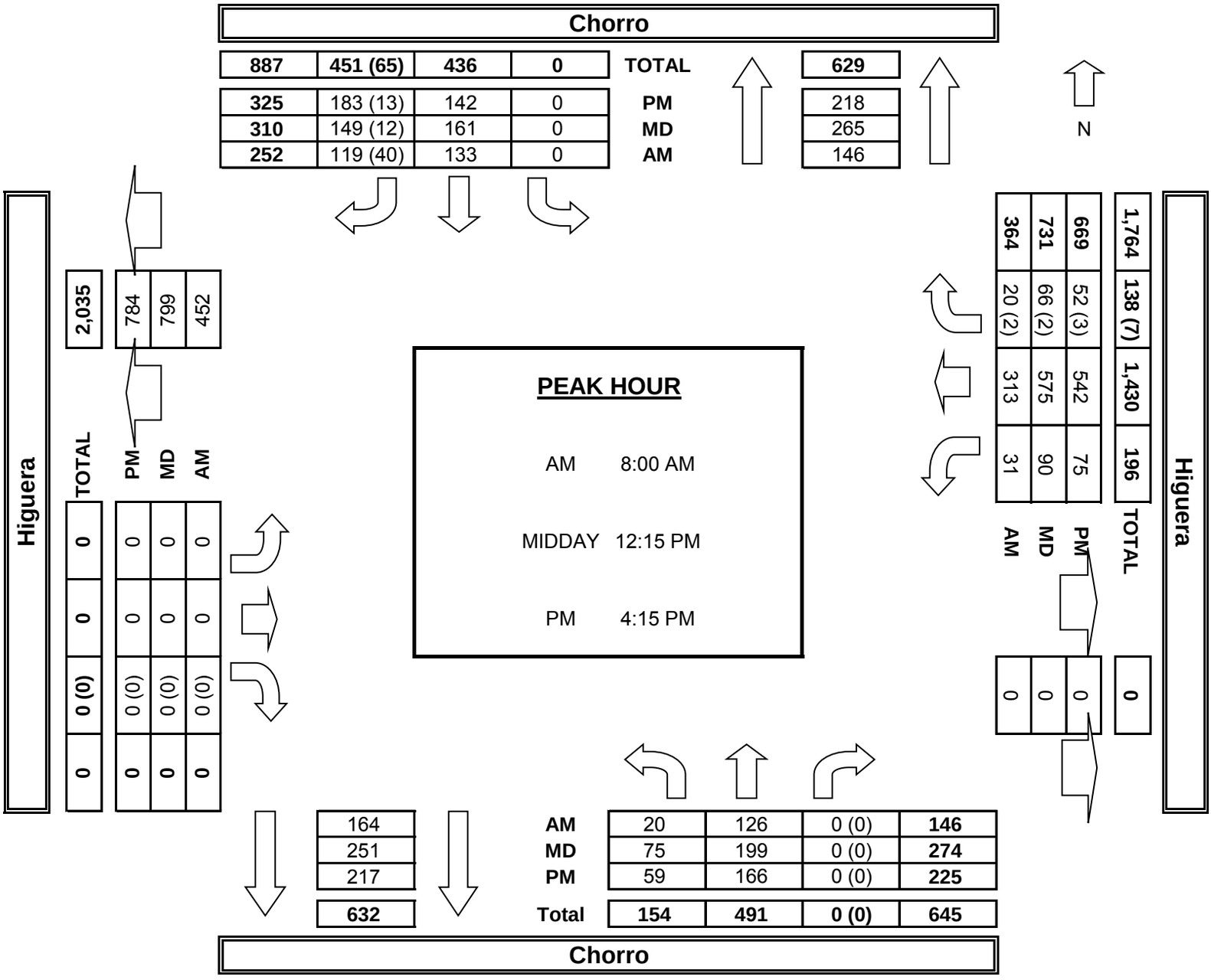
SOUTH SIDE

Chorro

AimTD LLC

TURNING MOVEMENT COUNTS




Chorro
887
451 (65)
436
0
TOTAL
629
325
183 (13)
142
0
PM
218
310
149 (12)
161
0
MD
265
252
119 (40)
133
0
AM
146
N
Higuera
2,035
784
799
452
TOTAL
PM
MD
AM
0
0
0
0
0
0
0
0
0
0 (0)
0 (0)
0 (0)
0 (0)
0
0
0
0
PEAK HOUR
AM 8:00 AM
MIDDAY 12:15 PM
PM 4:15 PM
1,764
138 (7)
1,430
196
669
52 (3)
542
75
731
66 (2)
575
90
364
20 (2)
313
31
TOTAL
PM
MD
AM
0
0
0
0
Higuera
164
251
217
632
AM
MD
PM
Total
20
75
59
154
126
199
166
491
0 (0)
0 (0)
0 (0)
0 (0)
146
274
225
645
Chorro

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Morro
EAST & WEST: Higuera

PROJECT #: SC0843
LOCATION #: 44
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

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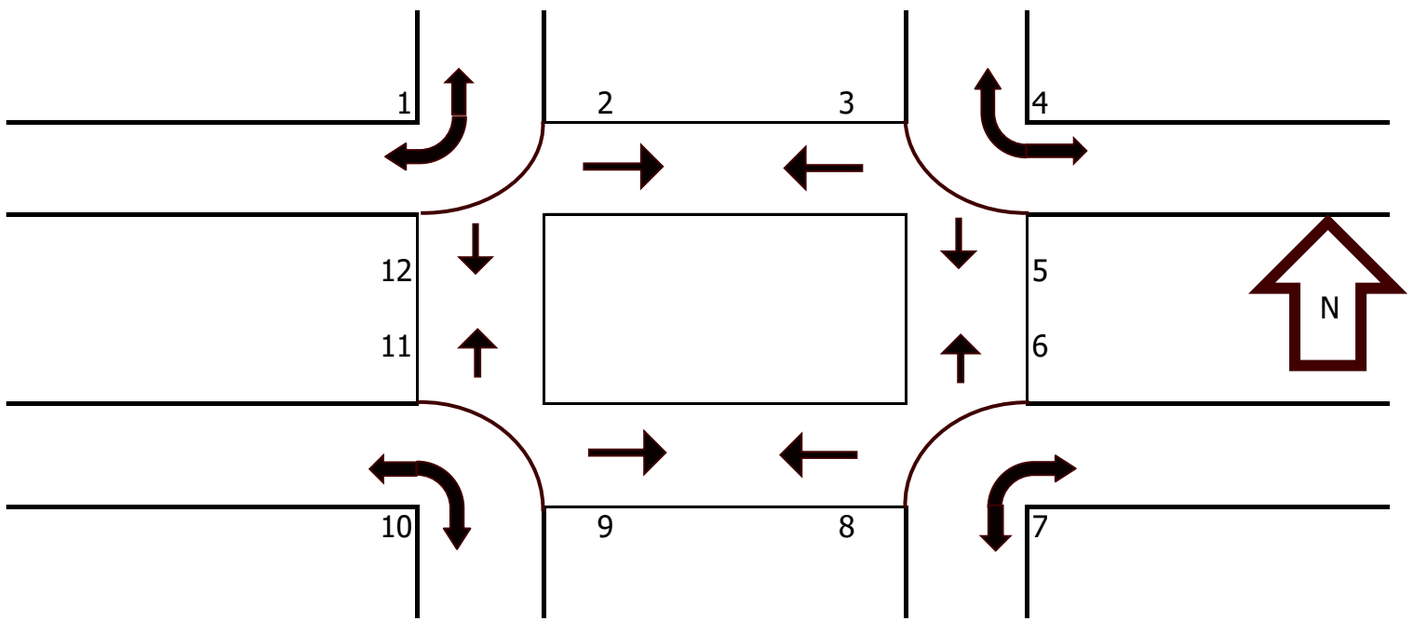
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Morro			SOUTHBOUND Morro			EASTBOUND Higuera			WESTBOUND Higuera				U-TURNS				
	LANES:	NL 0.5	NT 0.5	NR X	SL X	ST 1	SR 1	EL X	ET X	ER X	WL 0.5	WT 2	WR 0.5	TOTAL	NB 0	SB 0	EB X	WB X	TTL
AM	8:30 AM	7	6	0	0	3	6	0	0	0	8	86	4	120	0	0	0	0	0
	8:45 AM	6	8	0	0	2	4	0	0	0	7	79	7	113	0	0	0	0	0
	9:00 AM	5	14	0	0	6	5	0	0	0	9	94	4	137	0	0	0	0	0
	9:15 AM	7	17	0	0	10	6	0	0	0	11	71	5	127	0	0	0	0	0
	9:30 AM	7	6	0	0	6	7	0	0	0	2	78	13	119	0	0	0	0	0
	9:45 AM	13	14	0	0	1	2	0	0	0	11	85	4	130	0	0	0	0	0
	10:00 AM	18	12	0	0	6	12	0	0	1	10	115	6	180	0	0	0	0	0
	10:15 AM	11	11	0	0	8	11	0	0	0	7	101	5	154	0	0	0	0	0
	VOLUMES	74	88	0	0	42	53	0	0	1	65	709	48	1,080	0	0	0	0	0
	APPROACH %	46%	54%	0%	0%	44%	56%	0%	0%	100%	8%	86%	6%						
	APP/DEPART	162	/	136	95	/	108	1	/	0	822	/	836	0					
	BEGIN PEAK HR		9:30 AM																
	VOLUMES	49	43	0	0	21	32	0	0	1	30	379	28	583					
	APPROACH %	53%	47%	0%	0%	40%	60%	0%	0%	100%	7%	87%	6%						
	PEAK HR FACTOR		0.767			0.697			0.250			0.834		0.810					
	APP/DEPART	92	/	71	53	/	52	1	/	0	437	/	460	0					
MD	11:00 AM	16	10	0	0	9	9	0	0	0	8	122	6	180	0	0	0	0	0
	11:15 AM	17	14	0	0	15	17	0	0	0	8	147	15	233	0	0	0	0	0
	11:30 AM	12	18	0	1	8	24	0	0	0	6	137	12	218	0	1	0	0	1
	11:45 AM	18	21	0	0	13	13	0	0	0	14	142	14	235	0	0	0	0	0
	12:00 PM	18	15	0	0	16	18	0	0	0	7	152	15	241	0	0	0	0	0
	12:15 PM	21	14	0	0	12	16	0	0	0	13	142	13	231	0	0	0	0	0
	12:30 PM	26	20	0	0	12	20	0	0	0	16	124	9	227	0	0	0	0	0
	12:45 PM	11	20	0	0	14	22	0	0	0	8	151	10	236	0	0	0	0	0
	VOLUMES	139	132	0	1	99	139	0	0	0	80	1,117	94	1,801	0	1	0	0	1
	APPROACH %	51%	49%	0%	0%	41%	58%	0%	0%	0%	6%	87%	7%						
	APP/DEPART	271	/	227	239	/	179	0	/	0	1,291	/	1,395	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	76	69	0	0	54	76	0	0	0	44	569	47	935					
	APPROACH %	52%	48%	0%	0%	42%	58%	0%	0%	0%	7%	86%	7%						
	PEAK HR FACTOR		0.788			0.903			0.000			0.948		0.970					
	APP/DEPART	145	/	116	130	/	98	0	/	0	660	/	721	0					
PM	02:00 PM	9	20	0	0	15	17	0	0	0	13	138	10	222	0	0	0	0	0
	2:15 PM	20	14	0	0	9	16	0	0	0	13	127	9	208	0	0	0	0	0
	2:30 PM	19	16	0	0	12	14	0	0	0	17	118	8	204	0	0	0	0	0
	2:45 PM	17	13	0	0	10	13	0	0	0	21	116	13	203	0	0	0	0	0
	3:00 PM	13	7	0	1	8	12	0	0	0	10	134	9	194	0	0	0	0	0
	3:15 PM	18	18	0	0	9	13	0	0	0	17	129	12	216	0	0	0	0	0
	3:30 PM	8	20	0	0	13	14	0	0	0	15	128	7	205	0	0	0	0	0
	3:45 PM	13	16	0	0	10	16	0	0	0	11	149	7	222	0	0	0	0	0
	VOLUMES	117	124	0	1	86	115	0	0	0	117	1,039	75	1,674	0	0	0	0	0
	APPROACH %	49%	51%	0%	0%	43%	57%	0%	0%	0%	10%	84%	6%						
	APP/DEPART	241	/	199	202	/	203	0	/	1	1,231	/	1,271	0					
	BEGIN PEAK HR		2:00 PM																
	VOLUMES	52	61	0	1	40	55	0	0	0	53	540	35	837					
	APPROACH %	46%	54%	0%	1%	42%	57%	0%	0%	0%	8%	86%	6%						
	PEAK HR FACTOR		0.785			0.750			0.000			0.940		0.943					
	APP/DEPART	113	/	96	96	/	93	0	/	1	628	/	647	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	8:30 AM	3	14	9	1	6	3	5	7	3	2	4	5	62
	8:45 AM	1	4	5	3	6	4	2	6	4	4	14	0	53
	9:00 AM	6	6	17	3	13	2	0	8	2	0	3	10	70
	9:15 AM	4	10	26	2	12	5	1	8	13	8	9	7	105
	9:30 AM	2	7	13	4	8	6	1	17	8	0	4	8	78
	9:45 AM	2	10	18	3	23	4	0	11	8	3	12	9	103
	10:00 AM	6	12	16	4	19	10	0	15	16	0	12	12	122
	10:15 AM	4	15	16	3	19	6	0	23	8	2	16	11	123
	TOTAL	28	78	120	23	106	40	9	95	62	19	74	62	716
MD	11:00 AM	11	13	24	2	19	4	2	34	12	1	10	19	151
	11:15 AM	1	27	38	5	25	15	4	25	23	2	22	21	208
	11:30 AM	5	21	36	4	23	14	14	26	27	1	28	12	211
	11:45 AM	4	33	47	7	18	16	2	38	32	0	30	27	254
	12:00 PM	10	39	47	11	25	41	2	36	70	0	27	28	336
	12:15 PM	6	35	56	5	25	18	4	50	21	0	15	25	260
	12:30 PM	0	31	75	1	50	20	4	59	47	0	18	27	332
	12:45 PM	6	54	45	3	33	18	3	58	30	0	27	22	299
	TOTAL	43	253	368	38	218	146	35	326	262	4	177	181	2,051
PM	2:00 PM	2	72	63	3	32	40	5	33	41	1	33	24	349
	2:15 PM	5	41	79	0	29	13	6	55	31	0	46	42	347
	2:30 PM	8	42	57	11	34	22	9	70	69	1	41	41	405
	2:45 PM	2	34	50	7	22	22	2	55	28	0	13	20	255
	3:00 PM	0	40	72	6	28	15	4	26	26	0	12	21	250
	3:15 PM	6	44	66	1	14	12	7	45	15	0	37	34	281
	3:30 PM	0	40	56	3	47	17	0	49	23	0	34	34	303
	3:45 PM	3	38	60	7	26	22	4	29	17	3	32	31	272
	TOTAL	26	351	503	38	232	163	37	362	250	5	248	247	2,462



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Morro
EAST & WEST: Higuera

PROJECT #: SC0843
LOCATION #: 44
CONTROL: SIGNAL

NOTES:

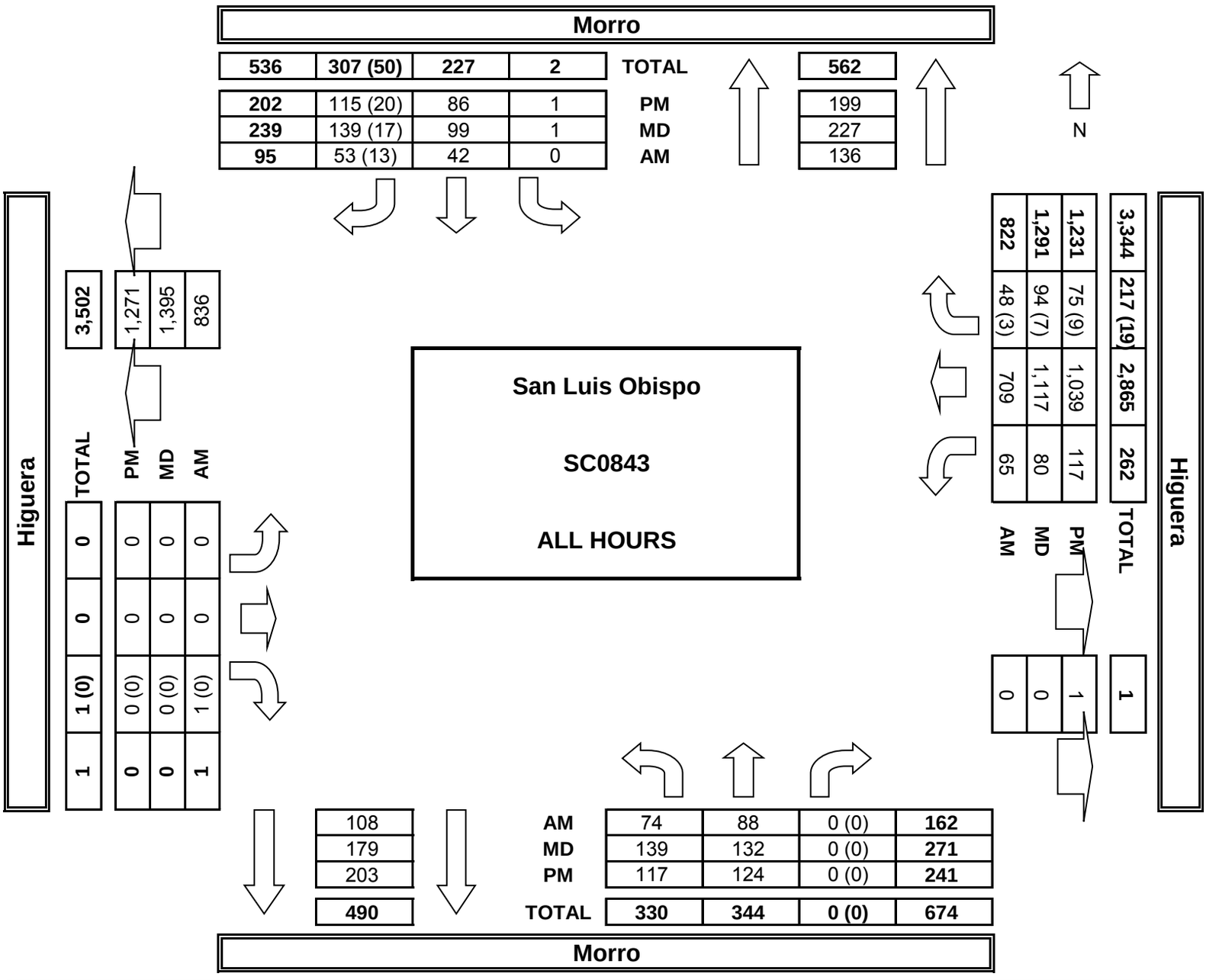
AM
PM
MD
OTHER
OTHER

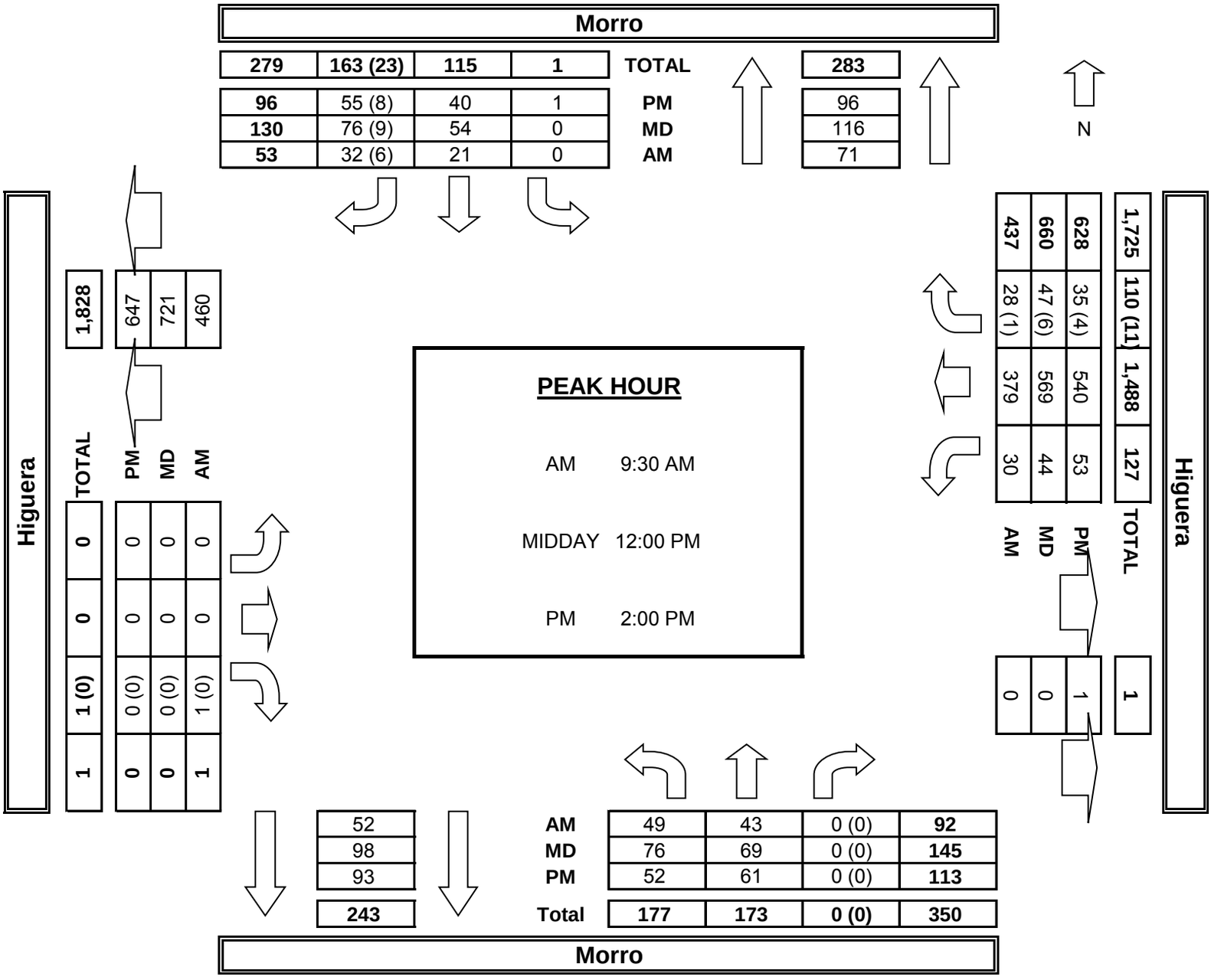
N
W
E
S

	NORTHBOUND Morro			SOUTHBOUND Morro			EASTBOUND Higuera			WESTBOUND Higuera			
LANES:	NL 0.5	NT 0.5	NR X	SL X	ST 1	SR 1	EL X	ET X	ER X	WL 0.5	WT 2	WR 0.5	TOTAL
AM													
8:30 AM	0	3	0	0	2	0	0	0	0	0	1	0	6
8:45 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
9:00 AM	2	3	0	0	1	0	0	0	0	0	2	0	8
9:15 AM	0	0	0	0	0	0	0	1	0	0	2	1	4
9:30 AM	0	1	0	0	2	0	0	0	0	0	2	0	5
9:45 AM	0	0	0	0	0	1	0	0	0	2	0	0	3
10:00 AM	0	2	0	0	0	1	0	0	0	0	0	0	3
10:15 AM	0	2	0	0	0	0	0	0	0	1	1	0	4
VOLUMES	2	11	0	0	6	2	0	1	0	3	10	1	36
APPROACH %	15%	85%	0%	0%	75%	25%	0%	100%	0%	21%	71%	7%	
APP/DEPART	13	/	12	8	/	9	1	/	1	14	/	14	0
BEGIN PEAK HR		8:30 AM											
VOLUMES	2	6	0	0	4	0	0	1	0	0	7	1	21
APPROACH %	25%	75%	0%	0%	100%	0%	0%	100%	0%	0%	88%	13%	
PEAK HR FACTOR		0.400			0.500			0.250			0.667		0.656
APP/DEPART	8	/	7	4	/	4	1	/	1	8	/	9	0
MD													
11:00 AM	0	3	0	0	0	0	0	0	0	2	1	0	6
11:15 AM	0	4	0	0	0	1	0	1	0	0	1	0	7
11:30 AM	0	2	0	0	0	0	0	1	0	0	0	0	3
11:45 AM	1	0	0	0	0	0	0	0	0	1	2	0	4
12:00 PM	0	0	0	0	0	0	0	0	0	1	5	0	6
12:15 PM	0	2	0	0	1	0	0	0	0	0	0	1	4
12:30 PM	0	2	0	0	0	0	0	1	0	0	1	0	4
12:45 PM	2	2	0	1	0	0	0	0	0	0	2	0	7
VOLUMES	3	15	0	1	1	1	0	3	0	4	12	1	41
APPROACH %	17%	83%	0%	33%	33%	33%	0%	100%	0%	24%	71%	6%	
APP/DEPART	18	/	16	3	/	5	3	/	4	17	/	16	0
BEGIN PEAK HR		12:00 PM											
VOLUMES	2	6	0	1	1	0	0	1	0	1	8	1	21
APPROACH %	25%	75%	0%	50%	50%	0%	0%	100%	0%	10%	80%	10%	
PEAK HR FACTOR		0.500			0.500			0.250			0.417		0.750
APP/DEPART	8	/	7	2	/	2	1	/	2	10	/	10	0
PM													
02:00 PM	1	2	0	0	0	0	0	0	0	2	7	0	12
2:15 PM	0	0	0	0	2	0	0	0	0	0	3	0	5
2:30 PM	0	2	0	0	0	0	1	0	0	0	3	1	7
2:45 PM	2	0	0	0	0	0	0	1	0	2	5	0	10
3:00 PM	0	2	0	0	6	1	0	1	1	1	2	0	14
3:15 PM	0	1	0	0	0	0	0	0	0	1	3	0	5
3:30 PM	0	1	0	0	0	0	0	0	0	1	2	0	4
3:45 PM	1	4	0	0	2	0	0	0	0	0	4	0	11
VOLUMES	4	12	0	0	10	1	1	2	1	7	29	1	68
APPROACH %	25%	75%	0%	0%	91%	9%	25%	50%	25%	19%	78%	3%	
APP/DEPART	16	/	14	11	/	18	4	/	2	37	/	34	0
BEGIN PEAK HR		2:15 PM											
VOLUMES	2	5	0	0	6	1	1	2	1	4	13	1	36
APPROACH %	29%	71%	0%	0%	86%	14%	25%	50%	25%	22%	72%	6%	
PEAK HR FACTOR		0.875			0.250			0.500			0.643		0.643
APP/DEPART	7	/	7	7	/	11	4	/	2	18	/	16	0

AimTD LLC

TURNING MOVEMENT COUNTS




Morro
279
163 (23)
115
1
TOTAL
283
96
55 (8)
40
1
PM
96
130
76 (9)
54
0
MD
116
53
32 (6)
21
0
AM
71
N
Higuera
1,828
647
721
460
TOTAL
PM
MD
AM
0
0
0
0
0
0
0
0
0
1 (0)
0 (0)
0 (0)
1 (0)
1
0
0
1
PEAK HOUR
AM 9:30 AM
MIDDAY 12:00 PM
PM 2:00 PM
437
660
628
1,725
28 (1)
47 (6)
35 (4)
110 (11)
379
569
540
1,488
30
44
53
127
AM
MD
PM
TOTAL
0
0
1
1
Higuera
52
98
93
243
AM
MD
PM
Total
49
43
0 (0)
92
76
69
0 (0)
145
52
61
0 (0)
113
177
173
0 (0)
350
Morro

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:				
Tue, Mar 22, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
	NORTH & SOUTH:	Osos	LOCATION #:	45
	EAST & WEST:	Higuera	CONTROL:	SIGNAL

NOTES:

AM PM MD OTHER OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Osos			SOUTHBOUND Osos			EASTBOUND Higuera			WESTBOUND Higuera				U-TURNS				
	LANES:	NL 1	NT 1	NR X	SL X	ST 1	SR 1	EL X	ET X	ER X	WL 0.5	WT 2	WR 0.5	TOTAL	NB 0	SB 0	EB X	WB X	TTL
AM	8:30 AM	9	24	0	0	20	9	0	0	0	22	81	10	175	0	0	0	0	0
	8:45 AM	12	24	0	0	22	11	0	0	0	18	72	3	162	0	0	0	0	0
	9:00 AM	18	21	0	0	17	12	0	0	0	21	75	1	165	0	0	0	0	0
	9:15 AM	13	23	0	0	15	7	0	0	0	15	65	6	144	0	0	0	0	0
	9:30 AM	20	33	0	0	15	7	0	0	0	23	66	8	172	0	0	0	0	0
	9:45 AM	16	31	0	0	19	13	0	0	0	31	68	10	188	0	0	0	0	0
	10:00 AM	23	28	0	0	15	20	0	0	0	15	90	4	195	0	0	0	0	0
	10:15 AM	19	41	0	0	13	18	0	0	0	12	81	7	191	0	0	0	0	0
	VOLUMES	130	225	0	0	136	97	0	0	0	157	598	49	1,392	0	0	0	0	0
	APPROACH %	37%	63%	0%	0%	58%	42%	0%	0%	0%	20%	74%	6%						
	APP/DEPART	355	/	274	233	/	293	0	/	0	804	/	825	0					
	BEGIN PEAK HR		9:30 AM																
	VOLUMES	78	133	0	0	62	58	0	0	0	81	305	29	746					
	APPROACH %	37%	63%	0%	0%	52%	48%	0%	0%	0%	20%	73%	7%						
	PEAK HR FACTOR		0.879			0.857			0.000			0.952		0.956					
	APP/DEPART	211	/	162	120	/	143	0	/	0	415	/	441	0					
MD	11:15 AM	34	44	0	0	28	26	0	0	0	19	109	4	264	0	0	0	0	0
	11:30 AM	27	46	0	0	25	33	0	0	0	23	113	14	281	0	0	0	0	0
	11:45 AM	33	46	0	0	22	19	0	0	0	22	114	12	268	0	0	0	0	0
	12:00 PM	22	49	0	0	19	25	0	0	0	40	129	7	291	0	0	0	0	0
	12:15 PM	39	50	0	0	30	20	0	0	0	35	117	7	298	0	0	0	0	0
	12:30 PM	23	48	0	0	27	19	0	0	0	31	101	9	258	0	0	0	0	0
	12:45 PM	39	49	0	0	22	21	0	0	0	25	107	9	272	0	0	0	0	0
	1:00 PM	28	49	0	0	23	17	0	0	0	23	104	13	257	0	0	0	0	0
	VOLUMES	245	381	0	0	196	180	0	0	0	218	894	75	2,189	0	0	0	0	0
	APPROACH %	39%	61%	0%	0%	52%	48%	0%	0%	0%	18%	75%	6%						
	APP/DEPART	626	/	456	376	/	414	0	/	0	1,187	/	1,319	0					
	BEGIN PEAK HR		11:30 AM																
	VOLUMES	121	191	0	0	96	97	0	0	0	120	473	40	1,138					
	APPROACH %	39%	61%	0%	0%	50%	50%	0%	0%	0%	19%	75%	6%						
	PEAK HR FACTOR		0.876			0.832			0.000			0.899		0.955					
	APP/DEPART	312	/	231	193	/	216	0	/	0	633	/	691	0					
PM	03:00 PM	25	37	0	0	31	13	0	0	0	23	113	8	250	0	0	0	0	0
	3:15 PM	21	35	0	0	27	27	0	0	0	27	128	10	275	0	0	0	0	0
	3:30 PM	27	56	0	0	25	16	0	0	0	15	122	6	267	0	0	0	0	0
	3:45 PM	32	41	0	0	20	18	0	0	0	17	129	9	266	0	0	0	0	0
	4:00 PM	29	46	0	0	17	16	0	0	0	15	115	9	247	0	0	0	0	0
	4:15 PM	20	35	0	0	31	13	0	0	0	18	121	5	243	0	0	0	0	0
	4:30 PM	22	60	0	0	15	12	0	0	0	21	121	7	258	0	0	0	0	0
	4:45 PM	25	49	0	0	17	15	0	0	0	18	122	11	257	0	0	0	0	0
	VOLUMES	201	359	0	0	183	130	0	0	0	154	971	65	2,063	0	0	0	0	0
	APPROACH %	36%	64%	0%	0%	58%	42%	0%	0%	0%	13%	82%	5%						
	APP/DEPART	560	/	424	313	/	337	0	/	0	1,190	/	1,302	0					
	BEGIN PEAK HR		3:00 PM																
	VOLUMES	105	169	0	0	103	74	0	0	0	82	492	33	1,058					
	APPROACH %	38%	62%	0%	0%	58%	42%	0%	0%	0%	14%	81%	5%						
	PEAK HR FACTOR		0.825			0.819			0.000			0.920		0.962					
	APP/DEPART	274	/	202	177	/	185	0	/	0	607	/	671	0					

Osos

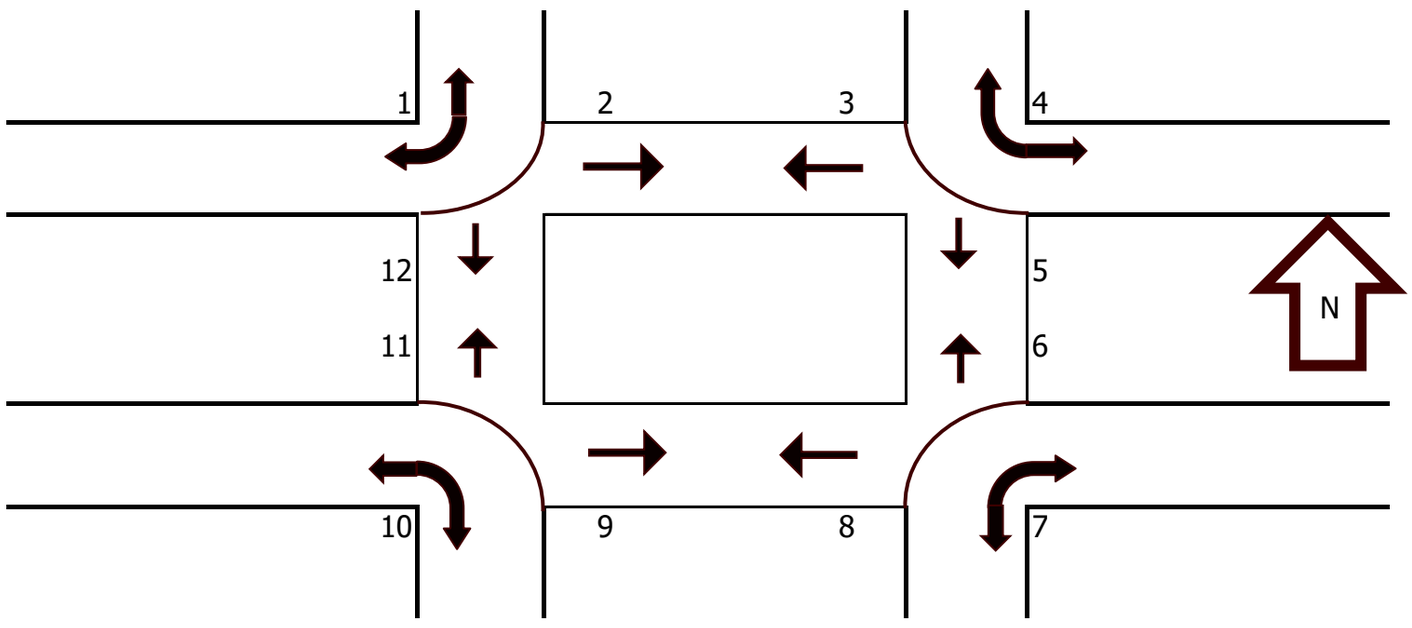
NORTH SIDE

Higuera WEST SIDE EAST SIDE **Higuera**

SOUTH SIDE

Osos

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	8:30 AM	5	2	11	1	1	2	0	3	3	0	7	1	36
	8:45 AM	5	2	10	0	5	1	0	3	3	0	3	1	33
	9:00 AM	3	5	8	1	1	1	0	4	2	2	2	7	36
	9:15 AM	1	5	2	0	0	4	0	2	2	1	5	3	25
	9:30 AM	3	5	10	4	0	2	0	4	8	0	4	5	45
	9:45 AM	1	15	7	1	4	7	0	3	7	0	10	7	62
	10:00 AM	4	5	7	1	6	5	0	0	6	0	8	4	46
	10:15 AM	4	15	15	0	3	4	0	1	6	1	12	8	69
	TOTAL	26	54	70	8	20	26	0	20	37	4	51	36	352
MD	11:15 AM	4	9	9	2	5	18	0	13	6	0	12	11	89
	11:30 AM	3	10	15	0	12	16	0	17	16	0	8	10	107
	11:45 AM	1	6	22	0	13	10	0	15	11	0	5	4	87
	12:00 PM	5	18	26	3	12	27	0	21	22	1	12	9	156
	12:15 PM	1	21	21	8	26	14	0	45	18	0	13	10	177
	12:30 PM	0	28	23	7	20	15	0	14	26	0	19	5	157
	12:45 PM	1	31	28	4	33	15	0	31	38	0	19	13	213
	1:00 PM	3	20	19	2	12	19	0	25	54	0	24	14	192
	TOTAL	18	143	163	26	133	134	0	181	191	1	112	76	1,178
PM	3:00 PM	0	20	34	2	4	2	0	17	26	0	18	14	137
	3:15 PM	0	16	28	3	13	6	0	19	18	0	17	16	136
	3:30 PM	0	19	18	0	5	14	0	27	18	0	10	16	127
	3:45 PM	1	9	21	3	15	3	0	8	19	2	10	5	96
	4:00 PM	1	12	6	1	1	1	0	23	23	0	5	13	86
	4:15 PM	2	10	8	0	10	6	0	14	13	5	10	16	94
	4:30 PM	0	12	8	2	10	8	0	34	31	0	14	15	134
	4:45 PM	0	22	10	1	11	22	0	20	9	0	12	6	113
	TOTAL	4	120	133	12	69	62	0	162	157	7	96	101	923



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Osos
EAST & WEST: Higuera

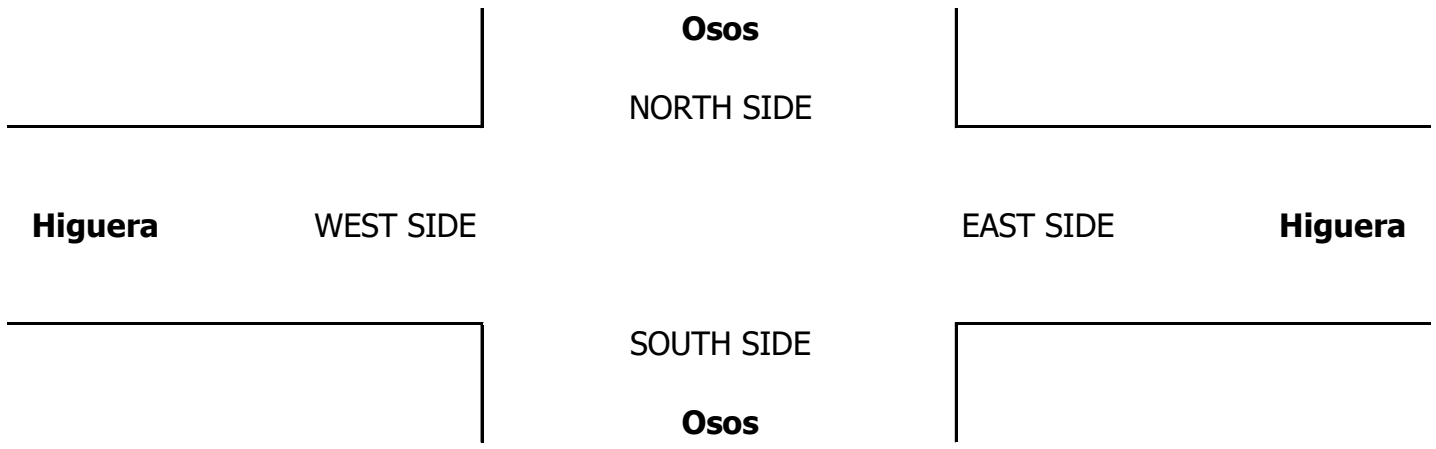
PROJECT #: SC0843
LOCATION #: 45
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

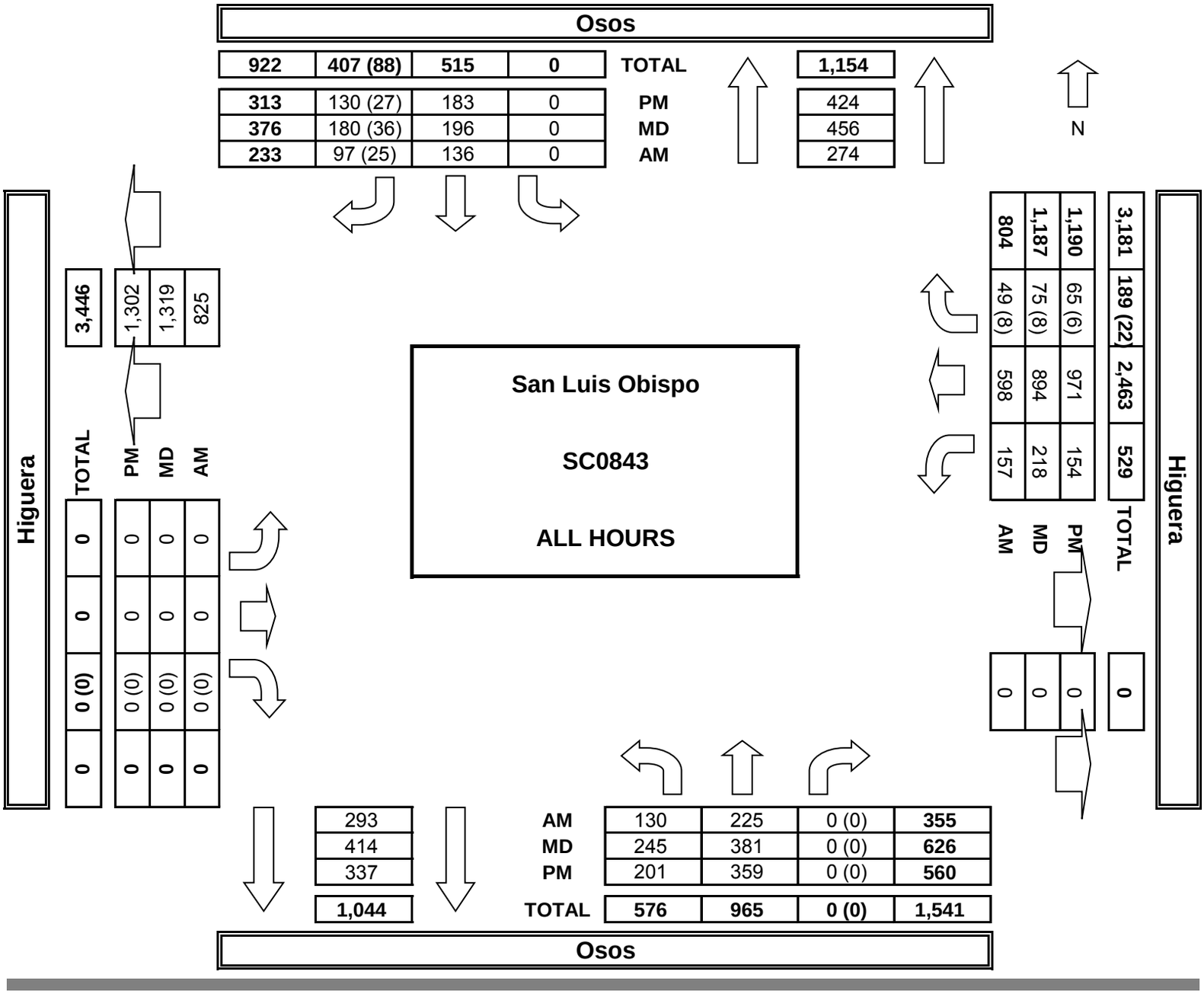
N ▲
◄ W
E ►
S ▼

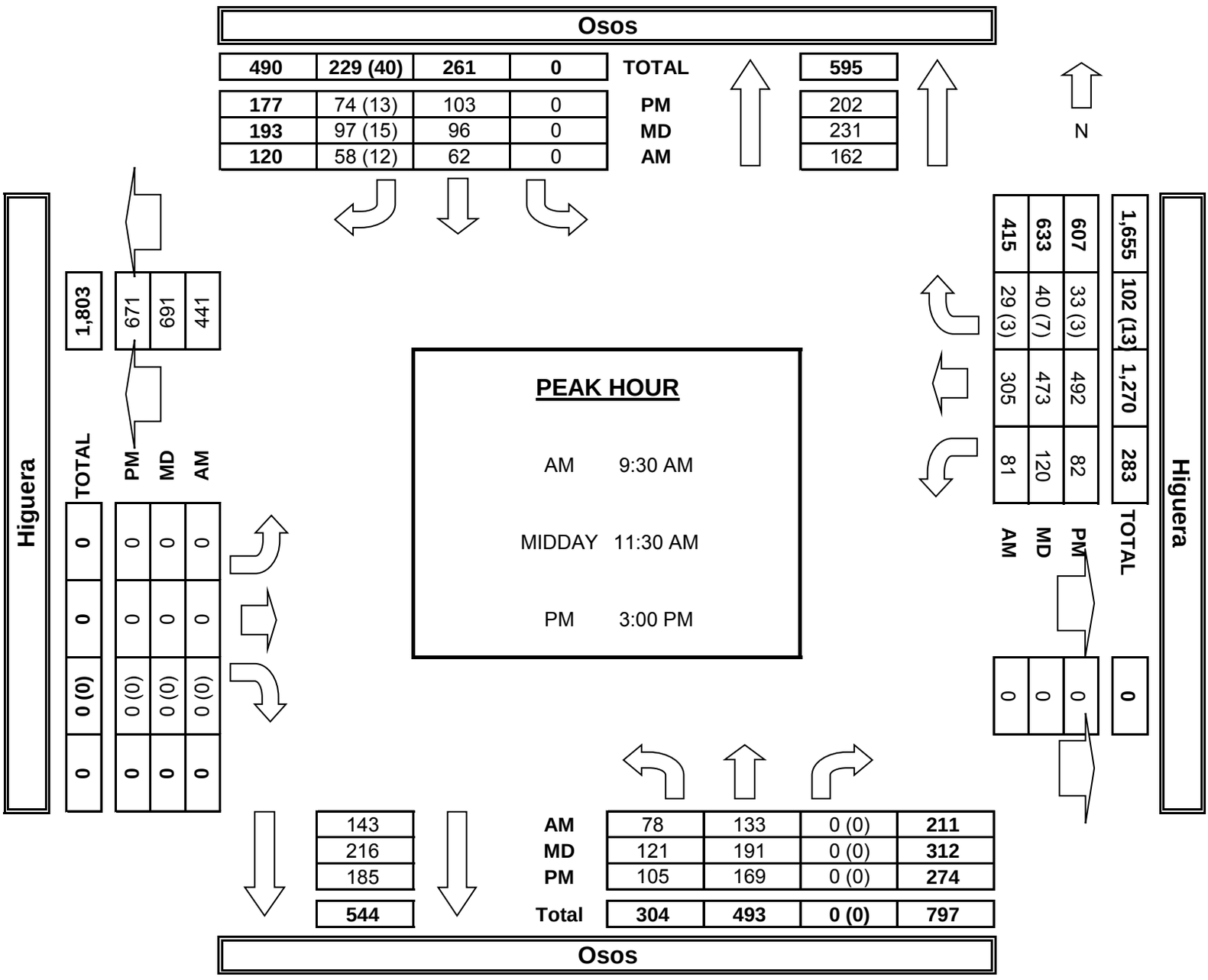
		NORTHBOUND Osos			SOUTHBOUND Osos			EASTBOUND Higuera			WESTBOUND Higuera			
	LANES:	NL 1	NT 1	NR X	SL X	ST 1	SR 1	EL X	ET X	ER X	WL 0.5	WT 2	WR 0.5	TOTAL
AM	8:30 AM	0	1	1	0	2	0	0	0	0	0	1	0	5
	8:45 AM	1	0	0	0	0	0	0	0	0	0	2	0	3
	9:00 AM	1	0	0	0	0	0	0	0	0	0	1	0	2
	9:15 AM	0	1	0	0	1	2	0	0	0	2	1	0	7
	9:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
	9:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	10:00 AM	0	1	0	0	2	1	0	0	0	0	0	0	4
	10:15 AM	0	1	0	0	1	0	0	1	0	1	1	0	5
	VOLUMES	2	5	1	0	7	3	0	1	0	3	8	0	30
	APPROACH %	25%	63%	13%	0%	70%	30%	0%	100%	0%	27%	73%	0%	
	APP/DEPART	8	/	5	10	/	10	1	/	2	11	/	13	0
	BEGIN PEAK HR		8:30 AM											
	VOLUMES	2	2	1	0	3	2	0	0	0	2	5	0	17
	APPROACH %	40%	40%	20%	0%	60%	40%	0%	0%	0%	29%	71%	0%	
	PEAK HR FACTOR		0.625			0.417			0.000			0.583		0.607
	APP/DEPART	5	/	2	5	/	5	0	/	1	7	/	9	0
MD	11:15 AM	0	0	0	0	1	0	0	1	0	1	2	0	5
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 AM	1	0	0	0	0	0	0	0	0	1	1	0	3
	12:00 PM	0	1	0	0	0	0	0	0	0	0	7	0	8
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	12:45 PM	0	1	0	0	0	1	0	1	0	0	1	0	4
	1:00 PM	0	2	0	0	0	0	0	0	0	0	3	0	5
	VOLUMES	1	5	0	0	1	1	0	2	0	2	14	0	26
	APPROACH %	17%	83%	0%	0%	50%	50%	0%	100%	0%	13%	88%	0%	
	APP/DEPART	6	/	5	2	/	3	2	/	2	16	/	16	0
	BEGIN PEAK HR		11:15 AM											
	VOLUMES	1	1	0	0	1	0	0	1	0	2	10	0	16
	APPROACH %	50%	50%	0%	0%	100%	0%	0%	100%	0%	17%	83%	0%	
	PEAK HR FACTOR		0.500			0.250			0.250			0.429		0.500
	APP/DEPART	2	/	1	1	/	3	1	/	1	12	/	11	0
PM	03:00 PM	1	1	0	0	0	0	0	0	0	0	0	0	2
	3:15 PM	0	0	0	0	2	2	0	0	0	0	2	0	6
	3:30 PM	2	0	0	0	1	1	0	0	0	1	1	0	6
	3:45 PM	0	3	0	0	0	0	0	0	0	0	2	0	5
	4:00 PM	3	5	0	0	1	1	0	0	0	0	1	0	11
	4:15 PM	0	2	0	0	0	0	0	1	0	1	3	0	7
	4:30 PM	0	1	0	0	0	1	0	0	0	0	2	0	4
	4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	VOLUMES	6	12	0	0	4	5	0	1	0	2	12	0	42
	APPROACH %	33%	67%	0%	0%	44%	56%	0%	100%	0%	14%	86%	0%	
	APP/DEPART	18	/	12	9	/	6	1	/	1	14	/	23	0
	BEGIN PEAK HR		3:30 PM											
	VOLUMES	5	10	0	0	2	2	0	1	0	2	7	0	29
	APPROACH %	33%	67%	0%	0%	50%	50%	0%	100%	0%	22%	78%	0%	
	PEAK HR FACTOR		0.469			0.500			0.250			0.563		0.659
	APP/DEPART	15	/	10	4	/	4	1	/	1	9	/	14	0



AimTD LLC

TURNING MOVEMENT COUNTS




Osos
490
229 (40)
261
0
TOTAL
595
177
74 (13)
103
0
PM
202
193
97 (15)
96
0
MD
231
120
58 (12)
62
0
AM
162
N
Higuera
1,803
671
691
441
TOTAL
PM
MD
AM
0
0
0
0
0
0
0
0
0
0 (0)
0 (0)
0 (0)
0
0
0
0
PEAK HOUR
AM 9:30 AM
MIDDAY 11:30 AM
PM 3:00 PM
1,655
102 (13)
1,270
283
607
633
415
33 (3)
40 (7)
29 (3)
492
473
305
82
120
81
TOTAL
PM
MD
AM
0
0
0
0
143
216
185
544
AM
MD
PM
Total
78
133
0 (0)
211
121
191
0 (0)
312
105
169
0 (0)
274
304
493
0 (0)
797
Osos
Higuera

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Marsh

PROJECT #: SC0843
LOCATION #: 111
CONTROL: SIGNAL

NOTES:

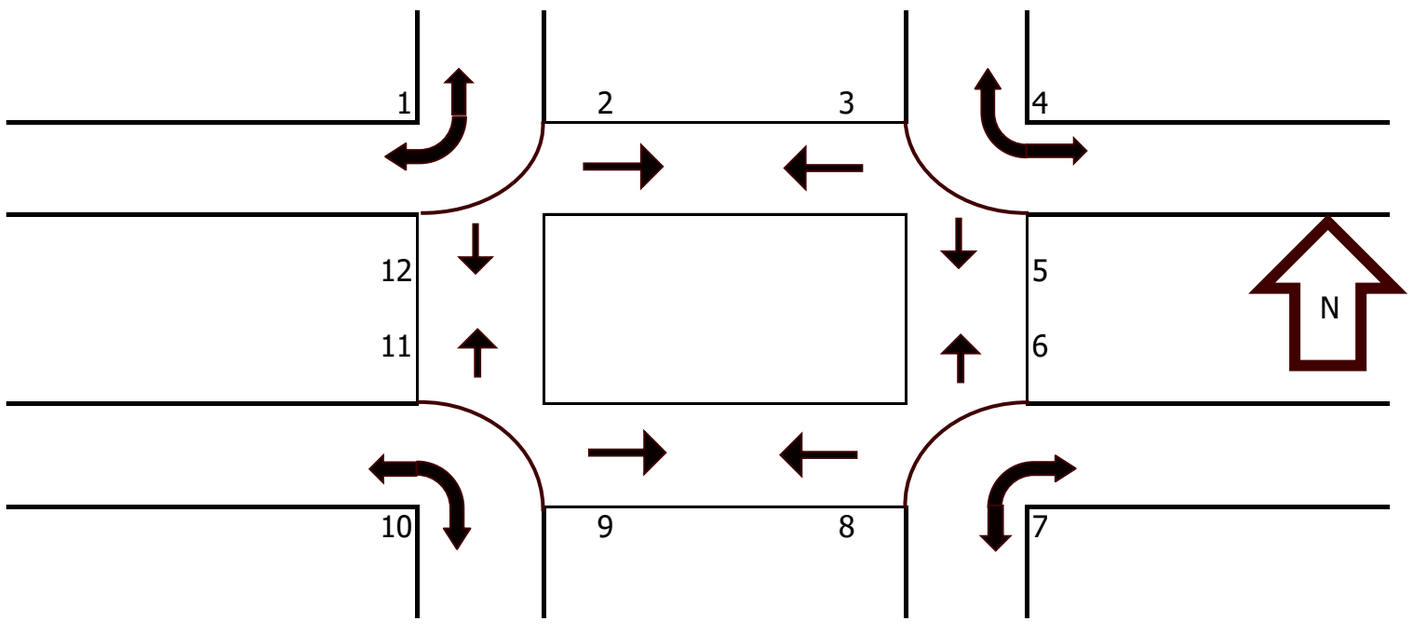
AM PM MD OTHER OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Marsh			WESTBOUND Marsh				U-TURNS				
	LANES:	NL X	NT 0.5	NR 0.5	SL 1	ST 1	SR X	EL 1.5	ET 1	ER 0.5	WL X	WT X	WR X	TOTAL	NB 0	SB 0	EB X	WB X	TTL
AM	7:30 AM	0	27	1	33	53	0	59	90	0	0	0	0	263	0	0	0	0	0
	7:45 AM	0	48	6	49	93	0	75	130	9	0	0	0	410	0	0	0	0	0
	8:00 AM	0	50	4	31	78	0	61	59	5	0	0	0	288	0	0	0	0	0
	8:15 AM	0	52	5	32	77	0	91	68	4	0	0	0	329	0	0	0	0	0
	8:30 AM	0	50	7	29	72	0	76	64	10	0	0	0	308	0	0	0	0	0
	8:45 AM	0	38	7	28	75	0	66	60	7	0	0	0	281	0	0	0	0	0
	9:00 AM	0	27	3	18	76	0	85	63	6	0	0	0	278	0	0	0	0	0
	9:15 AM	0	30	9	19	64	0	66	64	9	0	0	0	261	0	0	0	0	0
	VOLUMES	0	322	42	239	588	0	579	598	50	0	0	0	2,418	0	0	0	0	0
	APPROACH %	0%	88%	12%	29%	71%	0%	47%	49%	4%	0%	0%	0%						
	APP/DEPART	364	/	901	827	/	638	1,227	/	879	0	/	0	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	200	22	141	320	0	303	321	28	0	0	0	1,335					
	APPROACH %	0%	90%	10%	31%	69%	0%	46%	49%	4%	0%	0%	0%						
	PEAK HR FACTOR		0.974			0.812			0.762			0.000		0.814					
	APP/DEPART	222	/	503	461	/	348	652	/	484	0	/	0	0					
MD	11:30 AM	0	44	11	17	70	0	104	59	10	0	0	0	315	0	0	0	0	0
	11:45 AM	0	45	9	25	81	0	104	60	17	0	0	0	341	0	0	0	0	0
	12:00 PM	0	39	8	24	102	0	128	78	10	0	0	0	389	0	0	0	0	0
	12:15 PM	0	43	9	26	95	0	132	87	14	0	0	0	406	0	0	0	0	0
	12:30 PM	0	30	16	26	86	0	113	82	9	0	0	0	362	0	0	0	0	0
	12:45 PM	0	33	9	27	85	0	125	85	10	0	0	0	374	0	0	0	0	0
	1:00 PM	0	28	11	17	80	0	117	70	15	0	0	0	338	0	0	0	0	0
	1:15 PM	0	47	14	20	86	0	123	75	6	0	0	0	371	0	0	0	0	0
	VOLUMES	0	309	87	182	685	0	946	596	91	0	0	0	2,896	0	0	0	0	0
	APPROACH %	0%	78%	22%	21%	79%	0%	58%	36%	6%	0%	0%	0%						
	APP/DEPART	396	/	1,255	867	/	776	1,633	/	865	0	/	0	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	0	145	42	103	368	0	498	332	43	0	0	0	1,531					
	APPROACH %	0%	78%	22%	22%	78%	0%	57%	38%	5%	0%	0%	0%						
	PEAK HR FACTOR		0.899			0.935			0.937			0.000		0.943					
	APP/DEPART	187	/	643	471	/	411	873	/	477	0	/	0	0					
PM	03:30 PM	0	48	7	24	67	0	106	68	8	0	0	0	328	0	0	0	0	0
	3:45 PM	0	64	8	35	80	0	137	80	8	0	0	0	412	0	0	0	0	0
	4:00 PM	0	78	5	23	73	0	126	89	9	0	0	0	403	0	0	0	0	0
	4:15 PM	0	69	12	26	73	0	115	60	8	0	0	0	363	0	0	0	0	0
	4:30 PM	0	50	9	24	82	0	112	72	9	0	0	0	358	0	0	0	0	0
	4:45 PM	0	60	8	28	63	0	105	74	5	0	0	0	343	0	0	0	0	0
	5:00 PM	0	83	4	26	92	0	128	70	10	0	0	0	413	0	0	0	0	0
	5:15 PM	0	80	13	32	72	0	138	66	3	0	0	0	404	0	0	0	0	0
	VOLUMES	0	532	66	218	602	0	967	579	60	0	0	0	3,024	0	0	0	0	0
	APPROACH %	0%	89%	11%	27%	73%	0%	60%	36%	4%	0%	0%	0%						
	APP/DEPART	598	/	1,499	820	/	662	1,606	/	863	0	/	0	0					
	BEGIN PEAK HR		3:45 PM																
	VOLUMES	0	261	34	108	308	0	490	301	34	0	0	0	1,536					
	APPROACH %	0%	88%	12%	26%	74%	0%	59%	36%	4%	0%	0%	0%						
	PEAK HR FACTOR		0.889			0.904			0.917			0.000		0.932					
	APP/DEPART	295	/	751	416	/	342	825	/	443	0	/	0	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	1	0	1	3	0	3	1	3	1	0	13
	7:45 AM	0	0	0	0	3	0	0	0	1	0	5	2	11
	8:00 AM	0	0	0	0	1	1	0	0	0	0	1	0	3
	8:15 AM	0	0	0	0	1	0	0	4	1	0	4	0	10
	8:30 AM	2	0	0	0	1	0	0	1	4	0	3	2	13
	8:45 AM	0	0	0	1	1	0	0	4	1	1	3	3	14
	9:00 AM	0	0	0	0	3	1	0	1	2	0	1	1	9
	9:15 AM	0	0	0	0	0	0	0	7	3	0	1	0	11
	TOTAL	2	0	1	1	11	5	0	20	13	4	19	8	84
MD	11:30 AM	2	0	0	2	12	3	2	9	3	0	2	3	38
	11:45 AM	1	0	0	0	3	0	3	6	4	0	5	11	33
	12:00 PM	1	1	0	1	1	0	0	13	8	0	6	14	45
	12:15 PM	0	0	0	5	2	1	0	9	10	0	9	6	42
	12:30 PM	1	0	0	1	3	7	0	12	6	0	8	9	47
	12:45 PM	0	0	0	3	5	2	5	10	16	1	19	7	68
	1:00 PM	0	0	0	7	1	0	2	4	10	0	4	5	33
	1:15 PM	1	0	0	1	1	6	1	6	10	0	4	9	39
	TOTAL	6	1	0	20	28	19	13	69	67	1	57	64	345
PM	3:30 PM	1	0	0	0	1	2	0	10	18	0	0	7	39
	3:45 PM	0	0	0	0	3	4	0	3	3	0	4	3	20
	4:00 PM	0	0	1	0	2	0	0	4	2	1	2	7	19
	4:15 PM	0	0	0	1	0	1	2	1	3	0	0	3	11
	4:30 PM	0	0	0	0	0	0	0	1	6	0	2	5	14
	4:45 PM	1	0	0	0	0	5	0	2	2	0	0	4	14
	5:00 PM	0	0	0	0	1	6	0	8	1	0	0	6	22
	5:15 PM	1	0	0	0	7	2	0	4	7	0	0	6	27
	TOTAL	3	0	1	1	14	20	2	33	42	1	8	41	166



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Marsh

PROJECT #: SC0843
LOCATION #: 111
CONTROL: SIGNAL

NOTES:

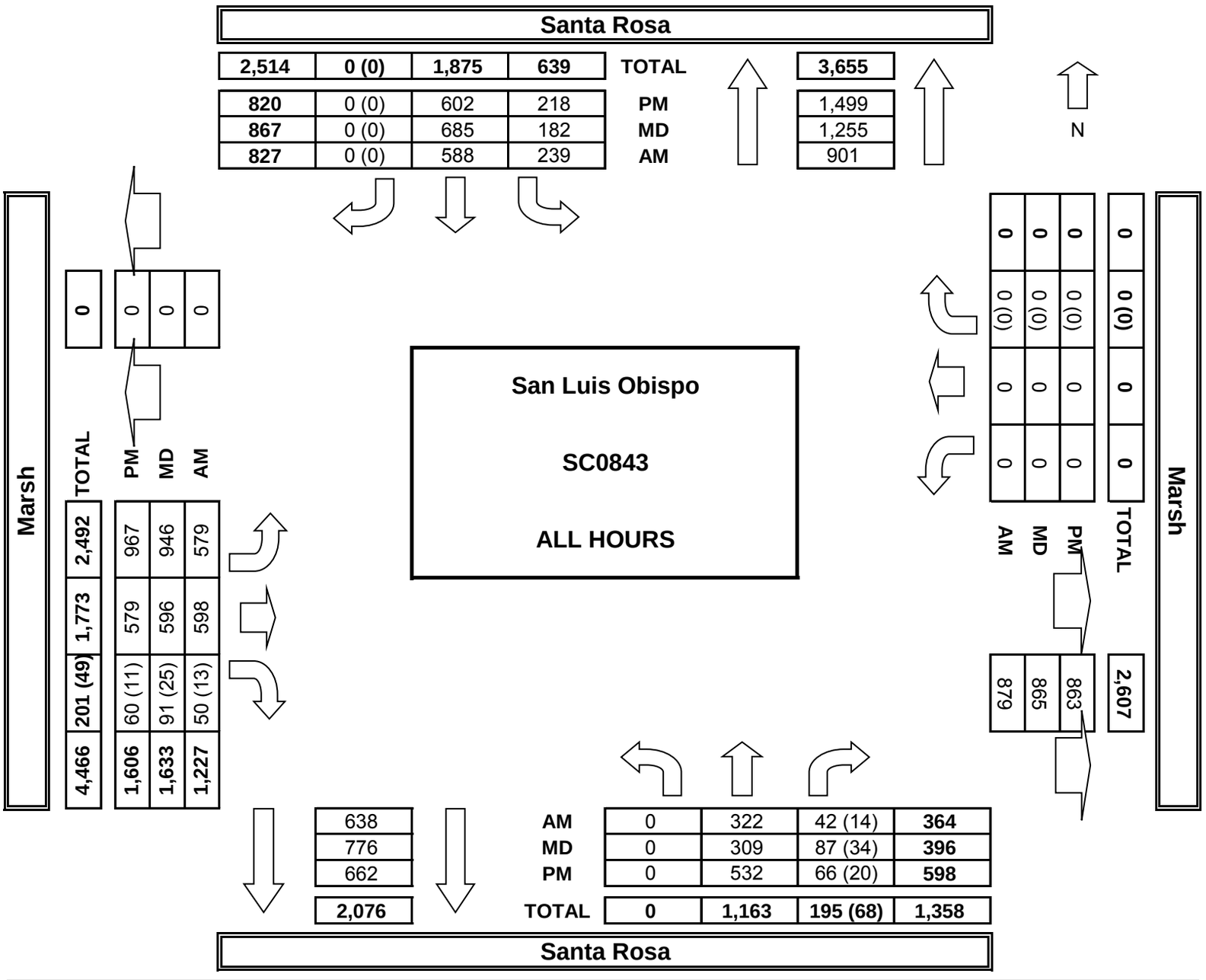
AM
PM
MD
OTHER
OTHER

N
W
E
S

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Marsh			WESTBOUND Marsh			
	LANES:	NL X	NT 0.5	NR 0.5	SL 1	ST 1	SR X	EL 1.5	ET 1	ER 0.5	WL X	WT X	WR X	TOTAL
AM	7:30 AM	0	0	0	0	0	0	1	3	0	0	0	0	4
	7:45 AM	0	2	0	0	0	0	1	4	0	0	0	0	7
	8:00 AM	0	1	0	0	0	0	0	3	0	0	0	0	4
	8:15 AM	0	1	0	0	0	0	0	2	0	0	0	0	3
	8:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	3
	8:45 AM	0	4	0	0	0	0	3	2	0	0	0	0	9
	9:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	2
	9:15 AM	0	0	1	0	0	0	1	0	1	0	0	0	3
	VOLUMES	0	8	2	0	0	0	7	17	1	0	0	0	35
	APPROACH %	0%	80%	20%	0%	0%	0%	28%	68%	4%	0%	0%	0%	
	APP/DEPART	10	/	15	0	/	1	25	/	19	0	/	0	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	0	6	0	0	0	0	3	10	0	0	0	0	19
	APPROACH %	0%	100%	0%	0%	0%	0%	23%	77%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.375			0.000			0.650			0.000		0.528
	APP/DEPART	6	/	9	0	/	0	13	/	10	0	/	0	0
MD	11:30 AM	0	1	0	0	0	0	1	0	0	0	0	0	2
	11:45 AM	0	0	1	0	2	0	0	4	0	0	0	0	7
	12:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	12:15 PM	0	1	1	0	0	0	0	0	0	0	0	0	2
	12:30 PM	0	0	1	0	1	0	1	1	0	0	0	0	4
	12:45 PM	0	2	1	0	0	0	0	1	0	0	0	0	4
	1:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	4
	1:15 PM	0	2	0	0	0	0	0	3	0	0	0	0	5
	VOLUMES	0	6	4	0	4	0	2	13	0	0	0	0	29
	APPROACH %	0%	60%	40%	0%	100%	0%	13%	87%	0%	0%	0%	0%	
	APP/DEPART	10	/	8	4	/	4	15	/	17	0	/	0	0
	BEGIN PEAK HR		12:30 PM											
	VOLUMES	0	4	2	0	1	0	1	9	0	0	0	0	17
	APPROACH %	0%	67%	33%	0%	100%	0%	10%	90%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.500			0.250			0.625			0.000		0.850
	APP/DEPART	6	/	5	1	/	1	10	/	11	0	/	0	0
PM	03:30 PM	0	1	0	0	0	0	0	0	1	0	0	0	2
	3:45 PM	0	0	0	0	1	0	2	2	1	0	0	0	6
	4:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	2
	4:15 PM	0	2	0	0	0	0	1	2	0	0	0	0	5
	4:30 PM	0	1	0	1	3	0	1	2	0	0	0	0	8
	4:45 PM	0	1	0	0	1	0	0	1	0	0	0	0	3
	5:00 PM	0	1	0	0	1	0	1	0	0	0	0	0	3
	5:15 PM	0	1	1	0	0	0	0	3	0	0	0	0	5
	VOLUMES	0	7	1	1	6	0	6	11	2	0	0	0	34
	APPROACH %	0%	88%	13%	14%	86%	0%	32%	58%	11%	0%	0%	0%	
	APP/DEPART	8	/	13	7	/	8	19	/	13	0	/	0	0
	BEGIN PEAK HR		3:45 PM											
	VOLUMES	0	3	0	1	4	0	5	7	1	0	0	0	21
	APPROACH %	0%	100%	0%	20%	80%	0%	38%	54%	8%	0%	0%	0%	
	PEAK HR FACTOR		0.375			0.313			0.650			0.000		0.656
	APP/DEPART	3	/	8	5	/	5	13	/	8	0	/	0	0

AimTD LLC

TURNING MOVEMENT COUNTS



Santa Rosa (north leg)

	Total				
TOTAL	**1,348**	**0 (0)**	**996**	**352**	
PM	**416**	0 (0)	308	108	
MD	**471**	0 (0)	368	103	
AM	**461**	0 (0)	320	141	

	Departing (north)
TOTAL	**1,897**
PM	751
MD	643
AM	503

N

Marsh (west leg)

	TOTAL	PM	MD	AM
Departing (west)	**0**	0	0	0
Left	**1,291**	490	498	303
Through	**954**	301	332	321
Right	**105 (23)**	34 (6)	43 (12)	28 (5)
Total	**2,350**	**825**	**873**	**652**

Marsh (east leg)

	AM	MD	PM	TOTAL
	0	**0**	**0**	**0**
	0 (0)	0 (0)	0 (0)	**0 (0)**
	0	0	0	**0**
	0	0	0	**0**
Departing (east)	484	477	443	**1,404**

PEAK HOUR

AM	7:45 AM
MIDDAY	12:00 PM
PM	3:45 PM

Santa Rosa (south leg)

	Departing (south)
AM	348
MD	411
PM	342
Total	**1,101**

AM	0	200	22 (9)	**222**
MD	0	145	42 (17)	**187**
PM	0	261	34 (12)	**295**
Total	**0**	**606**	**98 (38)**	**704**

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Pismo

PROJECT #: SC0843
LOCATION #: 112
CONTROL: STOP ALL

NOTES:

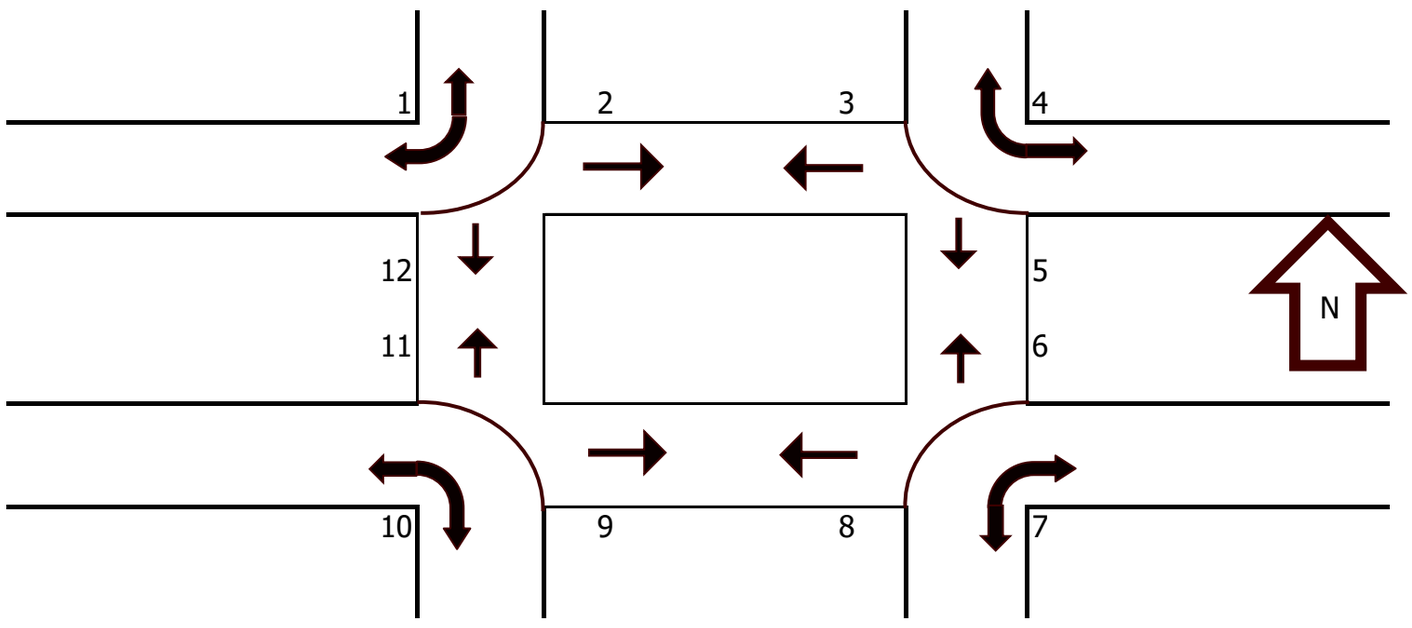
AM PM MD OTHER OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Pismo			WESTBOUND Pismo				U-TURNS				
	LANES:	NL 0.5	NT 0.5	NR X	SL X	ST 1	SR 1	EL X	ET X	ER X	WL 0.5	WT 0.5	WR 1	TOTAL	NB 0	SB 0	EB X	WB X	TTL
AM	7:30 AM	3	27	0	0	23	19	0	0	0	2	28	4	106	0	0	0	0	0
	7:45 AM	1	52	0	0	65	32	0	0	0	4	47	5	206	0	0	0	0	0
	8:00 AM	0	44	0	0	46	24	0	0	0	4	48	5	171	0	0	0	0	0
	8:15 AM	2	51	0	0	58	32	0	0	0	2	22	6	173	0	0	0	0	0
	8:30 AM	5	50	0	1	59	26	0	0	0	4	31	5	181	0	0	0	0	0
	8:45 AM	5	24	0	0	33	43	0	0	0	2	34	12	153	0	0	0	0	0
	9:00 AM	3	30	0	0	43	24	0	0	0	0	28	3	131	0	0	0	0	0
	9:15 AM	2	21	0	0	34	24	0	0	0	6	31	10	128	0	0	0	0	0
	VOLUMES	21	299	0	1	361	224	0	0	0	24	269	50	1,249	0	0	0	0	0
	APPROACH %	7%	93%	0%	0%	62%	38%	0%	0%	0%	7%	78%	15%						
	APP/DEPART	320	/	349	586	/	385	0	/	1	343	/	514	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	8	197	0	1	228	114	0	0	0	14	148	21	731					
	APPROACH %	4%	96%	0%	0%	66%	33%	0%	0%	0%	8%	81%	11%						
	PEAK HR FACTOR		0.932			0.884			0.000			0.803		0.887					
	APP/DEPART	205	/	218	343	/	242	0	/	1	183	/	270	0					
MD	11:30 AM	0	30	0	0	42	41	0	0	0	2	53	4	172	0	0	0	0	0
	11:45 AM	3	46	0	0	59	36	0	0	0	4	56	8	212	0	0	0	0	0
	12:00 PM	3	37	0	0	50	62	0	0	0	3	70	4	229	0	0	0	0	0
	12:15 PM	0	42	0	0	48	40	0	0	0	5	32	3	170	0	0	0	0	0
	12:30 PM	4	31	0	0	58	32	0	0	0	2	42	3	172	0	0	0	0	0
	12:45 PM	5	44	0	0	67	30	0	0	0	4	41	8	199	0	0	0	0	0
	1:00 PM	6	26	0	0	49	42	0	0	0	1	52	8	184	0	0	0	0	0
	1:15 PM	5	49	0	0	53	32	0	0	0	2	36	8	185	0	0	0	0	0
	VOLUMES	26	305	0	0	426	315	0	0	0	23	382	46	1,523	0	0	0	0	0
	APPROACH %	8%	92%	0%	0%	57%	43%	0%	0%	0%	5%	85%	10%						
	APP/DEPART	331	/	351	741	/	449	0	/	0	451	/	723	0					
	BEGIN PEAK HR		11:30 AM																
	VOLUMES	10	156	0	0	215	170	0	0	0	14	200	18	783					
	APPROACH %	6%	94%	0%	0%	56%	44%	0%	0%	0%	6%	86%	8%						
	PEAK HR FACTOR		0.847			0.859			0.000			0.753		0.855					
	APP/DEPART	166	/	174	385	/	229	0	/	0	232	/	380	0					
PM	04:00 PM	1	53	0	0	38	54	0	0	0	3	63	8	220	0	0	0	0	0
	4:15 PM	1	54	0	0	32	48	0	0	0	7	45	7	194	1	0	0	0	1
	4:30 PM	3	39	0	0	45	54	0	0	0	6	53	9	209	0	0	0	0	0
	4:45 PM	4	52	0	0	44	40	0	0	0	5	51	5	201	0	0	0	0	0
	5:00 PM	3	64	0	0	58	54	0	0	0	6	63	7	255	0	0	0	0	0
	5:15 PM	0	61	0	0	51	49	0	0	0	4	43	5	213	0	0	0	0	0
	5:30 PM	4	51	0	0	52	33	0	0	0	0	38	7	185	0	0	0	0	0
	5:45 PM	4	50	0	0	41	37	0	0	0	2	35	1	170	0	0	0	0	0
	VOLUMES	20	424	0	0	361	369	0	0	0	33	391	49	1,647	1	0	0	0	1
	APPROACH %	5%	95%	0%	0%	49%	51%	0%	0%	0%	7%	83%	10%						
	APP/DEPART	444	/	473	730	/	395	0	/	0	473	/	779	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	10	216	0	0	198	197	0	0	0	21	210	26	878					
	APPROACH %	4%	96%	0%	0%	50%	50%	0%	0%	0%	8%	82%	10%						
	PEAK HR FACTOR		0.843			0.882			0.000			0.845		0.861					
	APP/DEPART	226	/	242	395	/	219	0	/	0	257	/	417	0					

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	1	0	0	0	2	0	1	0	0	0	4	8
	7:45 AM	0	1	4	1	2	7	0	1	0	0	0	2	18
	8:00 AM	0	0	2	0	0	1	0	0	0	0	1	2	6
	8:15 AM	0	1	0	0	0	1	0	1	0	0	0	0	3
	8:30 AM	0	0	1	0	1	0	0	0	1	0	0	1	4
	8:45 AM	0	0	4	1	0	3	0	2	0	0	4	1	15
	9:00 AM	0	1	1	0	1	0	0	3	1	0	2	0	9
	9:15 AM	0	0	4	1	0	3	1	1	2	0	2	1	15
	TOTAL	0	4	16	3	4	17	1	9	4	0	9	11	78
MD	11:30 AM	1	0	1	1	1	2	0	2	1	0	5	4	18
	11:45 AM	0	1	6	0	1	4	0	1	1	0	3	0	17
	12:00 PM	3	1	0	0	1	7	2	9	0	0	10	1	34
	12:15 PM	1	1	3	0	0	4	0	1	2	0	3	1	16
	12:30 PM	0	3	0	2	0	3	2	1	1	0	5	4	21
	12:45 PM	0	0	1	0	2	0	8	2	0	0	2	10	25
	1:00 PM	0	1	1	0	0	2	0	2	1	0	3	3	13
	1:15 PM	0	0	2	0	5	2	0	0	4	0	1	5	19
	TOTAL	5	7	14	3	10	24	12	18	10	0	32	28	163
PM	4:00 PM	0	2	0	1	2	0	1	4	0	0	2	1	13
	4:15 PM	0	2	3	0	2	5	1	5	1	0	0	0	19
	4:30 PM	0	1	0	0	2	0	0	1	2	0	6	2	14
	4:45 PM	0	2	1	2	3	0	0	1	1	0	8	0	18
	5:00 PM	0	1	2	0	4	3	0	1	1	0	7	0	19
	5:15 PM	0	1	0	0	0	3	0	4	0	0	2	0	10
	5:30 PM	0	1	0	0	3	3	0	3	2	0	11	1	24
	5:45 PM	0	1	2	1	6	4	0	2	3	0	1	0	20
	TOTAL	0	11	8	4	22	18	2	21	10	0	37	4	137



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Rosa
EAST & WEST: Pismo

PROJECT #: SC0843
LOCATION #: 112
CONTROL: STOP ALL

NOTES:

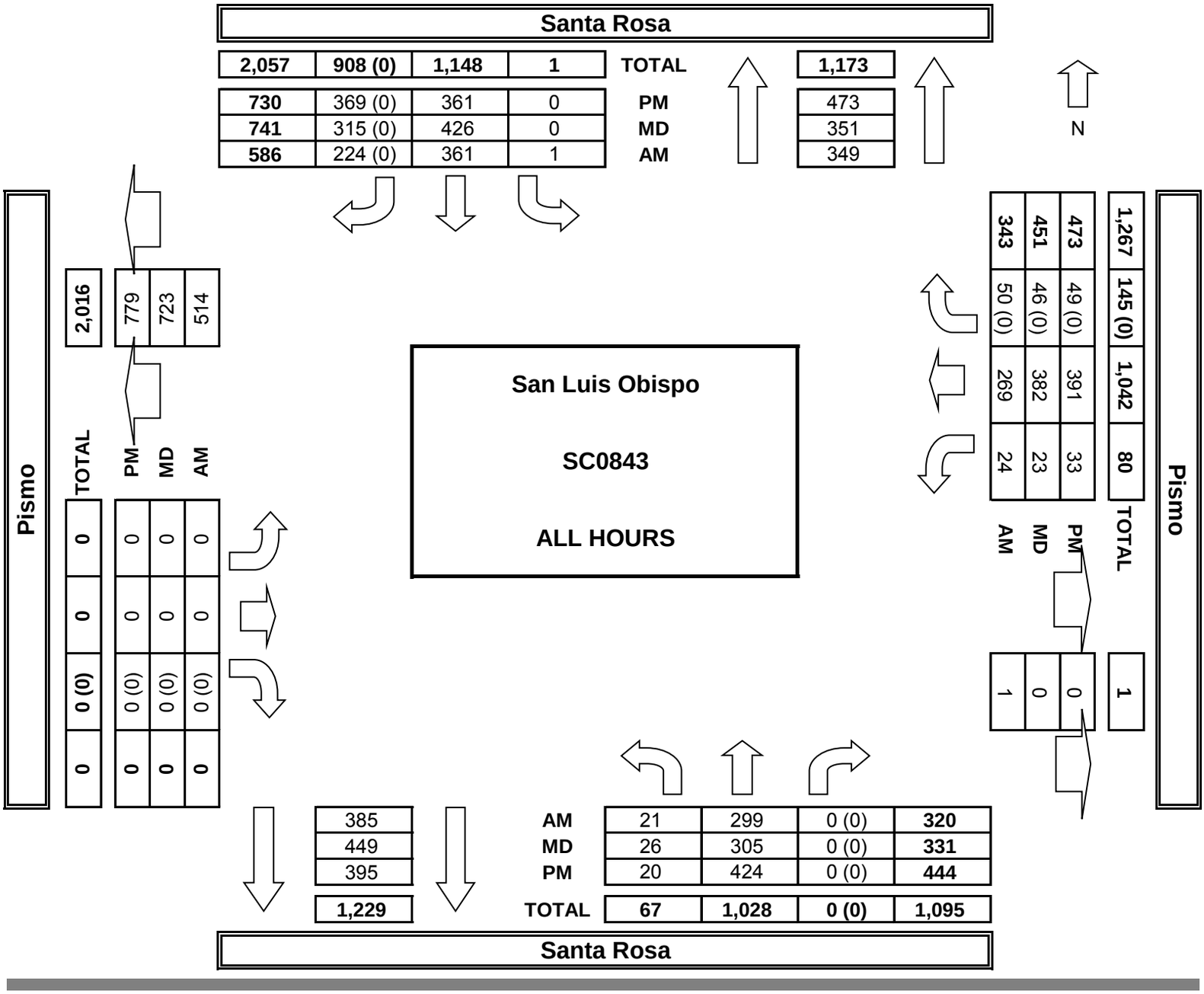
AM
PM
MD
OTHER
OTHER

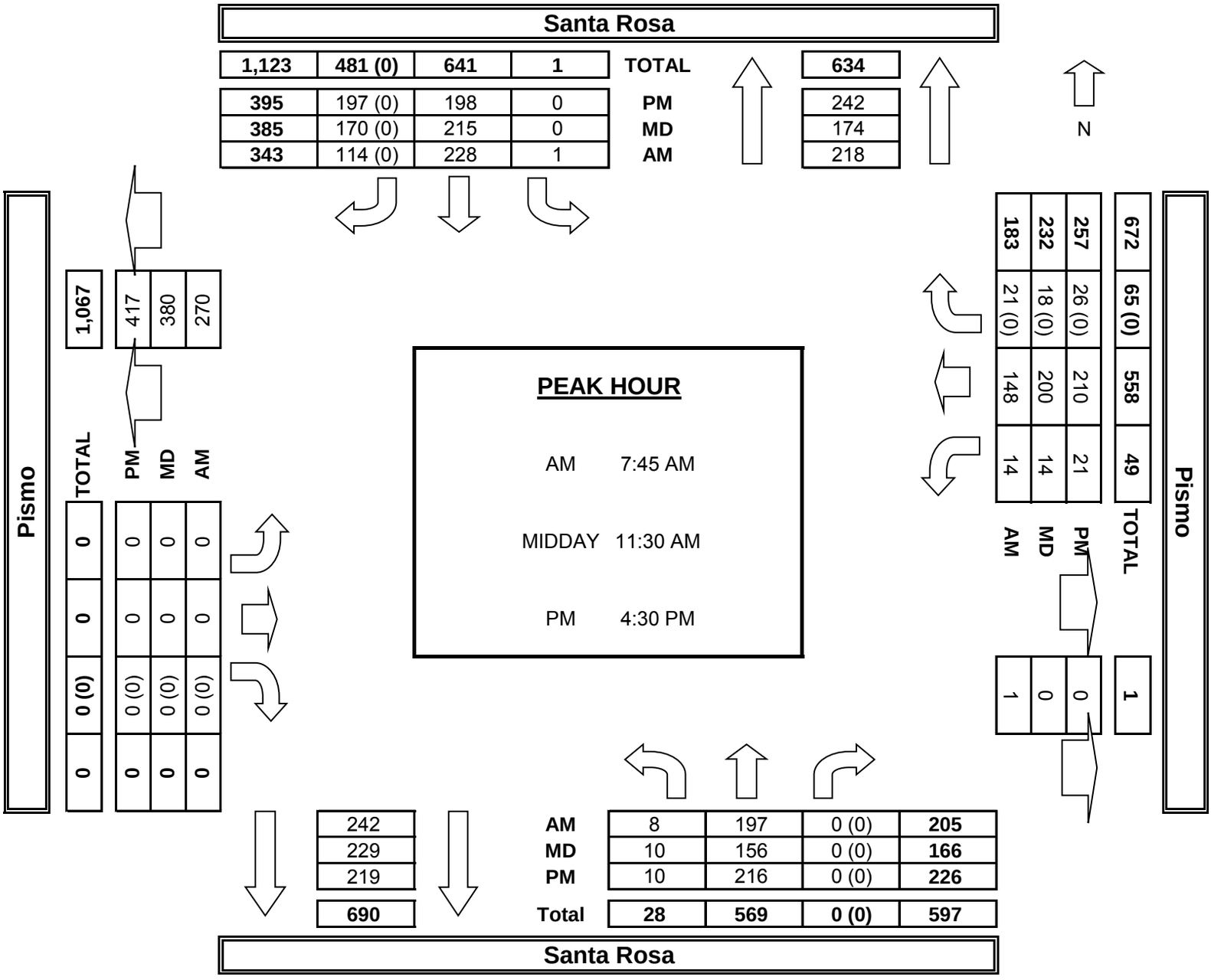
◄ W N ▲ S ▼ E ►

		NORTHBOUND Santa Rosa			SOUTHBOUND Santa Rosa			EASTBOUND Pismo			WESTBOUND Pismo			
	LANES:	NL 0.5	NT 0.5	NR X	SL X	ST 1	SR 1	EL X	ET X	ER X	WL 0.5	WT 0.5	WR 1	TOTAL
AM	7:30 AM	0	1	0	0	0	0	0	1	0	0	1	0	3
	7:45 AM	1	3	0	0	0	0	0	0	0	1	2	0	7
	8:00 AM	0	2	0	0	1	0	0	0	0	0	5	0	8
	8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	3	0	0	0	0	0	0	0	0	0	0	3
	9:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
	9:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	VOLUMES	1	13	0	0	2	0	0	1	0	1	8	0	26
	APPROACH %	7%	93%	0%	0%	100%	0%	0%	100%	0%	11%	89%	0%	
	APP/DEPART	14	/	13	2	/	3	1	/	1	9	/	9	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	1	7	0	0	1	0	0	1	0	1	8	0	19
	APPROACH %	13%	88%	0%	0%	100%	0%	0%	100%	0%	11%	89%	0%	
	PEAK HR FACTOR		0.500			0.250			0.250			0.450		0.594
	APP/DEPART	8	/	7	1	/	2	1	/	1	9	/	9	0
MD	11:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	11:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	12:00 PM	0	1	0	0	1	0	0	0	0	1	1	0	4
	12:15 PM	0	1	0	0	0	0	0	0	0	0	1	0	2
	12:30 PM	1	1	0	0	1	1	0	0	0	0	0	0	4
	12:45 PM	0	3	1	0	0	1	0	0	0	0	0	0	5
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:15 PM	0	3	0	0	0	0	0	0	0	0	2	0	5
	VOLUMES	1	11	1	0	3	2	0	0	0	1	4	0	23
	APPROACH %	8%	85%	8%	0%	60%	40%	0%	0%	0%	20%	80%	0%	
	APP/DEPART	13	/	11	5	/	4	0	/	1	5	/	7	0
	BEGIN PEAK HR		12:00 PM											
	VOLUMES	1	6	1	0	2	2	0	0	0	1	2	0	15
	APPROACH %	13%	75%	13%	0%	50%	50%	0%	0%	0%	33%	67%	0%	
	PEAK HR FACTOR		0.500			0.500			0.000			0.375		0.750
	APP/DEPART	8	/	6	4	/	3	0	/	1	3	/	5	0
PM	04:00 PM	0	0	0	0	0	1	0	0	0	0	2	0	3
	4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
	4:30 PM	0	0	0	0	2	2	0	0	0	0	1	0	5
	4:45 PM	0	1	0	0	1	0	0	1	0	0	0	0	3
	5:00 PM	0	1	0	0	2	1	0	0	0	1	2	0	7
	5:15 PM	0	1	0	0	1	1	0	0	0	0	2	0	5
	5:30 PM	0	2	0	0	1	0	0	0	0	0	2	0	5
	5:45 PM	0	1	0	0	0	0	0	0	0	2	5	0	8
	VOLUMES	0	7	0	0	8	5	0	1	0	3	14	0	38
	APPROACH %	0%	100%	0%	0%	62%	38%	0%	100%	0%	18%	82%	0%	
	APP/DEPART	7	/	7	13	/	11	1	/	1	17	/	19	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	0	5	0	0	4	2	0	0	0	3	11	0	25
	APPROACH %	0%	100%	0%	0%	67%	33%	0%	0%	0%	21%	79%	0%	
	PEAK HR FACTOR		0.625			0.500			0.000			0.500		0.781
	APP/DEPART	5	/	5	6	/	7	0	/	0	14	/	13	0

AimTD LLC

TURNING MOVEMENT COUNTS




Santa Rosa
1,123 481 (0) 641 1 TOTAL
395 197 (0) 198 0 PM
385 170 (0) 215 0 MD
343 114 (0) 228 1 AM
634
242
174
218
N
Pismo
1,067
417 380 270
TOTAL PM MD AM
0 0 0 0
0 0 0 0
0 (0) 0 (0) 0 (0) 0 (0)
0 0 0 0
PEAK HOUR
AM 7:45 AM
MIDDAY 11:30 AM
PM 4:30 PM
183 232 257 672
21 (0) 18 (0) 26 (0) 65 (0)
148 200 210 558
14 14 21 49
AM MD PM TOTAL
1 0 0 1
Pismo
242
229
219
690
AM 8 197 0 (0) 205
MD 10 156 0 (0) 166
PM 10 216 0 (0) 226
Total 28 569 0 (0) 597
Santa Rosa

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:				
Tue, Mar 22, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
	NORTH & SOUTH:	Osos	LOCATION #:	99
	EAST & WEST:	Buchon	CONTROL:	SIGNAL

NOTES:

AM PM MD OTHER OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Osos			SOUTHBOUND Osos			EASTBOUND Buchon			WESTBOUND Buchon				U-TURNS				
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	38	13	4	40	1	1	0	0	8	3	0	108	0	0	0	0	0
	7:15 AM	1	66	23	0	35	1	1	6	0	16	1	0	150	0	0	0	0	0
	7:30 AM	0	68	44	1	50	0	1	18	1	21	3	1	208	0	0	0	0	0
	7:45 AM	0	98	54	1	86	0	2	14	4	54	6	0	319	0	0	0	0	0
	8:00 AM	1	95	24	2	73	0	3	6	4	26	5	1	240	0	0	0	0	0
	8:15 AM	0	89	42	1	50	2	2	10	2	29	3	1	231	0	0	0	0	0
	8:30 AM	0	73	40	3	67	0	1	7	7	24	6	2	230	0	0	0	0	0
	8:45 AM	1	88	34	4	85	1	2	11	3	17	3	0	249	0	0	0	0	0
	VOLUMES	3	615	274	16	486	5	13	72	21	195	30	5	1,735	0	0	0	0	0
	APPROACH %	0%	69%	31%	3%	96%	1%	12%	68%	20%	85%	13%	2%						
	APP/DEPART	892	/	633	507	/	702	106	/	362	230	/	38	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	1	355	160	7	276	2	8	37	17	133	20	4	1,020					
	APPROACH %	0%	69%	31%	2%	97%	1%	13%	60%	27%	85%	13%	3%						
	PEAK HR FACTOR		0.849			0.819			0.775			0.654		0.799					
	APP/DEPART	516	/	367	285	/	426	62	/	204	157	/	23	0					
MD	11:15 AM	3	77	23	3	78	0	1	13	4	20	7	2	231	0	0	0	0	0
	11:30 AM	2	85	29	7	74	3	2	9	5	19	4	3	242	0	0	0	0	0
	11:45 AM	2	115	37	8	78	2	2	10	1	18	7	2	282	0	0	0	0	0
	12:00 PM	4	113	30	3	124	2	2	15	3	25	9	2	332	0	0	0	0	0
	12:15 PM	2	91	23	20	87	1	4	13	5	26	5	4	281	0	0	0	0	0
	12:30 PM	2	82	28	15	78	1	7	8	6	27	7	1	262	0	0	0	0	0
	12:45 PM	2	117	40	14	76	2	5	21	4	22	10	3	316	0	0	0	0	0
	1:00 PM	0	92	40	11	78	1	5	15	8	18	5	2	275	0	0	0	0	0
	VOLUMES	17	772	250	81	673	12	28	104	36	175	54	19	2,221	0	0	0	0	0
	APPROACH %	2%	74%	24%	11%	88%	2%	17%	62%	21%	71%	22%	8%						
	APP/DEPART	1,039	/	819	766	/	884	168	/	435	248	/	83	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	10	403	121	52	365	6	18	57	18	100	31	10	1,191					
	APPROACH %	2%	75%	23%	12%	86%	1%	19%	61%	19%	71%	22%	7%						
	PEAK HR FACTOR		0.840			0.820			0.775			0.979		0.897					
	APP/DEPART	534	/	431	423	/	483	93	/	230	141	/	47	0					
PM	04:30 PM	2	98	39	8	88	1	2	7	1	24	4	4	278	0	0	0	0	0
	4:45 PM	0	97	39	14	77	2	3	15	1	25	7	1	281	0	0	0	0	0
	5:00 PM	2	99	58	9	96	4	2	19	1	35	8	0	333	0	0	0	0	0
	5:15 PM	1	99	43	8	91	1	4	16	1	32	9	4	309	0	0	0	0	0
	5:30 PM	2	75	36	11	84	0	3	12	2	26	10	0	261	0	0	0	0	0
	5:45 PM	1	78	43	7	63	3	1	15	1	30	4	2	248	0	0	0	0	0
	6:00 PM	0	71	27	7	73	2	1	9	1	11	2	1	205	0	0	0	0	0
	6:15 PM	4	62	40	9	52	0	0	5	0	16	7	0	195	0	0	0	0	0
	VOLUMES	12	679	325	73	624	13	16	98	8	199	51	12	2,110	0	0	0	0	0
	APPROACH %	1%	67%	32%	10%	88%	2%	13%	80%	7%	76%	19%	5%						
	APP/DEPART	1,016	/	707	710	/	831	122	/	496	262	/	76	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	5	393	179	39	352	8	11	57	4	116	28	9	1,201					
	APPROACH %	1%	68%	31%	10%	88%	2%	15%	79%	6%	76%	18%	6%						
	PEAK HR FACTOR		0.907			0.915			0.818			0.850		0.902					
	APP/DEPART	577	/	413	399	/	472	72	/	275	153	/	41	0					

Osos

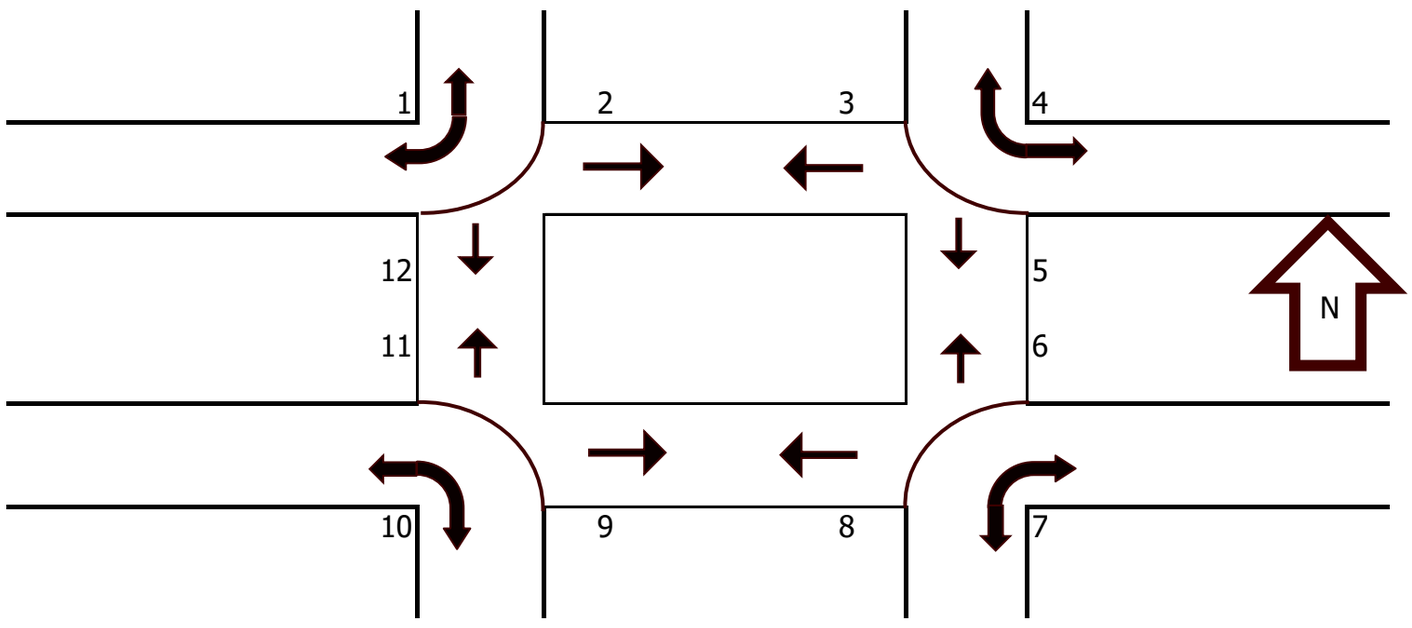
NORTH SIDE

Buchon WEST SIDE EAST SIDE **Buchon**

SOUTH SIDE

Osos

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:00 AM	0	0	0	0	1	1	0	0	0	0	0	2	4
	7:15 AM	0	0	2	0	0	2	1	0	0	0	0	1	6
	7:30 AM	0	2	0	0	0	1	1	0	2	1	0	0	7
	7:45 AM	0	0	2	0	2	1	0	0	0	1	2	0	8
	8:00 AM	0	1	0	0	0	4	1	0	3	0	0	1	10
	8:15 AM	0	1	0	0	1	5	0	1	2	0	2	1	13
	8:30 AM	0	2	0	1	2	0	0	0	2	1	0	0	8
	8:45 AM	0	0	1	0	0	1	0	1	0	0	1	3	7
	TOTAL	0	6	5	1	6	15	3	2	9	3	5	8	63
MD	11:15 AM	0	2	0	0	10	7	2	1	0	0	1	2	25
	11:30 AM	0	0	0	2	3	2	1	2	0	0	1	0	11
	11:45 AM	0	1	0	0	1	9	1	1	2	0	4	1	20
	12:00 PM	0	1	2	0	0	0	0	0	0	0	0	2	5
	12:15 PM	0	3	1	0	0	2	0	0	1	0	2	5	14
	12:30 PM	0	5	4	0	2	5	0	0	1	0	3	1	21
	12:45 PM	0	0	0	3	4	6	0	1	0	0	3	4	21
	1:00 PM	0	0	1	0	1	0	0	1	0	0	2	0	5
	TOTAL	0	12	8	5	21	31	4	6	4	0	16	15	122
PM	4:30 PM	0	2	0	0	6	2	0	0	0	1	1	2	14
	4:45 PM	0	1	1	0	0	2	3	1	1	0	3	1	13
	5:00 PM	0	2	2	0	1	3	0	0	2	0	1	5	16
	5:15 PM	1	0	0	0	1	1	0	0	0	0	1	2	6
	5:30 PM	0	8	0	0	3	3	0	1	0	0	1	1	17
	5:45 PM	0	0	0	0	2	2	0	0	0	1	0	1	6
	6:00 PM	0	1	0	0	3	3	0	4	2	0	3	2	18
	6:15 PM	0	2	0	2	1	1	0	0	4	0	3	0	13
	TOTAL	1	16	3	2	17	17	3	6	9	2	13	14	103



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Osos
EAST & WEST: Buchon

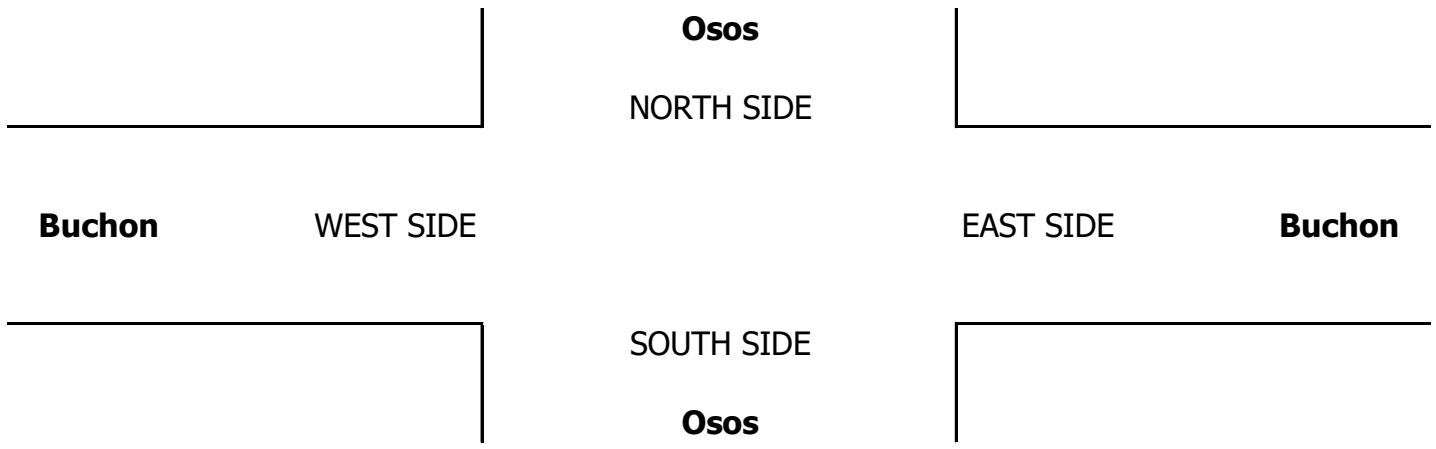
PROJECT #: SC0843
LOCATION #: 99
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

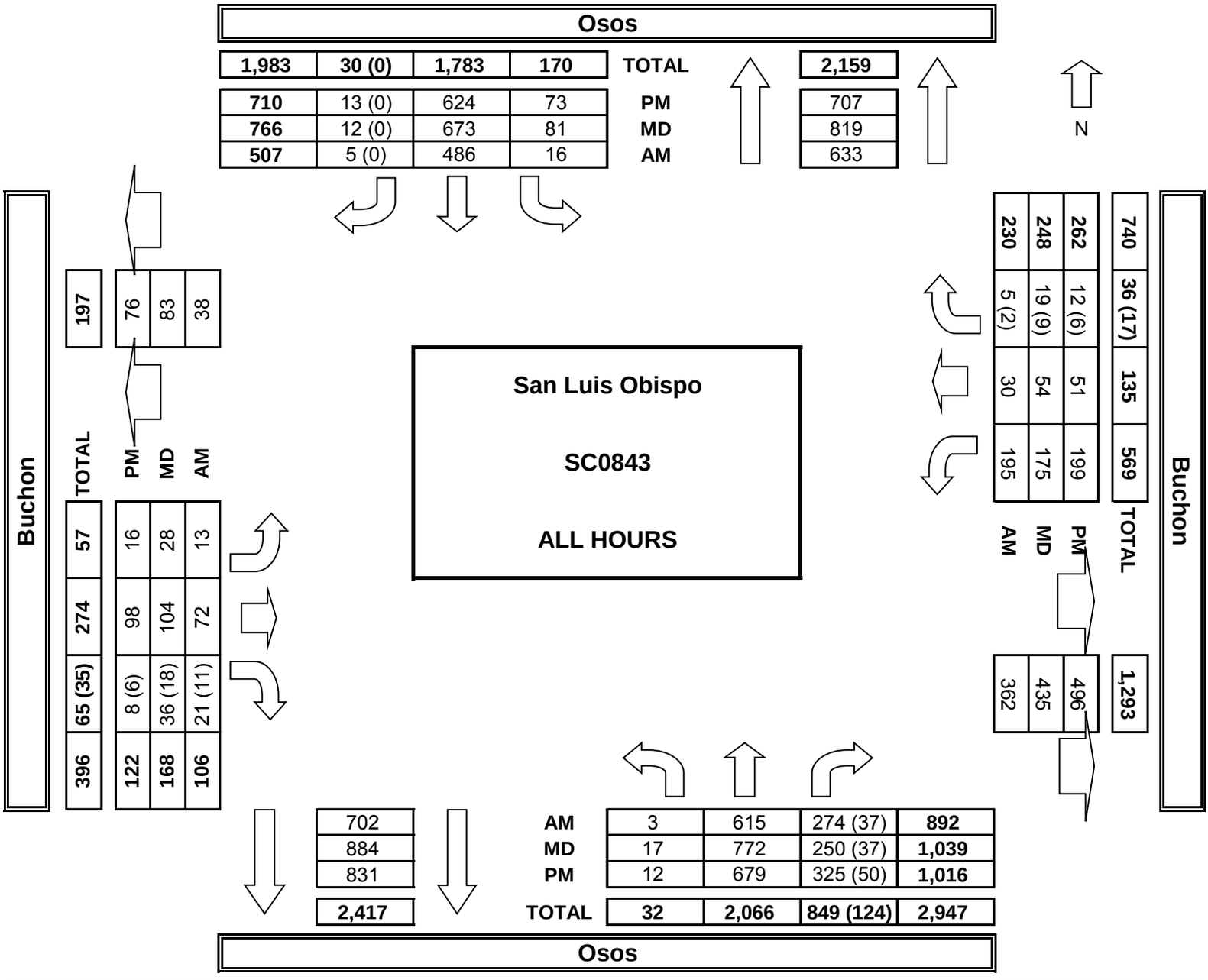
▲ N
◄ W
E ►
S ▼

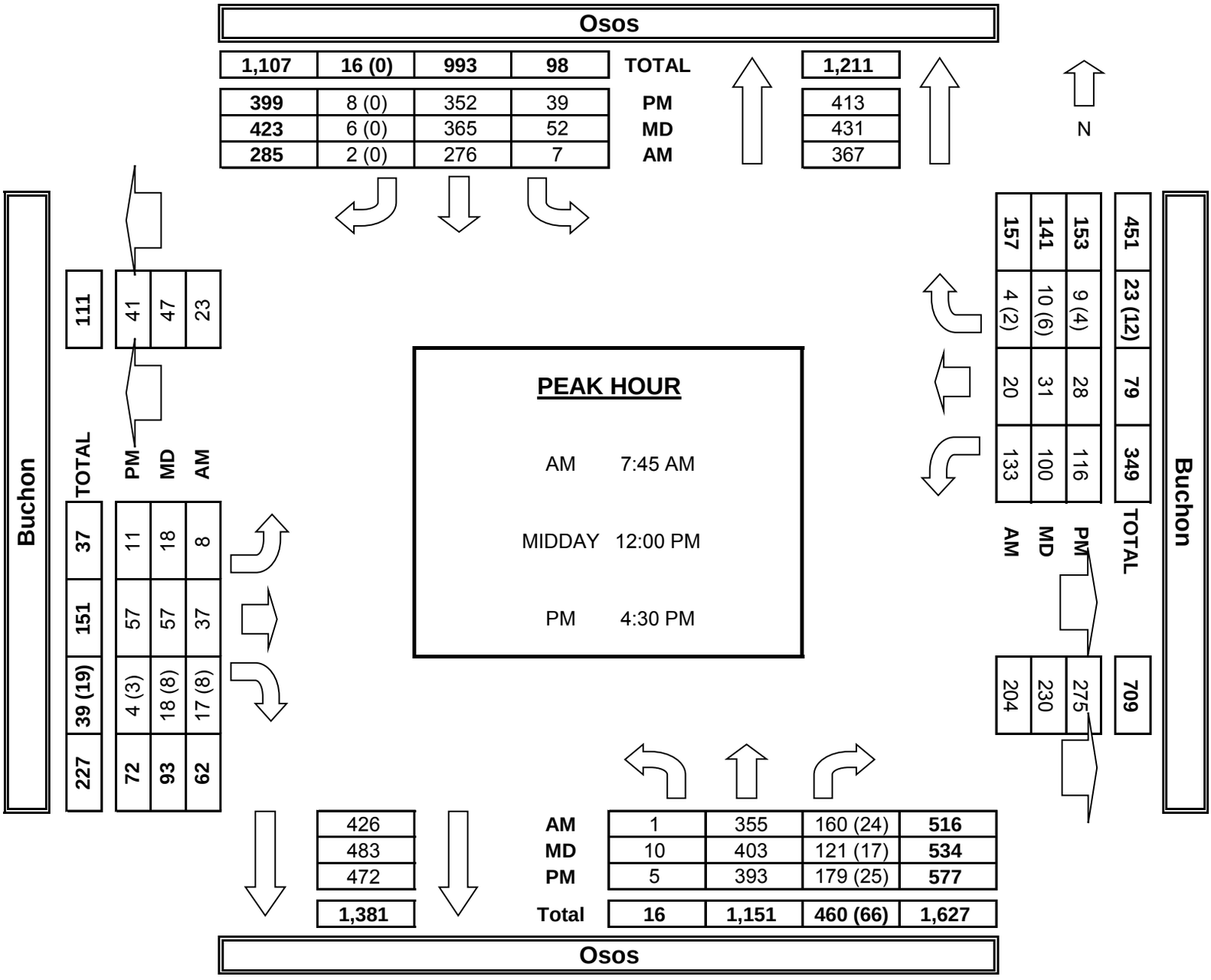
		NORTHBOUND Osos			SOUTHBOUND Osos			EASTBOUND Buchon			WESTBOUND Buchon			
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	1	1	0	0	0	0	1	0	1	0	0	4
	7:30 AM	0	2	0	0	0	0	0	1	0	1	0	0	4
	7:45 AM	0	1	1	0	1	0	0	0	0	0	0	0	3
	8:00 AM	0	0	0	0	2	0	0	1	0	0	0	0	3
	8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	8:30 AM	0	2	0	0	2	0	0	0	0	0	0	0	4
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	6	2	0	5	0	0	4	0	2	0	0	19
	APPROACH %	0%	75%	25%	0%	100%	0%	0%	100%	0%	100%	0%	0%	
	APP/DEPART	8	/	6	5	/	7	4	/	6	2	/	0	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	4	2	0	3	0	0	3	0	2	0	0	14
	APPROACH %	0%	67%	33%	0%	100%	0%	0%	100%	0%	100%	0%	0%	
	PEAK HR FACTOR		0.750			0.375			0.750			0.500		0.875
	APP/DEPART	6	/	4	3	/	5	3	/	5	2	/	0	0
MD	11:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	11:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
	11:45 AM	0	3	2	0	3	0	0	0	0	0	0	0	8
	12:00 PM	0	2	1	0	1	0	0	0	0	0	0	0	4
	12:15 PM	0	1	0	1	0	0	0	0	0	0	1	0	3
	12:30 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
	12:45 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
	1:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	VOLUMES	0	9	3	1	6	0	0	4	0	0	1	0	24
	APPROACH %	0%	75%	25%	14%	86%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	12	/	9	7	/	6	4	/	8	1	/	1	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	0	7	3	1	4	0	0	1	0	0	1	0	17
	APPROACH %	0%	70%	30%	20%	80%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.500			0.417			0.125			0.250		0.531
	APP/DEPART	10	/	7	5	/	4	1	/	5	1	/	1	0
PM	04:30 PM	0	1	0	0	1	0	0	0	0	0	1	0	3
	4:45 PM	0	1	2	0	0	0	0	0	0	0	0	0	3
	5:00 PM	0	0	0	0	4	0	0	0	0	0	1	0	5
	5:15 PM	0	1	0	0	1	0	0	1	0	0	1	0	4
	5:30 PM	0	0	0	0	1	0	0	2	0	0	1	0	4
	5:45 PM	0	0	1	0	0	0	0	0	0	0	3	0	4
	6:00 PM	0	0	0	0	0	1	0	0	0	0	2	0	3
	6:15 PM	0	2	0	0	1	0	0	0	0	0	0	0	3
	VOLUMES	0	5	3	0	8	1	0	3	0	0	9	0	29
	APPROACH %	0%	63%	38%	0%	89%	11%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	8	/	5	9	/	8	3	/	6	9	/	10	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	0	1	1	0	6	0	0	3	0	0	6	0	17
	APPROACH %	0%	50%	50%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.500			0.375			0.375			0.500		0.850
	APP/DEPART	2	/	1	6	/	6	3	/	4	6	/	6	0



AimTD LLC

TURNING MOVEMENT COUNTS




Osos
1,107
16 (0)
993
98
TOTAL
1,211
399
8 (0)
352
39
PM
413
423
6 (0)
365
52
MD
431
285
2 (0)
276
7
AM
367
N
Buchon
111
41
47
23
TOTAL
PM
MD
AM
37
11
18
8
151
57
57
37
39 (19)
4 (3)
18 (8)
17 (8)
227
72
93
62
PEAK HOUR
AM 7:45 AM
MIDDAY 12:00 PM
PM 4:30 PM
157
141
153
451
4 (2)
10 (6)
9 (4)
23 (12)
20
31
28
79
133
100
116
349
AM
MD
PM
TOTAL
204
230
275
709
Buchon
426
483
472
1,381
AM
MD
PM
Total
1
355
160 (24)
516
10
403
121 (17)
534
5
393
179 (25)
577
16
1,151
460 (66)
1,627
Osos

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Higuera
EAST & WEST: Marsh

PROJECT #: SC0843
LOCATION #: 47
CONTROL: SIGNAL

NOTES:

AM PM MD OTHER OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Higuera			SOUTHBOUND Higuera			EASTBOUND Marsh			WESTBOUND Marsh				U-TURNS				
	LANES:	NL 1	NT X	NR 1	SL 0	ST 1	SR 1	EL X	ET 2	ER 1	WL X	WT X	WR X	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	8:30 AM	34	0	34	1	49	50	0	151	68	0	0	0	387	0	0	0	0	0
	8:45 AM	30	0	50	2	43	53	0	169	75	0	0	0	422	0	0	0	0	0
	9:00 AM	39	0	71	7	49	48	0	116	57	0	0	0	387	0	0	0	0	0
	9:15 AM	33	0	66	4	49	68	0	124	49	0	0	0	393	0	0	0	0	0
	9:30 AM	32	0	65	3	42	74	0	109	47	0	0	0	372	0	0	0	0	0
	9:45 AM	30	0	71	1	56	59	0	125	45	0	0	0	387	0	0	0	0	0
	10:00 AM	46	0	66	4	56	70	0	122	39	0	0	0	403	0	0	0	0	0
	10:15 AM	40	0	65	6	60	97	0	106	36	0	0	0	410	0	0	0	0	0
	VOLUMES	284	0	488	28	404	519	0	1,022	416	0	0	0	3,161	0	0	0	0	0
	APPROACH %	37%	0%	63%	3%	42%	55%	0%	71%	29%	0%	0%	0%						
	APP/DEPART	772	/	0	951	/	820	1,438	/	1,538	0	/	803	0					
	BEGIN PEAK HR		8:30 AM																
	VOLUMES	136	0	221	14	190	219	0	560	249	0	0	0	1,589					
	APPROACH %	38%	0%	62%	3%	45%	52%	0%	69%	31%	0%	0%	0%						
	PEAK HR FACTOR		0.811			0.874			0.829			0.000		0.941					
	APP/DEPART	357	/	0	423	/	439	809	/	795	0	/	355	0					
MD	11:15 AM	44	0	90	6	57	83	0	124	37	0	0	0	441	0	0	0	0	0
	11:30 AM	49	0	89	5	68	110	0	128	48	0	0	0	497	0	0	0	0	0
	11:45 AM	43	0	89	5	80	122	0	142	52	0	0	0	533	0	0	0	0	0
	12:00 PM	55	0	99	6	87	111	0	136	45	0	0	0	539	0	0	0	0	0
	12:15 PM	36	0	79	8	73	124	0	153	52	0	0	0	525	0	0	0	0	0
	12:30 PM	46	0	91	3	69	117	0	132	43	0	0	0	501	0	0	0	0	0
	12:45 PM	66	0	68	1	73	108	0	128	42	0	0	0	486	0	0	0	0	0
	1:00 PM	60	0	64	6	84	115	0	147	43	0	0	0	519	0	0	0	0	0
	VOLUMES	399	0	669	40	591	890	0	1,090	362	0	0	0	4,041	0	0	0	0	0
	APPROACH %	37%	0%	63%	3%	39%	59%	0%	75%	25%	0%	0%	0%						
	APP/DEPART	1,068	/	0	1,521	/	953	1,452	/	1,799	0	/	1,289	0					
	BEGIN PEAK HR		11:45 AM																
	VOLUMES	180	0	358	22	309	474	0	563	192	0	0	0	2,098					
	APPROACH %	33%	0%	67%	3%	38%	59%	0%	75%	25%	0%	0%	0%						
	PEAK HR FACTOR		0.873			0.972			0.921			0.000		0.973					
	APP/DEPART	538	/	0	805	/	501	755	/	943	0	/	654	0					
PM	02:30 PM	48	0	68	7	76	103	0	107	39	0	0	0	448	0	0	0	0	0
	2:45 PM	52	0	79	5	72	114	0	130	41	0	0	0	493	0	0	0	0	0
	3:00 PM	41	0	63	5	83	141	0	129	44	0	0	0	506	0	0	0	0	0
	3:15 PM	49	0	81	3	79	168	0	112	46	0	0	0	538	0	0	0	0	0
	3:30 PM	53	0	72	2	65	124	0	126	50	0	0	0	492	0	0	0	0	0
	3:45 PM	47	0	73	4	73	132	0	119	54	0	0	0	502	0	0	0	0	0
	4:00 PM	80	0	90	2	60	124	0	143	40	0	0	0	539	0	0	0	0	0
	4:15 PM	68	0	81	15	71	143	0	112	44	0	0	0	534	0	0	0	0	0
	VOLUMES	438	0	607	43	579	1,049	0	978	358	0	0	0	4,052	0	0	0	0	0
	APPROACH %	42%	0%	58%	3%	35%	63%	0%	73%	27%	0%	0%	0%						
	APP/DEPART	1,045	/	0	1,671	/	937	1,336	/	1,628	0	/	1,487	0					
	BEGIN PEAK HR		3:15 PM																
	VOLUMES	229	0	316	11	277	548	0	500	190	0	0	0	2,071					
	APPROACH %	42%	0%	58%	1%	33%	66%	0%	72%	28%	0%	0%	0%						
	PEAK HR FACTOR		0.801			0.836			0.943			0.000		0.961					
	APP/DEPART	545	/	0	836	/	467	690	/	827	0	/	777	0					

Higuera

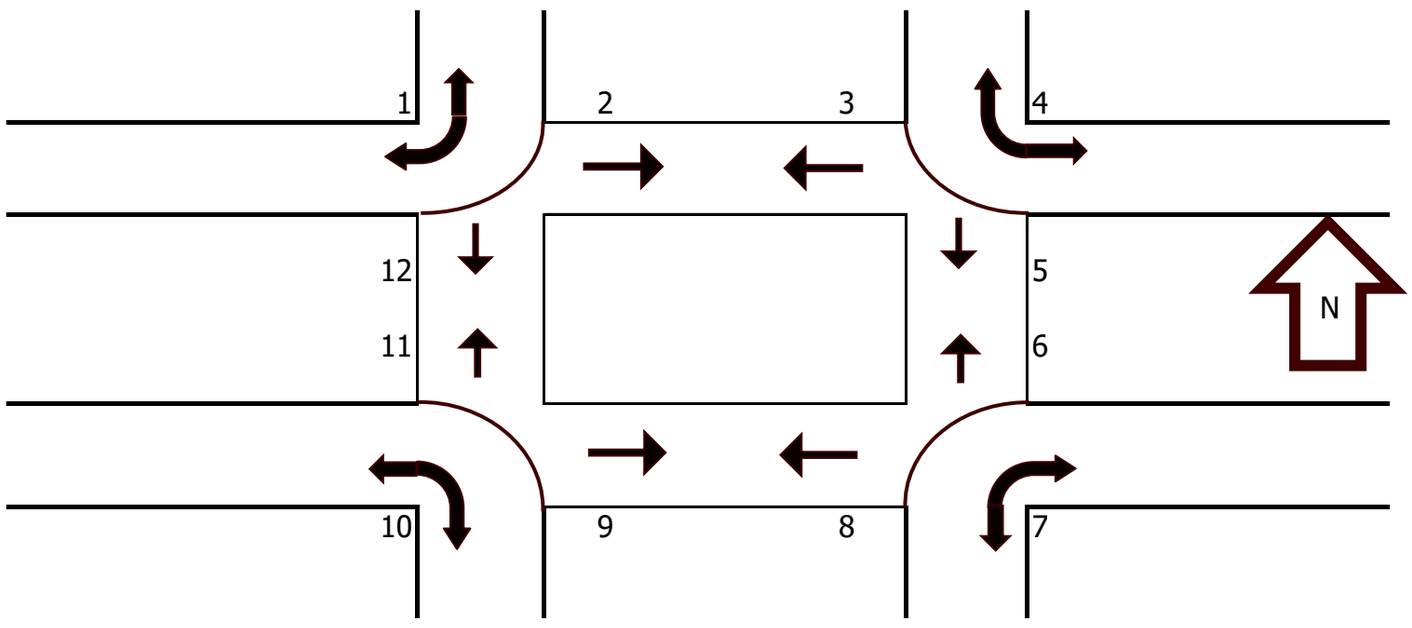
NORTH SIDE

Marsh WEST SIDE EAST SIDE **Marsh**

SOUTH SIDE

Higuera

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	8:30 AM	1	1	0	0	0	1	1	0	0	0	1	1	6
	8:45 AM	0	1	0	0	0	2	0	0	0	0	0	1	4
	9:00 AM	2	0	0	0	0	0	1	0	0	0	0	0	3
	9:15 AM	3	1	0	0	0	3	0	0	0	0	1	0	8
	9:30 AM	2	0	0	0	0	1	0	0	0	0	0	0	3
	9:45 AM	0	1	0	0	0	2	0	0	0	0	0	1	4
	10:00 AM	0	0	0	0	0	0	0	0	0	5	1	0	6
	10:15 AM	0	0	0	0	1	0	0	1	0	0	3	0	5
	TOTAL	8	4	0	0	1	9	2	1	0	5	6	3	39
MD	11:15 AM	1	0	0	0	0	0	0	0	0	0	0	1	2
	11:30 AM	1	0	0	0	0	0	3	0	2	0	0	0	6
	11:45 AM	0	0	2	0	3	1	0	0	0	0	0	0	6
	12:00 PM	1	0	0	0	0	1	0	0	0	0	0	0	2
	12:15 PM	3	0	0	0	0	1	0	0	1	0	0	0	5
	12:30 PM	1	0	1	0	0	3	0	1	0	0	3	0	9
	12:45 PM	0	2	2	0	2	3	1	0	2	0	1	0	13
	1:00 PM	2	1	0	0	0	0	0	1	1	0	0	2	7
	TOTAL	9	3	5	0	5	9	4	2	6	0	4	3	50
PM	2:30 PM	1	0	0	0	0	0	0	0	0	0	0	1	2
	2:45 PM	12	3	0	0	0	1	1	1	1	0	0	2	21
	3:00 PM	1	2	0	0	0	1	0	2	0	0	0	0	6
	3:15 PM	1	8	2	0	0	1	0	0	0	0	0	0	12
	3:30 PM	0	2	0	0	0	1	0	4	0	0	0	1	8
	3:45 PM	0	1	0	0	0	0	0	0	1	0	1	3	6
	4:00 PM	2	0	2	0	0	0	0	0	0	0	2	0	6
	4:15 PM	3	0	0	0	0	0	0	0	0	0	0	2	5
	TOTAL	20	16	4	0	0	4	1	7	2	0	3	9	66



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Higuera
EAST & WEST: Marsh

PROJECT #: SC0843
LOCATION #: 47
CONTROL: SIGNAL

NOTES:

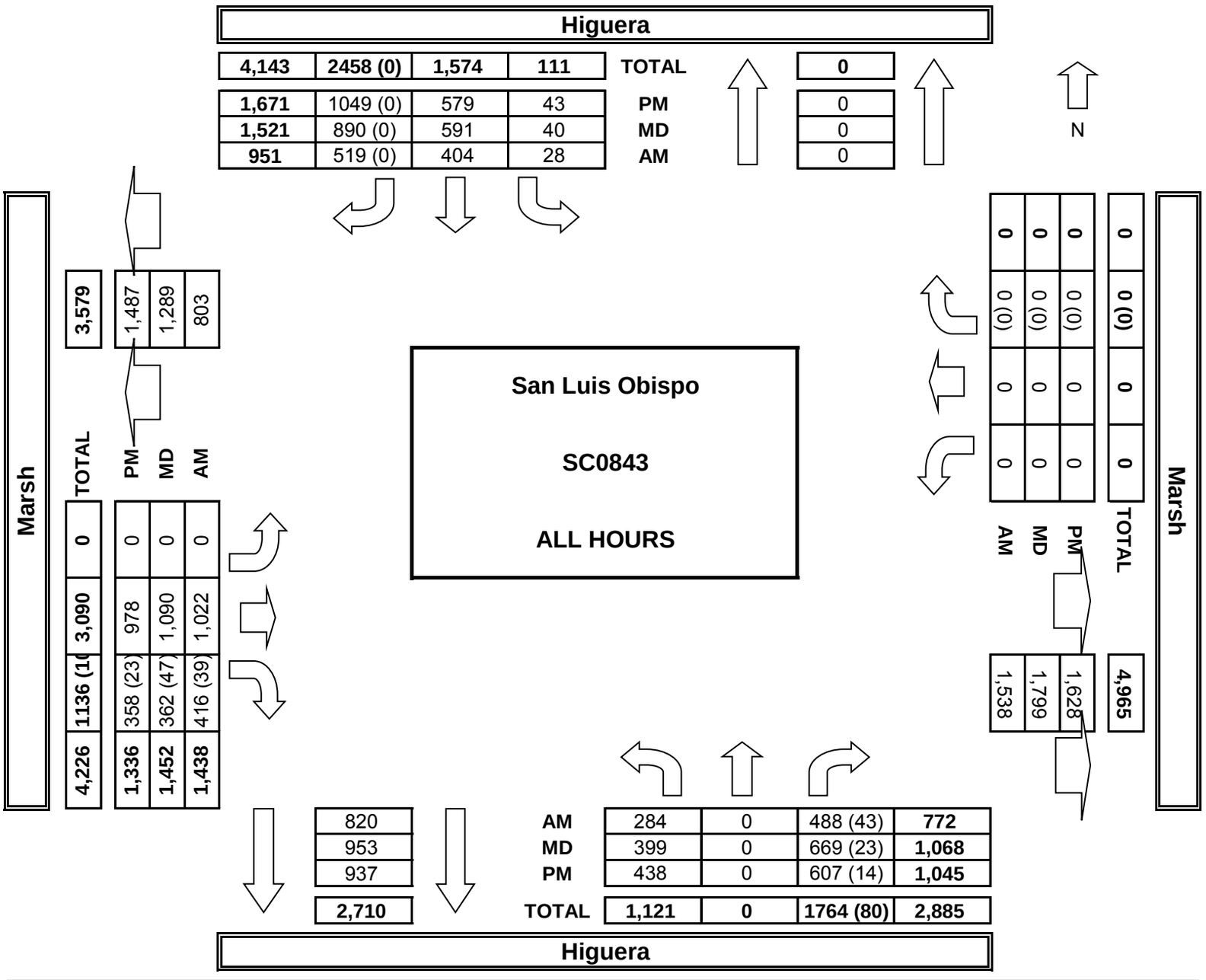
AM
PM
MD
OTHER
OTHER

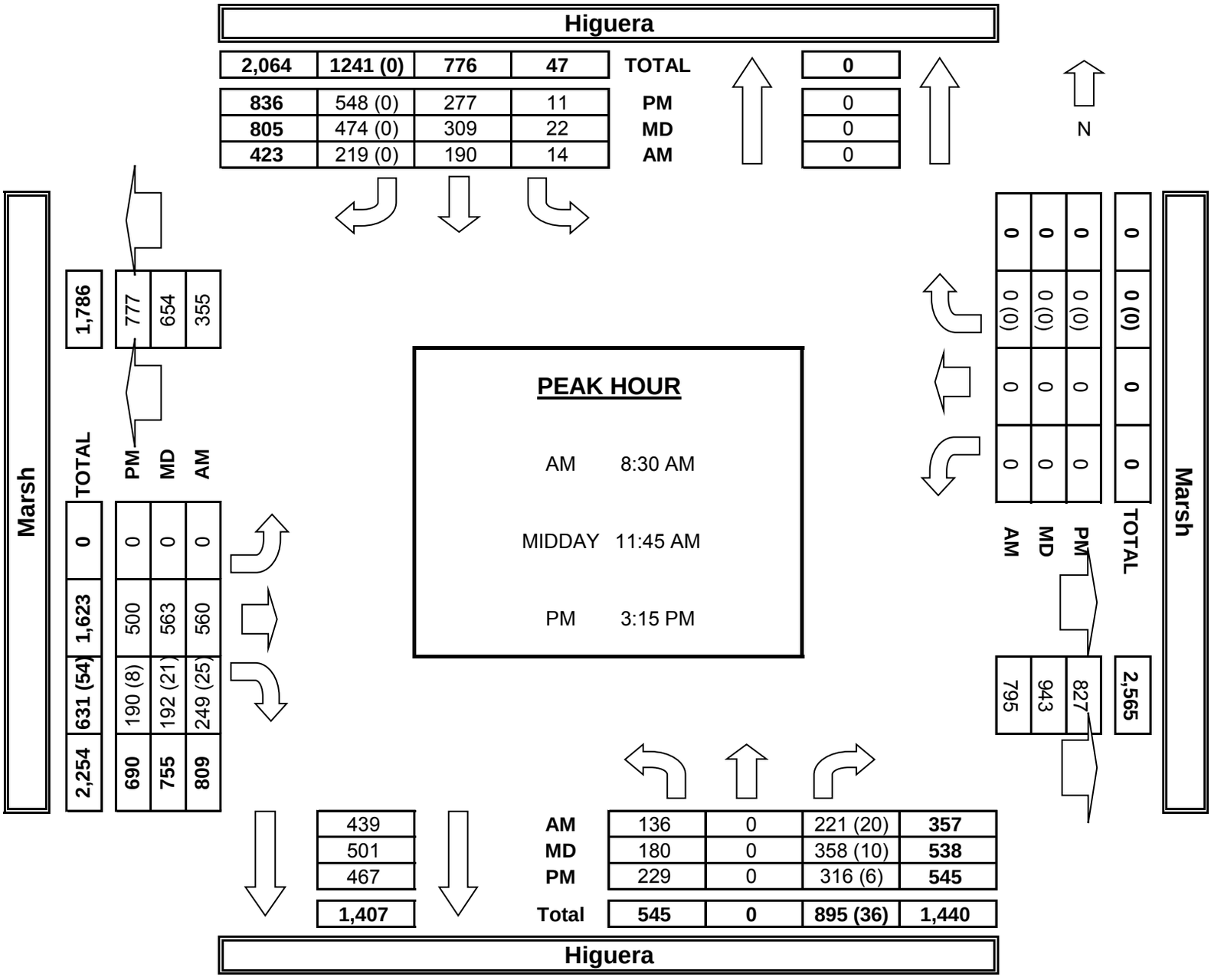
N
W
E
S

		NORTHBOUND Higuera			SOUTHBOUND Higuera			EASTBOUND Marsh			WESTBOUND Marsh			
	LANES:	NL 1	NT X	NR 1	SL 0	ST 1	SR 1	EL X	ET 2	ER 1	WL X	WT X	WR X	TOTAL
AM	8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
	8:45 AM	0	0	2	0	3	0	0	0	0	0	0	0	5
	9:00 AM	0	0	1	0	5	0	0	0	0	0	0	0	6
	9:15 AM	0	0	0	0	1	0	0	0	1	0	0	0	2
	9:30 AM	0	0	1	0	1	0	0	0	1	0	0	0	3
	9:45 AM	0	0	1	0	2	0	0	1	0	0	0	0	4
	10:00 AM	0	0	1	0	1	1	0	1	0	0	0	0	4
	10:15 AM	0	0	1	0	0	0	3	0	0	0	0	0	4
	VOLUMES	0	0	8	0	13	1	3	2	2	0	0	0	29
	APPROACH %	0%	0%	100%	0%	93%	7%	43%	29%	29%	0%	0%	0%	
	APP/DEPART	8	/	3	14	/	15	7	/	10	0	/	1	0
	BEGIN PEAK HR		8:45 AM											
	VOLUMES	0	0	4	0	10	0	0	0	2	0	0	0	16
	APPROACH %	0%	0%	100%	0%	100%	0%	0%	0%	100%	0%	0%	0%	
	PEAK HR FACTOR		0.500			0.500			0.500			0.000		0.667
	APP/DEPART	4	/	0	10	/	12	2	/	4	0	/	0	0
MD	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	2
	11:45 AM	0	0	1	0	0	2	0	3	1	0	0	0	7
	12:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	2
	12:15 PM	1	1	2	0	1	1	1	0	0	0	0	0	7
	12:30 PM	8	0	0	0	3	1	1	0	1	0	0	0	14
	12:45 PM	1	0	2	0	3	0	0	0	1	0	0	0	7
	1:00 PM	0	1	5	0	1	0	0	0	1	0	0	0	8
	VOLUMES	11	2	11	0	10	4	2	3	4	0	0	0	47
	APPROACH %	46%	8%	46%	0%	71%	29%	22%	33%	44%	0%	0%	0%	
	APP/DEPART	24	/	4	14	/	14	9	/	14	0	/	15	0
	BEGIN PEAK HR		12:15 PM											
	VOLUMES	10	2	9	0	8	2	2	0	3	0	0	0	36
	APPROACH %	48%	10%	43%	0%	80%	20%	40%	0%	60%	0%	0%	0%	
	PEAK HR FACTOR		0.656			0.625			0.625			0.000		0.643
	APP/DEPART	21	/	4	10	/	11	5	/	9	0	/	12	0
PM	02:30 PM	4	0	3	0	2	0	0	0	0	0	0	0	9
	2:45 PM	2	0	3	0	0	0	0	0	0	0	0	0	5
	3:00 PM	0	0	2	0	6	1	0	0	0	0	0	0	9
	3:15 PM	0	0	1	0	3	0	0	1	0	0	0	0	5
	3:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	3:45 PM	1	0	3	0	3	1	0	0	0	0	0	0	8
	4:00 PM	0	0	2	0	1	0	0	0	0	0	0	0	3
	4:15 PM	0	0	2	0	7	0	0	0	0	0	0	0	9
	VOLUMES	7	0	16	0	23	2	0	1	0	0	0	0	49
	APPROACH %	30%	0%	70%	0%	92%	8%	0%	100%	0%	0%	0%	0%	
	APP/DEPART	23	/	0	25	/	23	1	/	17	0	/	9	0
	BEGIN PEAK HR		2:30 PM											
	VOLUMES	6	0	9	0	11	1	0	1	0	0	0	0	28
	APPROACH %	40%	0%	60%	0%	92%	8%	0%	100%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.536			0.429			0.250			0.000		0.778
	APP/DEPART	15	/	0	12	/	11	1	/	10	0	/	7	0

AimTD LLC

TURNING MOVEMENT COUNTS




Higuera
2,064
1241 (0)
776
47
TOTAL
0
836
548 (0)
277
11
PM
0
805
474 (0)
309
22
MD
0
423
219 (0)
190
14
AM
0
N
Marsh
1,786
777
654
355
TOTAL
PM
MD
AM
0
0
0
0
1,623
500
563
560
631 (54)
190 (8)
192 (21)
249 (25)
2,254
690
755
809
PEAK HOUR
AM 8:30 AM
MIDDAY 11:45 AM
PM 3:15 PM
0
0
0
0
0 (0)
0 (0)
0 (0)
0
0
0
0
0
0
0
0
0
0 (0)
0
0
TOTAL
AM
MD
PM
795
943
827
2,565
Marsh
439
501
467
1,407
AM
MD
PM
Total
136
180
229
545
0
0
0
0
221 (20)
358 (10)
316 (6)
895 (36)
357
538
545
1,440
Higuera

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 22, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Santa Barbara
EAST & WEST: Upham

PROJECT #: SC0843
LOCATION #: 100
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Santa Barbara			SOUTHBOUND Santa Barbara			EASTBOUND Upham			WESTBOUND Upham				U-TURNS				
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0.5	WT 0.5	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	52	7	0	57	1	1	0	1	1	1	0	121	0	0	0	0	0
	7:15 AM	0	94	2	0	59	2	1	0	0	5	0	0	163	0	0	0	0	0
	7:30 AM	0	136	5	0	76	0	8	0	3	5	0	0	233	0	0	0	0	0
	7:45 AM	0	165	5	0	149	4	9	1	0	8	0	0	341	0	0	0	0	0
	8:00 AM	0	103	9	0	93	4	9	2	3	8	4	0	235	0	0	0	0	0
	8:15 AM	0	136	5	2	94	0	10	1	1	2	0	1	252	0	0	0	0	0
	8:30 AM	1	116	3	0	100	1	2	1	0	11	1	3	239	0	0	0	0	0
	8:45 AM	1	132	8	1	107	2	2	1	3	5	1	1	264	0	0	0	0	0
	VOLUMES	2	934	44	3	735	14	42	6	11	45	7	5	1,848	0	0	0	0	0
	APPROACH %	0%	95%	4%	0%	98%	2%	71%	10%	19%	79%	12%	9%						
	APP/DEPART	980	/	981	752	/	791	59	/	53	57	/	23	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	1	520	22	2	436	9	30	5	4	29	5	4	1,067					
	APPROACH %	0%	96%	4%	0%	98%	2%	77%	13%	10%	76%	13%	11%						
	PEAK HR FACTOR		0.799			0.730			0.696			0.633		0.782					
	APP/DEPART	543	/	554	447	/	469	39	/	29	38	/	15	0					
MD	11:30 AM	1	105	4	2	104	3	9	0	5	9	0	1	243	0	0	0	0	0
	11:45 AM	1	107	5	0	106	4	5	1	1	4	1	0	235	0	0	0	0	0
	12:00 PM	2	133	6	1	111	3	7	0	1	10	2	0	276	0	0	0	0	0
	12:15 PM	1	114	6	0	105	6	7	0	6	14	3	0	262	0	0	0	0	0
	12:30 PM	3	211	11	2	156	3	9	0	4	10	2	4	415	0	0	0	0	0
	12:45 PM	1	155	7	2	111	1	7	0	2	15	1	3	305	0	0	0	0	0
	1:00 PM	1	130	8	0	125	5	8	2	0	15	0	3	297	0	0	0	0	0
	1:15 PM	0	145	8	0	122	1	2	0	4	11	1	1	295	0	0	0	0	0
	VOLUMES	10	1,100	55	7	940	26	54	3	23	88	10	12	2,328	0	0	0	0	0
	APPROACH %	1%	94%	5%	1%	97%	3%	68%	4%	29%	80%	9%	11%						
	APP/DEPART	1,165	/	1,166	973	/	1,051	80	/	65	110	/	46	0					
	BEGIN PEAK HR		12:30 PM																
	VOLUMES	5	641	34	4	514	10	26	2	10	51	4	11	1,312					
	APPROACH %	1%	94%	5%	1%	97%	2%	68%	5%	26%	77%	6%	17%						
	PEAK HR FACTOR		0.756			0.820			0.731			0.868		0.790					
	APP/DEPART	680	/	678	528	/	575	38	/	40	66	/	19	0					
PM	04:00 PM	0	157	4	2	129	5	2	0	3	14	0	2	318	0	0	0	0	0
	4:15 PM	0	148	2	1	130	0	4	0	3	17	0	2	307	0	0	0	0	0
	4:30 PM	0	149	11	0	136	5	4	1	3	13	2	3	327	0	0	0	0	0
	4:45 PM	0	162	4	1	117	3	3	0	6	11	1	1	309	0	0	0	0	0
	5:00 PM	0	172	3	0	144	5	5	1	3	15	3	2	353	0	0	0	0	0
	5:15 PM	2	182	2	0	138	4	7	0	2	22	0	1	360	0	0	0	0	0
	5:30 PM	3	141	7	3	110	3	4	1	5	11	0	1	289	0	0	0	0	0
	5:45 PM	2	129	6	0	95	1	3	1	1	9	0	2	249	0	0	0	0	0
	VOLUMES	7	1,240	39	7	999	26	32	4	26	112	6	14	2,512	0	0	0	0	0
	APPROACH %	1%	96%	3%	1%	97%	3%	52%	6%	42%	85%	5%	11%						
	APP/DEPART	1,286	/	1,286	1,032	/	1,137	62	/	50	132	/	39	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	2	665	20	1	535	17	19	2	14	61	6	7	1,349					
	APPROACH %	0%	97%	3%	0%	97%	3%	54%	6%	40%	82%	8%	9%						
	PEAK HR FACTOR		0.923			0.928			0.972			0.804		0.937					
	APP/DEPART	687	/	691	553	/	610	35	/	23	74	/	25	0					

Santa Barbara

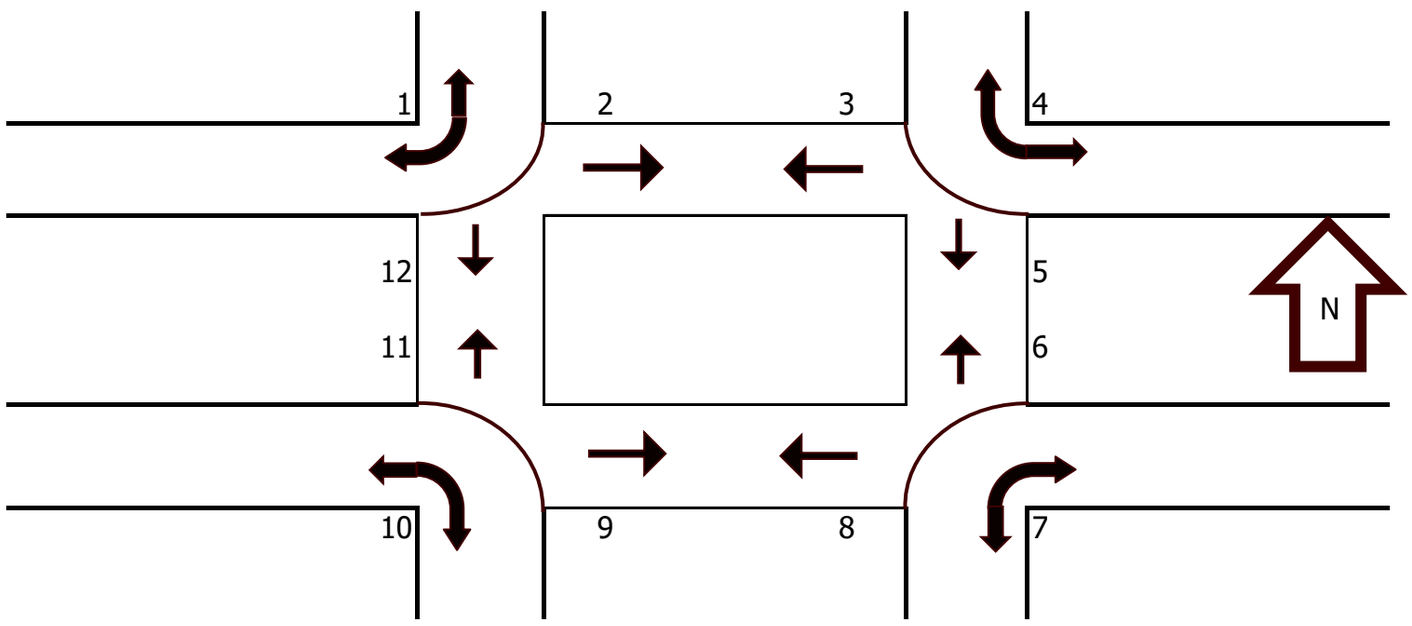
NORTH SIDE

Upham WEST SIDE EAST SIDE **Upham**

SOUTH SIDE

Santa Barbara

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:00 AM	0	2	0	0	0	2	0	0	0	0	2	0	6
	7:15 AM	1	2	4	0	4	0	1	0	0	0	0	0	12
	7:30 AM	0	2	0	1	2	2	0	0	0	0	0	0	7
	7:45 AM	0	2	10	0	0	0	0	1	0	0	0	0	13
	8:00 AM	0	2	0	0	1	1	0	0	0	0	1	1	6
	8:15 AM	0	3	0	0	4	0	0	0	0	0	0	1	8
	8:30 AM	0	0	1	1	1	0	4	0	0	0	0	0	7
	8:45 AM	0	4	0	0	2	2	0	1	2	0	3	0	14
	TOTAL	1	17	15	2	14	7	5	2	2	0	6	2	73
MD	11:30 AM	0	0	0	0	1	2	0	1	0	0	0	0	4
	11:45 AM	0	0	0	1	1	1	0	0	2	1	1	0	7
	12:00 PM	0	1	2	0	0	2	0	0	0	0	0	1	6
	12:15 PM	0	0	0	0	1	0	0	1	0	0	3	0	5
	12:30 PM	0	2	3	3	1	1	0	1	0	0	1	1	13
	12:45 PM	0	0	2	0	0	0	0	4	0	1	1	6	14
	1:00 PM	1	1	0	1	0	1	0	0	0	0	0	0	4
	1:15 PM	0	1	0	1	1	0	0	0	0	0	3	1	7
	TOTAL	1	5	7	6	5	7	0	7	2	2	9	9	60
PM	4:00 PM	2	0	1	1	1	0	0	0	1	0	2	2	10
	4:15 PM	0	2	2	0	0	0	0	0	0	0	0	1	5
	4:30 PM	4	1	2	0	0	1	0	0	0	0	0	1	9
	4:45 PM	0	5	1	0	2	1	0	0	0	0	0	0	9
	5:00 PM	0	2	1	0	2	0	0	0	0	0	1	0	6
	5:15 PM	0	1	1	0	1	2	0	0	0	0	0	1	6
	5:30 PM	0	0	1	0	1	0	0	0	0	0	0	1	3
	5:45 PM	1	3	2	2	0	3	0	0	1	0	1	1	14
	TOTAL	7	14	11	3	7	7	0	0	2	0	4	7	62



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:				
Tue, Mar 22, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
	NORTH & SOUTH:	Santa Barbara	LOCATION #:	100
	EAST & WEST:	Upham	CONTROL:	SIGNAL

NOTES:

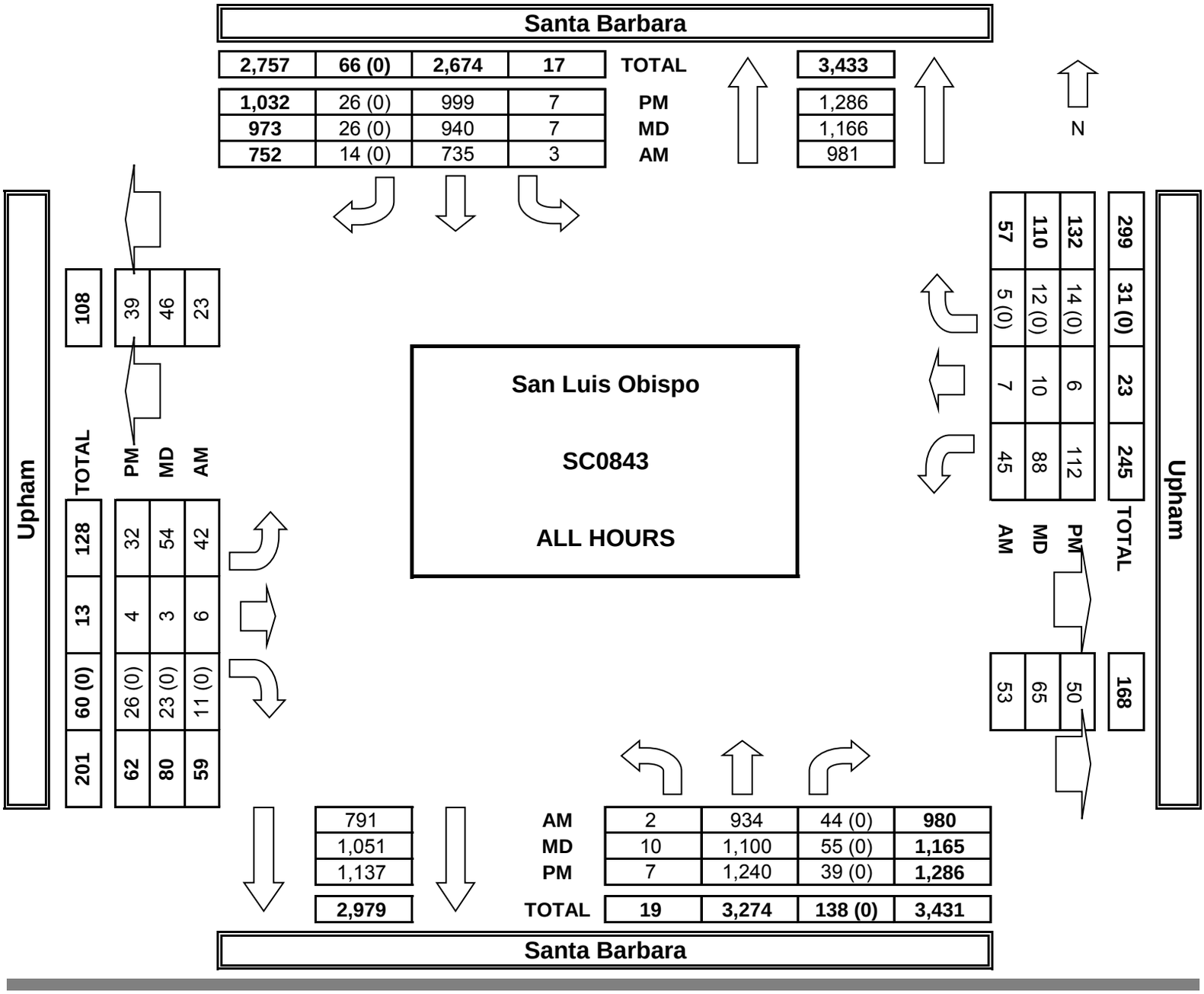
AM PM MD OTHER OTHER

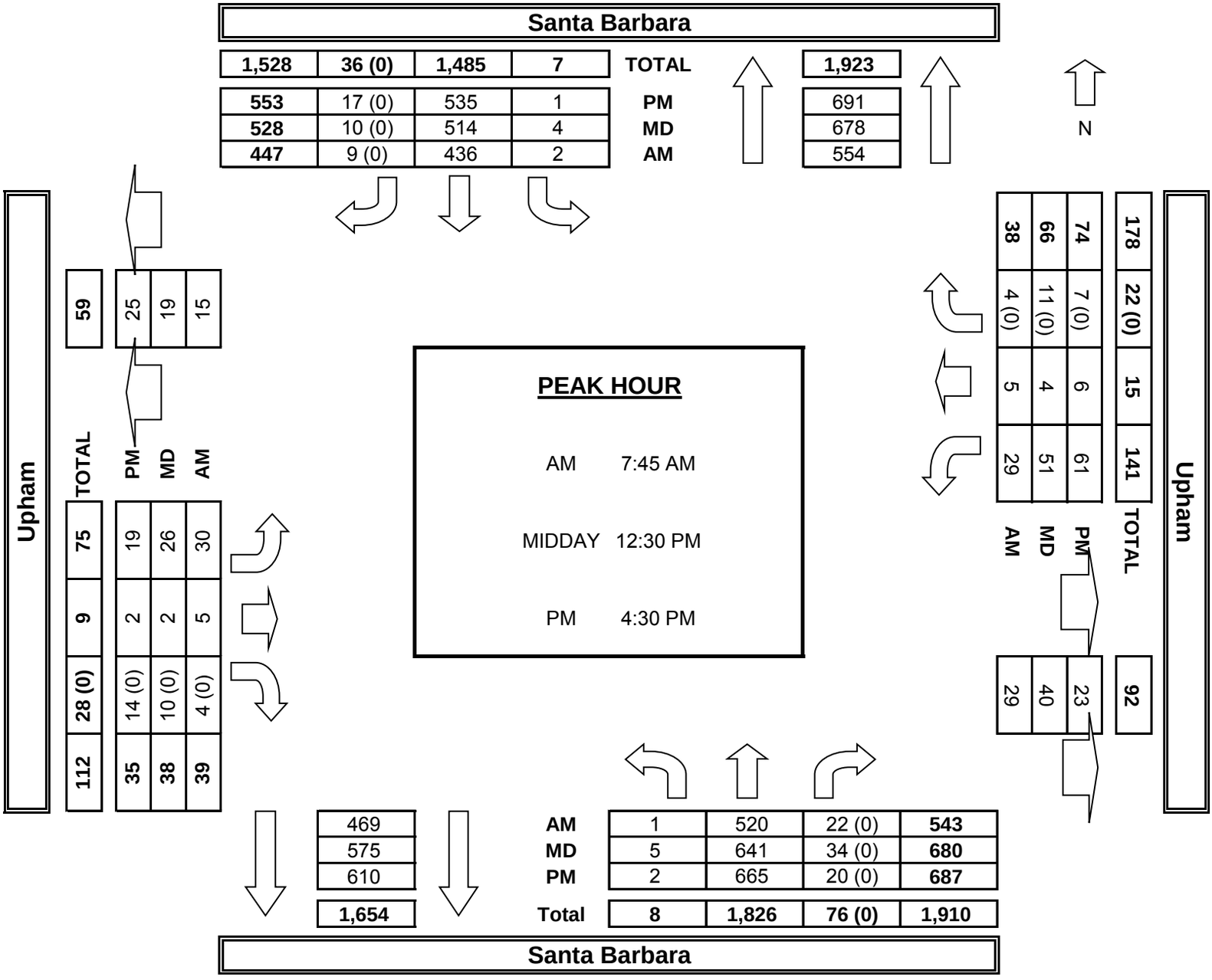
▲ N ◄ W E ► S ▼

	NORTHBOUND Santa Barbara			SOUTHBOUND Santa Barbara			EASTBOUND Upham			WESTBOUND Upham			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0.5	WT 0.5	WR 1	TOTAL
AM													
7:00 AM	0	0	0	0	4	0	0	1	0	0	0	0	5
7:15 AM	0	2	0	0	2	0	0	1	0	0	0	0	5
7:30 AM	0	1	3	0	1	0	0	1	0	0	4	0	10
7:45 AM	0	3	2	0	1	0	0	4	0	1	0	0	11
8:00 AM	0	3	0	0	2	2	0	1	0	1	2	0	11
8:15 AM	1	0	0	0	1	0	1	1	0	1	0	0	5
8:30 AM	0	1	1	0	2	0	0	1	0	0	0	0	5
8:45 AM	0	1	0	0	1	0	0	0	0	1	2	0	5
VOLUMES	1	11	6	0	14	2	1	10	0	4	8	0	57
APPROACH %	6%	61%	33%	0%	88%	13%	9%	91%	0%	33%	67%	0%	
APP/DEPART	18	/	12	16	/	18	11	/	16	12	/	11	0
BEGIN PEAK HR		7:15 AM											
VOLUMES	1	7	5	0	5	2	1	7	0	3	6	0	37
APPROACH %	8%	54%	38%	0%	71%	29%	13%	88%	0%	33%	67%	0%	
PEAK HR FACTOR		0.650			0.438			0.500			0.563		0.841
APP/DEPART	13	/	8	7	/	8	8	/	12	9	/	9	0
MD													
11:30 AM	0	2	0	0	0	0	0	0	0	0	2	0	4
11:45 AM	0	1	0	0	0	0	0	1	0	0	1	0	3
12:00 PM	1	1	0	0	1	0	0	1	0	0	1	1	6
12:15 PM	2	3	2	0	0	0	0	0	0	0	2	0	9
12:30 PM	2	2	0	0	2	0	0	1	0	0	1	2	10
12:45 PM	0	1	2	0	1	0	1	1	0	0	2	0	8
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
1:15 PM	0	2	0	1	1	0	0	0	0	0	2	0	6
VOLUMES	5	12	4	1	5	0	1	5	0	0	11	3	47
APPROACH %	24%	57%	19%	17%	83%	0%	17%	83%	0%	0%	79%	21%	
APP/DEPART	21	/	16	6	/	5	6	/	10	14	/	16	0
BEGIN PEAK HR		12:00 PM											
VOLUMES	5	7	4	0	4	0	1	3	0	0	6	3	33
APPROACH %	31%	44%	25%	0%	100%	0%	25%	75%	0%	0%	67%	33%	
PEAK HR FACTOR		0.571			0.500			0.500			0.750		0.825
APP/DEPART	16	/	11	4	/	4	4	/	7	9	/	11	0
PM													
04:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	1	0	0	1	0	0	3	0	0	2	0	7
4:30 PM	0	1	0	0	2	0	0	2	0	0	2	0	7
4:45 PM	1	3	0	0	0	0	0	2	0	0	0	0	6
5:00 PM	0	1	2	0	3	0	0	3	0	2	1	0	12
5:15 PM	0	0	0	0	4	0	0	0	0	1	2	0	7
5:30 PM	0	0	1	0	1	0	0	0	1	1	2	0	6
5:45 PM	1	3	0	0	3	0	0	2	0	1	1	0	11
VOLUMES	2	12	3	0	14	0	0	12	1	5	10	0	59
APPROACH %	12%	71%	18%	0%	100%	0%	0%	92%	8%	33%	67%	0%	
APP/DEPART	17	/	12	14	/	20	13	/	15	15	/	12	0
BEGIN PEAK HR		5:00 PM											
VOLUMES	1	4	3	0	11	0	0	5	1	5	6	0	36
APPROACH %	13%	50%	38%	0%	100%	0%	0%	83%	17%	45%	55%	0%	
PEAK HR FACTOR		0.500			0.688			0.500			0.917		0.750
APP/DEPART	8	/	4	11	/	17	6	/	8	11	/	7	0

AimTD LLC

TURNING MOVEMENT COUNTS




Santa Barbara
1,528 | 36 (0) | 1,485 | 7 | TOTAL | 1,923
553 | 17 (0) | 535 | 1 | PM | 691
528 | 10 (0) | 514 | 4 | MD | 678
447 | 9 (0) | 436 | 2 | AM | 554
N
Upham
59
25 | 19 | 15
TOTAL
PM
MD
AM
75 | 19 | 26 | 30
9 | 2 | 2 | 5
28 (0) | 14 (0) | 10 (0) | 4 (0)
112 | 35 | 38 | 39
PEAK HOUR
AM 7:45 AM
MIDDAY 12:30 PM
PM 4:30 PM
178 | 22 (0) | 15 | 141
38 | 4 (0) | 5 | 29
66 | 11 (0) | 4 | 51
74 | 7 (0) | 6 | 61
AM
MD
PM
TOTAL
29 | 40 | 23 | 92
Upham
469
575
610
1,654
AM | 1 | 520 | 22 (0) | 543
MD | 5 | 641 | 34 (0) | 680
PM | 2 | 665 | 20 (0) | 687
Total | 8 | 1,826 | 76 (0) | 1,910
Santa Barbara

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Apr 5, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Broad
EAST & WEST: Santa Barbara

PROJECT #: SC0843
LOCATION #: 101
CONTROL: SIGNAL

NOTES:

AM PM MD OTHER OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Broad			SOUTHBOUND Broad			EASTBOUND Santa Barbara			WESTBOUND Santa Barbara				U-TURNS				
	LANES:	NL 2	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 1	WT 0.5	WR 0.5	TOTAL	NB X	SB 0	EB 0	WB 0	TTL
AM	7:30 AM	51	62	106	1	69	8	12	53	81	79	27	1	550	0	0	0	0	0
	7:45 AM	76	94	100	1	152	9	24	50	102	107	28	0	743	0	0	0	0	0
	8:00 AM	34	89	82	4	117	10	21	39	106	101	26	6	635	0	0	0	0	0
	8:15 AM	83	82	92	9	122	17	13	41	91	76	24	2	652	0	0	0	0	0
	8:30 AM	68	61	97	2	117	3	12	41	116	69	33	1	620	0	0	0	0	0
	8:45 AM	59	67	79	1	101	10	15	36	109	98	20	3	598	0	0	0	0	0
	9:00 AM	56	58	72	0	92	7	11	34	82	74	20	6	512	0	0	0	0	0
	9:15 AM	66	55	83	1	82	8	14	46	66	89	25	5	540	0	0	1	0	1
	VOLUMES	493	568	711	19	852	72	122	340	753	693	203	24	4,850	0	0	1	0	1
	APPROACH %	28%	32%	40%	2%	90%	8%	10%	28%	62%	75%	22%	3%						
	APP/DEPART	1,772	/	713	943	/	2,298	1,215	/	1,070	920	/	769	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	261	326	371	16	508	39	70	171	415	353	111	9	2,650					
	APPROACH %	27%	34%	39%	3%	90%	7%	11%	26%	63%	75%	23%	2%						
	PEAK HR FACTOR		0.887			0.869			0.932			0.876		0.892					
	APP/DEPART	958	/	405	563	/	1,276	656	/	558	473	/	411	0					
MD	11:15 AM	92	106	90	5	93	18	15	45	74	69	35	4	646	0	0	0	0	0
	11:30 AM	85	99	79	4	121	9	17	57	56	102	41	3	673	0	0	0	0	0
	11:45 AM	93	129	121	1	128	15	14	65	60	85	42	7	760	0	0	0	0	0
	12:00 PM	90	116	100	8	126	16	14	47	72	116	42	7	754	0	0	0	0	0
	12:15 PM	90	118	87	3	107	8	17	50	50	96	30	4	660	0	0	0	0	0
	12:30 PM	89	96	101	4	125	11	17	52	74	101	28	3	701	0	0	0	0	0
	12:45 PM	71	71	78	1	92	12	12	39	45	69	21	1	512	0	0	0	0	0
	1:00 PM	75	82	107	3	124	11	12	40	68	106	45	1	674	0	0	0	0	0
	VOLUMES	685	817	763	29	916	100	118	395	499	744	284	30	5,380	0	0	0	0	0
	APPROACH %	30%	36%	34%	3%	88%	10%	12%	39%	49%	70%	27%	3%						
	APP/DEPART	2,265	/	965	1,045	/	2,159	1,012	/	1,187	1,058	/	1,069	0					
	BEGIN PEAK HR		11:45 AM																
	VOLUMES	362	459	409	16	486	50	62	214	256	398	142	21	2,875					
	APPROACH %	29%	37%	33%	3%	88%	9%	12%	40%	48%	71%	25%	4%						
	PEAK HR FACTOR		0.897			0.920			0.930			0.850		0.946					
	APP/DEPART	1,230	/	542	552	/	1,140	532	/	639	561	/	554	0					
PM	04:30 PM	116	114	109	4	126	20	8	45	79	95	35	7	758	0	0	0	0	0
	4:45 PM	97	155	101	4	126	18	14	42	85	91	46	6	785	0	0	0	0	0
	5:00 PM	114	176	125	7	138	20	12	50	83	119	39	4	887	0	0	0	0	0
	5:15 PM	126	191	118	11	126	20	13	57	84	118	51	5	920	0	0	0	0	0
	5:30 PM	106	120	107	4	109	10	13	66	85	83	30	7	740	0	0	0	0	0
	5:45 PM	111	113	101	2	100	5	16	59	71	82	36	1	697	0	0	0	0	0
	6:00 PM	79	79	86	2	97	12	13	46	67	70	25	3	579	0	0	0	0	0
	6:15 PM	53	51	50	1	50	7	15	29	49	53	14	4	376	0	0	0	0	0
	VOLUMES	802	999	797	35	872	112	104	394	603	711	276	37	5,742	0	0	0	0	0
	APPROACH %	31%	38%	31%	3%	86%	11%	9%	36%	55%	69%	27%	4%						
	APP/DEPART	2,598	/	1,140	1,019	/	2,186	1,101	/	1,226	1,024	/	1,190	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	453	636	453	26	516	78	47	194	331	423	171	22	3,350					
	APPROACH %	29%	41%	29%	4%	83%	13%	8%	34%	58%	69%	28%	4%						
	PEAK HR FACTOR		0.886			0.939			0.929			0.885		0.910					
	APP/DEPART	1,542	/	705	620	/	1,270	572	/	673	616	/	702	0					

Broad

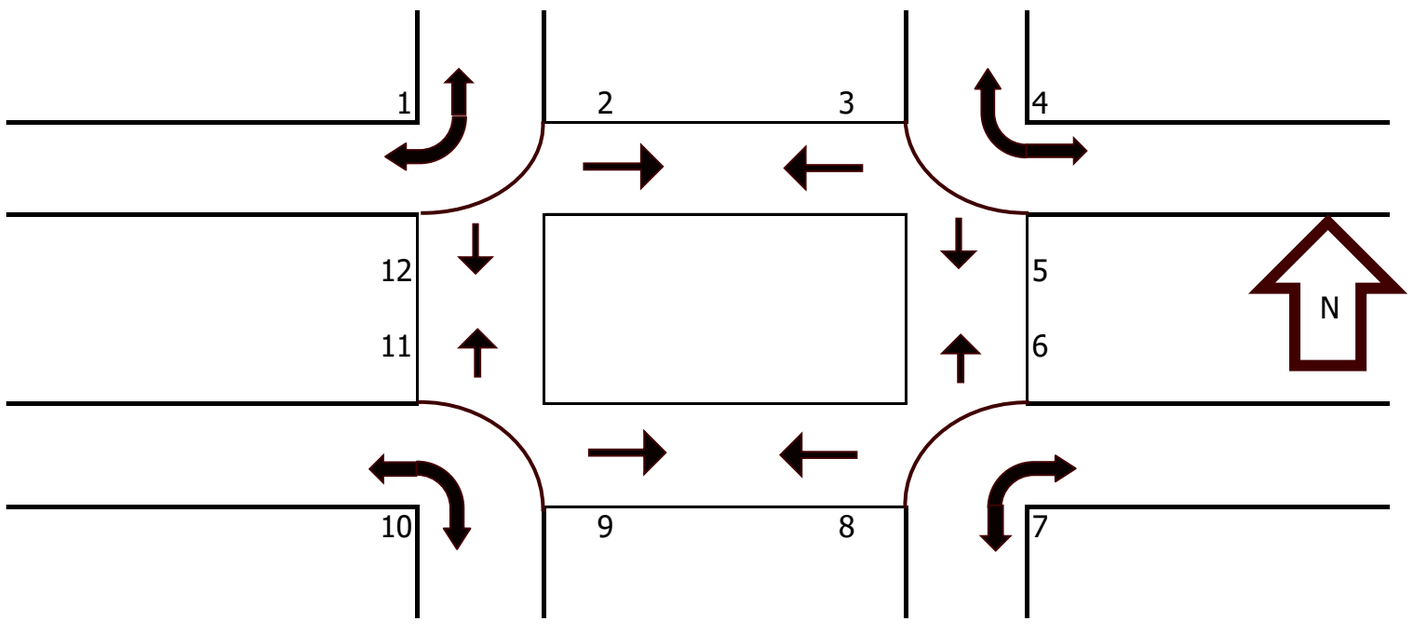
NORTH SIDE

Santa Barbara WEST SIDE EAST SIDE **Santa Barbara**

SOUTH SIDE

Broad

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	0	0	1	0	0	0	0	0	1	1	3
	7:45 AM	0	1	1	0	1	1	0	3	1	0	1	1	10
	8:00 AM	0	3	2	0	1	2	1	0	0	0	1	0	10
	8:15 AM	0	0	0	0	1	0	0	0	1	0	1	0	3
	8:30 AM	0	0	0	0	0	0	0	0	3	0	0	0	3
	8:45 AM	0	0	0	0	1	0	0	1	1	2	0	0	5
	9:00 AM	0	3	1	0	0	0	0	1	1	0	1	1	8
	9:15 AM	0	2	0	0	0	3	1	1	1	0	0	0	8
	TOTAL	0	9	4	0	5	6	2	6	8	2	5	3	50
MD	11:15 AM	0	0	0	0	1	0	0	0	1	0	4	0	6
	11:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	11:45 AM	0	0	0	0	0	0	2	5	1	0	0	0	8
	12:00 PM	0	2	0	0	0	0	0	3	1	0	1	0	7
	12:15 PM	0	2	0	0	0	0	0	4	0	0	0	1	7
	12:30 PM	0	0	0	0	1	0	0	1	1	0	0	0	3
	12:45 PM	0	0	2	0	0	0	0	0	1	0	0	0	3
	1:00 PM	0	0	1	0	0	1	0	2	0	0	0	1	5
	TOTAL	0	4	3	0	2	1	2	16	5	0	5	2	40
PM	4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	4:45 PM	0	2	2	0	1	1	1	0	0	0	1	2	10
	5:00 PM	0	0	0	0	0	0	0	1	4	0	3	0	8
	5:15 PM	0	0	0	0	0	2	0	1	0	0	0	0	3
	5:30 PM	2	3	0	0	0	0	0	0	1	0	2	0	8
	5:45 PM	0	0	0	0	1	4	0	2	4	0	0	0	11
	6:00 PM	2	1	0	0	3	2	1	3	3	0	4	2	21
	6:15 PM	0	1	0	0	3	0	0	6	6	2	6	0	24
	TOTAL	4	7	2	0	8	9	2	14	18	2	16	4	86



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Apr 5, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Broad
EAST & WEST: Santa Barbara

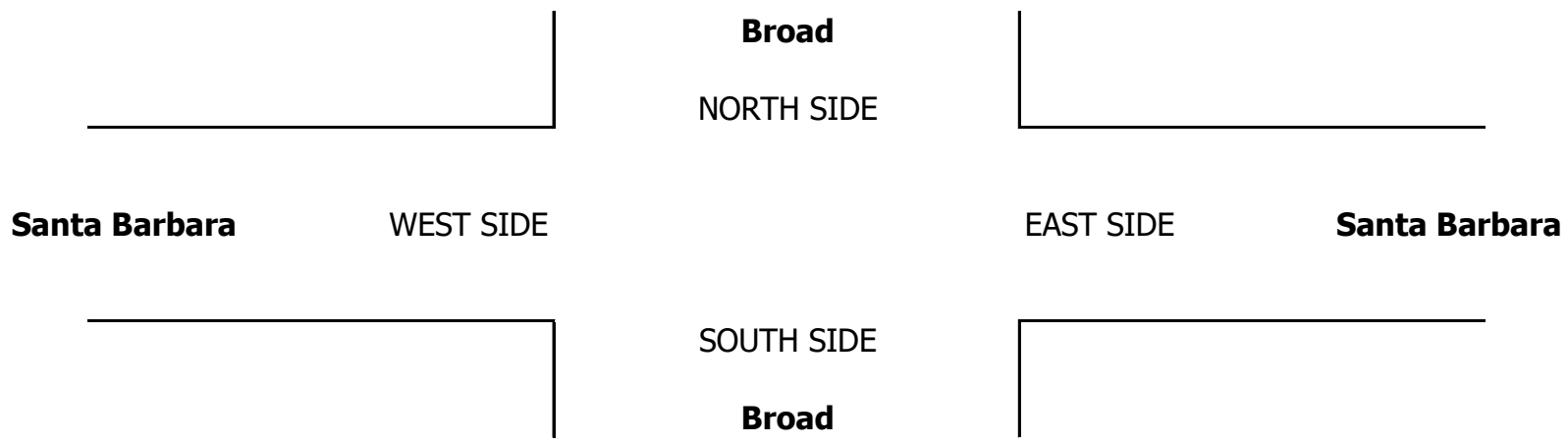
PROJECT #: SC0843
LOCATION #: 101
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

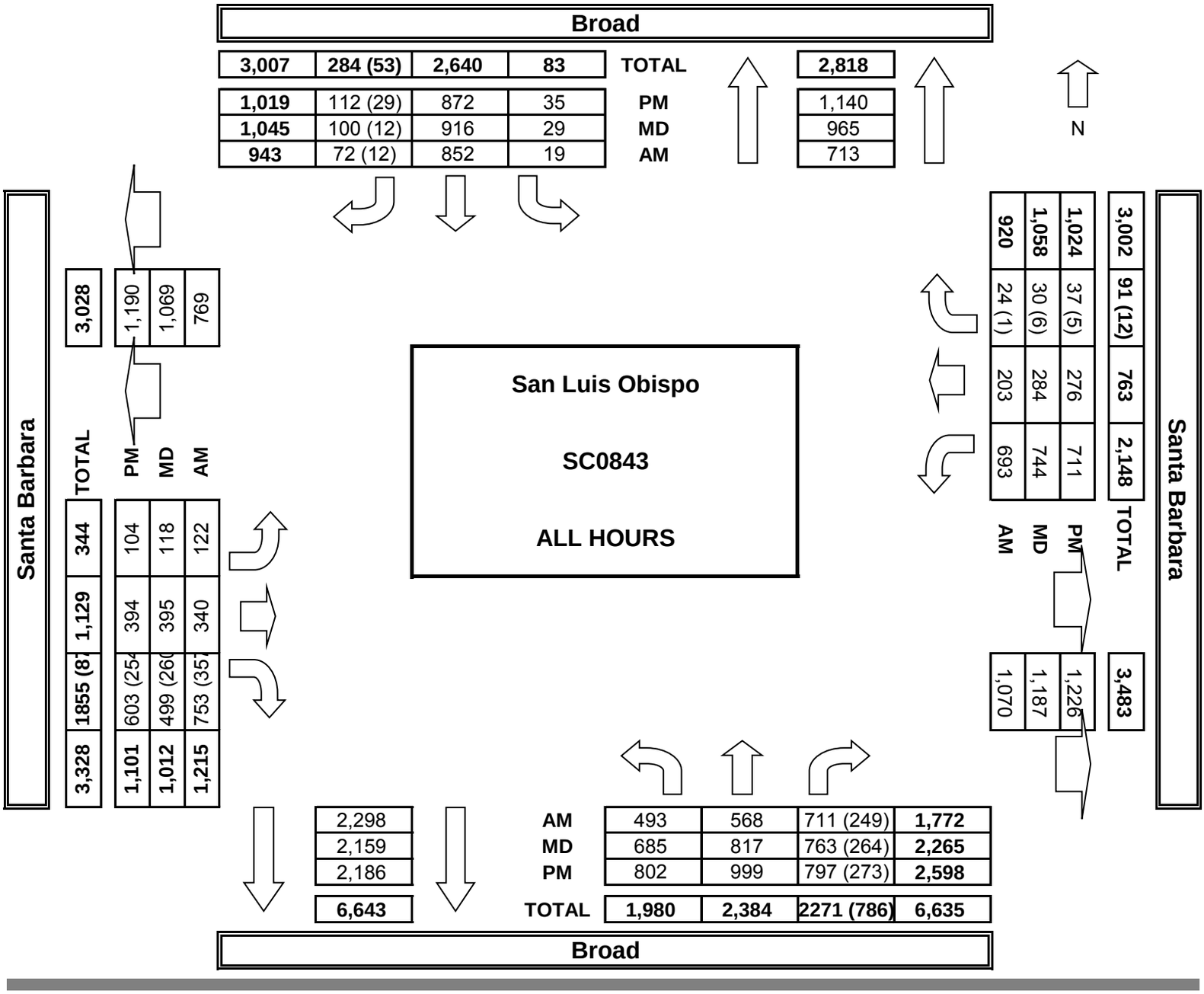
N
W
E
S

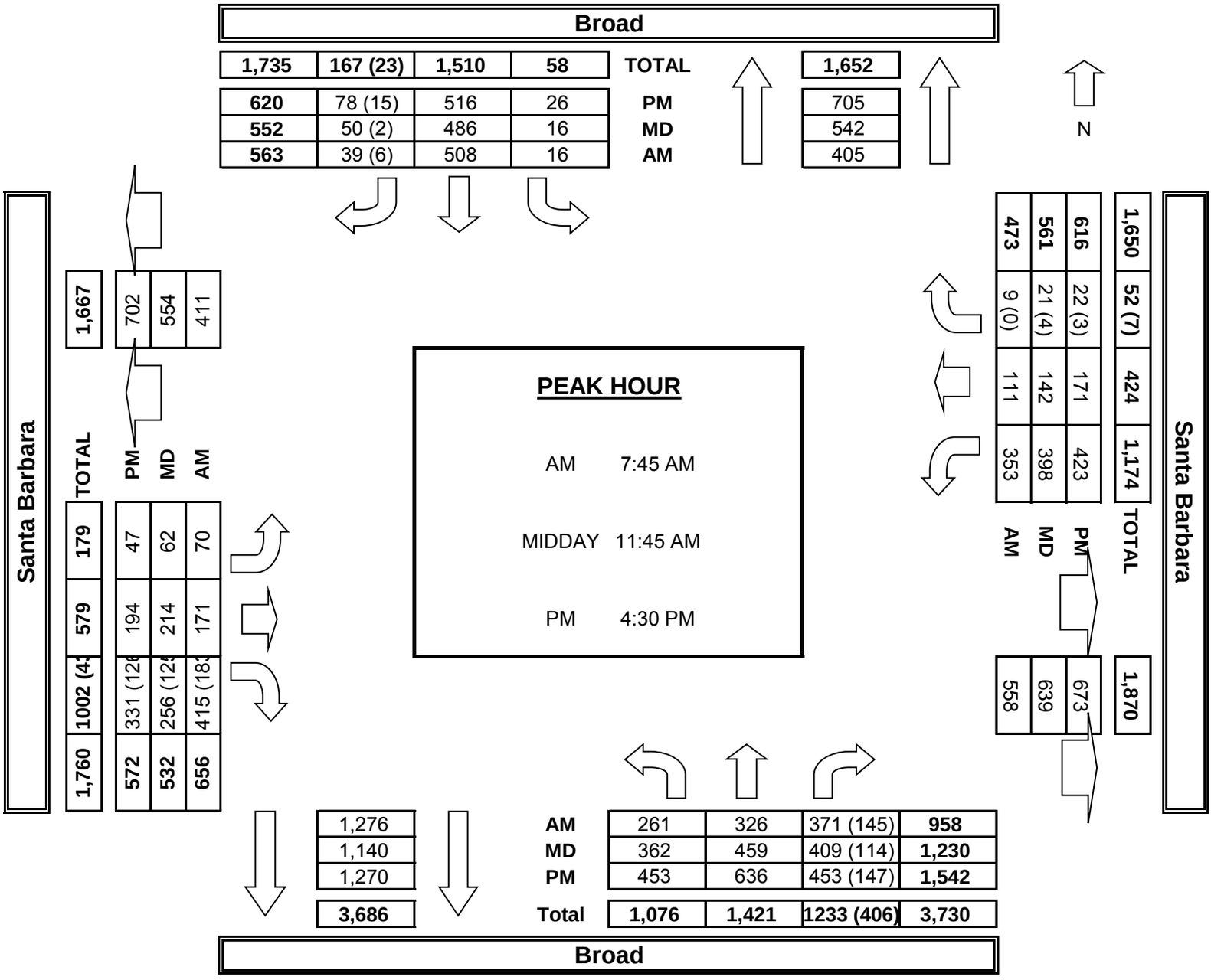
		NORTHBOUND Broad			SOUTHBOUND Broad			EASTBOUND Santa Barbara			WESTBOUND Santa Barbara			
	LANES:	NL 2	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 1	WT 0.5	WR 0.5	TOTAL
AM	7:30 AM	0	1	2	0	2	0	0	2	0	0	1	0	8
	7:45 AM	0	1	0	0	1	0	0	3	0	4	2	0	11
	8:00 AM	0	0	0	0	1	0	0	3	0	0	0	0	4
	8:15 AM	0	4	0	0	0	0	1	3	0	0	2	0	10
	8:30 AM	0	0	0	0	1	0	0	3	0	1	0	0	5
	8:45 AM	0	1	0	0	2	0	0	5	0	2	1	0	11
	9:00 AM	0	0	0	0	2	0	1	2	0	0	1	0	6
	9:15 AM	0	1	1	0	1	0	0	2	0	1	0	0	6
	VOLUMES	0	8	3	0	10	0	2	23	0	8	7	0	61
	APPROACH %	0%	73%	27%	0%	100%	0%	8%	92%	0%	53%	47%	0%	
	APP/DEPART	11	/	10	10	/	18	25	/	26	15	/	7	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	6	2	0	4	0	1	11	0	4	5	0	33
	APPROACH %	0%	75%	25%	0%	100%	0%	8%	92%	0%	44%	56%	0%	
	PEAK HR FACTOR		0.500			0.500			0.750			0.375		0.750
	APP/DEPART	8	/	7	4	/	8	12	/	13	9	/	5	0
MD	11:15 AM	0	1	3	0	1	0	0	0	0	0	0	0	5
	11:30 AM	1	1	2	0	1	0	0	0	0	1	1	0	7
	11:45 AM	0	2	3	0	0	0	0	2	0	0	0	0	7
	12:00 PM	0	2	2	0	0	0	0	0	0	0	1	0	5
	12:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	12:30 PM	0	1	3	0	0	0	0	0	0	0	0	0	4
	12:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
	1:00 PM	0	2	0	0	1	0	0	1	0	1	1	0	6
	VOLUMES	1	10	13	0	4	0	0	4	0	2	3	0	37
	APPROACH %	4%	42%	54%	0%	100%	0%	0%	100%	0%	40%	60%	0%	
	APP/DEPART	24	/	10	4	/	6	4	/	17	5	/	4	0
	BEGIN PEAK HR		11:15 AM											
	VOLUMES	1	6	10	0	2	0	0	2	0	1	2	0	24
	APPROACH %	6%	35%	59%	0%	100%	0%	0%	100%	0%	33%	67%	0%	
	PEAK HR FACTOR		0.850			0.500			0.250			0.375		0.857
	APP/DEPART	17	/	6	2	/	3	2	/	12	3	/	3	0
PM	04:30 PM	2	2	1	0	0	0	0	1	0	3	1	0	10
	4:45 PM	0	2	2	0	0	0	0	1	0	1	0	0	6
	5:00 PM	0	1	0	0	0	0	0	2	0	2	1	0	6
	5:15 PM	0	7	1	0	1	0	1	0	1	3	5	0	19
	5:30 PM	0	1	0	0	1	0	0	2	1	3	3	0	11
	5:45 PM	0	3	0	0	0	0	0	2	0	1	3	0	9
	6:00 PM	0	2	1	0	2	0	0	0	0	1	2	0	8
	6:15 PM	0	1	0	0	3	0	0	0	0	2	0	0	6
	VOLUMES	2	19	5	0	7	0	1	8	2	16	15	0	75
	APPROACH %	8%	73%	19%	0%	100%	0%	9%	73%	18%	52%	48%	0%	
	APP/DEPART	26	/	20	7	/	25	11	/	13	31	/	17	0
	BEGIN PEAK HR		5:15 PM											
	VOLUMES	0	13	2	0	4	0	1	4	2	8	13	0	47
	APPROACH %	0%	87%	13%	0%	100%	0%	14%	57%	29%	38%	62%	0%	
	PEAK HR FACTOR		0.469			0.500			0.583			0.656		0.618
	APP/DEPART	15	/	14	4	/	14	7	/	6	21	/	13	0



AimTD LLC

TURNING MOVEMENT COUNTS




Broad
1,735
167 (23)
1,510
58
TOTAL
1,652
620
78 (15)
516
26
PM
705
552
50 (2)
486
16
MD
542
563
39 (6)
508
16
AM
405
N
Santa Barbara
1,667
702
554
411
TOTAL
PM
MD
AM
179
47
62
70
579
194
214
171
1002 (4
331 (12
256 (12
415 (18
1,760
572
532
656
PEAK HOUR
AM 7:45 AM
MIDDAY 11:45 AM
PM 4:30 PM
1,650
52 (7)
424
1,174
616
22 (3)
171
423
561
21 (4)
142
398
473
9 (0)
111
353
TOTAL
PM
MD
AM
1,870
673
639
558
Santa Barbara
1,276
1,140
1,270
3,686
AM
MD
PM
Total
261
326
371 (145)
958
362
459
409 (114)
1,230
453
636
453 (147)
1,542
1,076
1,421
1233 (406)
3,730
Broad

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:				
Wed, Mar 16, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
	NORTH & SOUTH:	Hwy 101 SB	LOCATION #:	84
	EAST & WEST:	Madonna	CONTROL:	SIGNAL

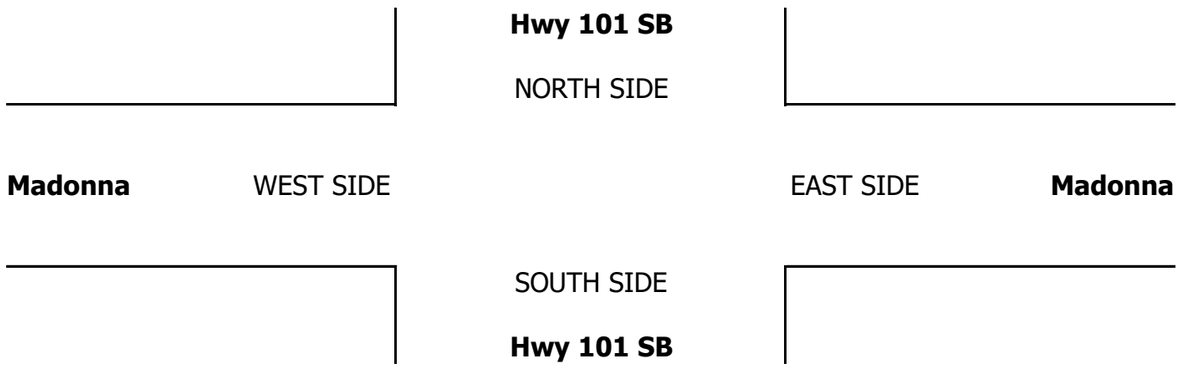
NOTES:

AM PM MD OTHER OTHER

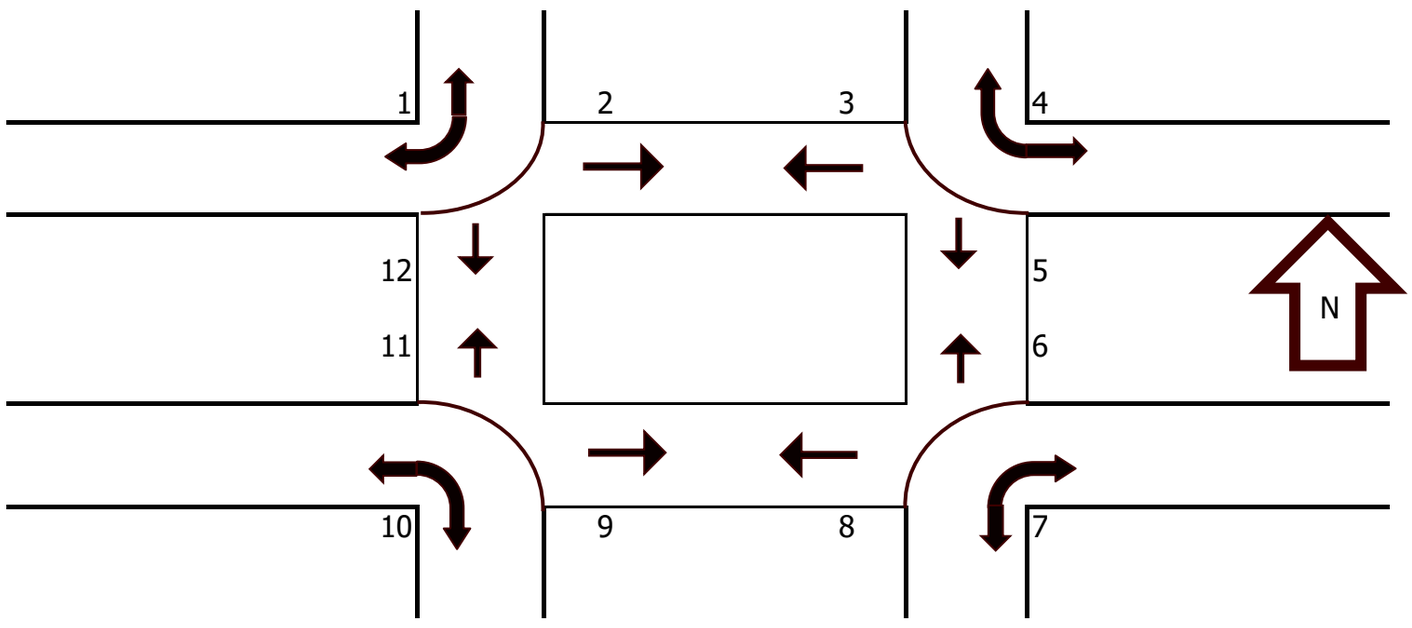
▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Hwy 101 SB			SOUTHBOUND Hwy 101 SB			EASTBOUND Madonna			WESTBOUND Madonna				U-TURNS				
	LANES:	NL 1.5	NT 0.5	NR 1	SL 1.5	ST 0.5	SR 1	EL 1	ET 2.5	ER 0.5	WL 1	WT 2.5	WR 0.5	TOTAL	NB 0	SB 0	EB 0	WB X	TTL
AM	7:00 AM	43	4	47	1	1	1	6	82	14	11	52	4	266	0	0	3	0	3
	7:15 AM	53	0	79	3	0	1	2	153	18	25	66	4	404	0	0	1	0	1
	7:30 AM	57	3	102	1	0	1	3	256	12	32	66	5	538	0	0	3	0	3
	7:45 AM	110	5	157	4	1	1	6	295	7	25	126	7	744	0	0	3	0	3
	8:00 AM	89	0	107	0	3	1	2	264	13	25	119	3	626	0	0	2	0	2
	8:15 AM	63	4	134	2	1	2	5	257	16	32	114	4	634	0	0	3	0	3
	8:30 AM	69	1	102	5	2	3	12	228	26	28	76	5	557	0	0	5	0	5
	8:45 AM	68	3	108	2	0	3	10	219	25	33	115	5	591	0	0	6	0	6
	VOLUMES	552	20	836	18	8	13	46	1,754	131	211	734	37	4,360	0	0	26	0	26
	APPROACH %	39%	1%	59%	46%	21%	33%	2%	91%	7%	21%	75%	4%						
	APP/DEPART	1,408	/	77	39	/	350	1,931	/	2,608	982	/	1,325	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	331	10	500	11	7	7	25	1,044	62	110	435	19	2,561					
	APPROACH %	39%	1%	59%	44%	28%	28%	2%	92%	5%	20%	77%	3%						
	PEAK HR FACTOR		0.773			0.625			0.918			0.892		0.861					
	APP/DEPART	841	/	41	25	/	179	1,131	/	1,555	564	/	786	0					
MD	11:00 AM	102	7	48	6	2	4	6	202	28	23	134	15	577	0	0	3	0	3
	11:15 AM	96	8	42	7	2	2	13	197	28	28	166	11	600	0	0	7	0	7
	11:30 AM	141	9	63	4	1	10	7	275	35	27	160	15	747	0	0	2	0	2
	11:45 AM	119	28	67	4	4	5	7	253	30	32	191	22	762	0	0	0	0	0
	12:00 PM	149	15	66	11	3	7	8	260	41	27	221	21	829	0	0	6	0	6
	12:15 PM	139	5	50	3	7	5	7	256	36	37	187	11	743	0	0	3	0	3
	12:30 PM	142	7	59	5	2	6	7	276	40	25	216	5	790	0	0	3	0	3
	12:45 PM	134	6	60	12	4	11	6	306	36	27	182	11	795	0	0	5	0	5
	VOLUMES	1,022	85	455	52	25	50	61	2,025	274	226	1,457	111	5,843	0	0	29	0	29
	APPROACH %	65%	5%	29%	41%	20%	39%	3%	86%	12%	13%	81%	6%						
	APP/DEPART	1,562	/	228	127	/	525	2,360	/	2,532	1,794	/	2,558	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	564	33	235	31	16	29	28	1,098	153	116	806	48	3,157					
	APPROACH %	68%	4%	28%	41%	21%	38%	2%	86%	12%	12%	83%	5%						
	PEAK HR FACTOR		0.904			0.704			0.919			0.901		0.952					
	APP/DEPART	832	/	92	76	/	285	1,279	/	1,364	970	/	1,416	0					
PM	03:00 PM	127	6	58	9	6	5	4	297	49	47	195	5	808	0	0	3	0	3
	3:15 PM	142	4	66	2	4	5	6	276	46	29	177	6	763	0	0	5	0	5
	3:30 PM	148	5	62	7	5	2	6	245	39	50	198	3	770	0	0	1	0	1
	3:45 PM	154	10	67	6	4	1	6	276	42	47	204	8	825	0	0	2	0	2
	4:00 PM	170	3	47	7	5	5	10	286	38	56	229	5	861	0	0	6	0	6
	4:15 PM	198	8	61	4	4	4	11	268	33	39	239	5	874	0	0	5	0	5
	4:30 PM	153	6	44	2	2	5	6	267	37	41	238	3	804	0	0	3	0	3
	4:45 PM	130	6	56	4	1	2	8	276	21	39	180	2	725	0	0	6	0	6
	VOLUMES	1,222	48	461	41	31	29	57	2,191	305	348	1,660	37	6,430	0	0	31	0	31
	APPROACH %	71%	3%	27%	41%	31%	29%	2%	86%	12%	17%	81%	2%						
	APP/DEPART	1,731	/	111	101	/	684	2,553	/	2,693	2,045	/	2,942	0					
	BEGIN PEAK HR		3:45 PM																
	VOLUMES	675	27	219	19	15	15	33	1,097	150	183	910	21	3,364					
	APPROACH %	73%	3%	24%	39%	31%	31%	3%	86%	12%	16%	82%	2%						
	PEAK HR FACTOR		0.862			0.721			0.958			0.960		0.962					
	APP/DEPART	921	/	65	49	/	348	1,280	/	1,335	1,114	/	1,616	0					



		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:00 AM	1	0	1	0	0	0	0	0	1	1	0	0	4
	7:15 AM	0	0	1	0	0	0	0	1	0	0	0	0	2
	7:30 AM	0	0	0	0	0	0	0	1	1	0	1	1	4
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	5	2	0	1	0	8
	8:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	0	0	1	0	0	0	0	3	1	0	1	0	6
	8:45 AM	1	1	1	0	0	1	0	1	0	0	0	0	5
	TOTAL	3	1	4	0	0	1	0	11	5	1	3	1	30
MD	11:00 AM	0	1	0	0	0	0	0	1	0	0	1	0	3
	11:15 AM	0	0	0	0	0	0	0	2	0	0	2	0	4
	11:30 AM	1	0	0	0	0	0	0	0	2	0	0	0	3
	11:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
	12:15 PM	1	0	0	0	0	0	0	1	1	0	1	0	4
	12:30 PM	0	1	0	0	0	0	0	0	1	0	0	2	4
	12:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	2
	TOTAL	2	2	0	0	0	0	0	4	5	0	5	4	22
PM	3:00 PM	0	0	0	0	0	0	0	2	3	0	0	0	5
	3:15 PM	0	0	0	0	0	0	0	1	1	0	0	2	4
	3:30 PM	1	0	0	0	0	0	0	1	0	0	0	0	2
	3:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	2
	4:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
	4:15 PM	3	0	0	0	0	0	0	0	0	0	1	1	5
	4:30 PM	0	0	0	0	0	0	0	1	1	0	0	0	2
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	4	0	0	0	0	0	0	7	6	0	1	4	22



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Mar 16, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Hwy 101 SB
EAST & WEST: Madonna

PROJECT #: SC0843
LOCATION #: 84
CONTROL: SIGNAL

NOTES:

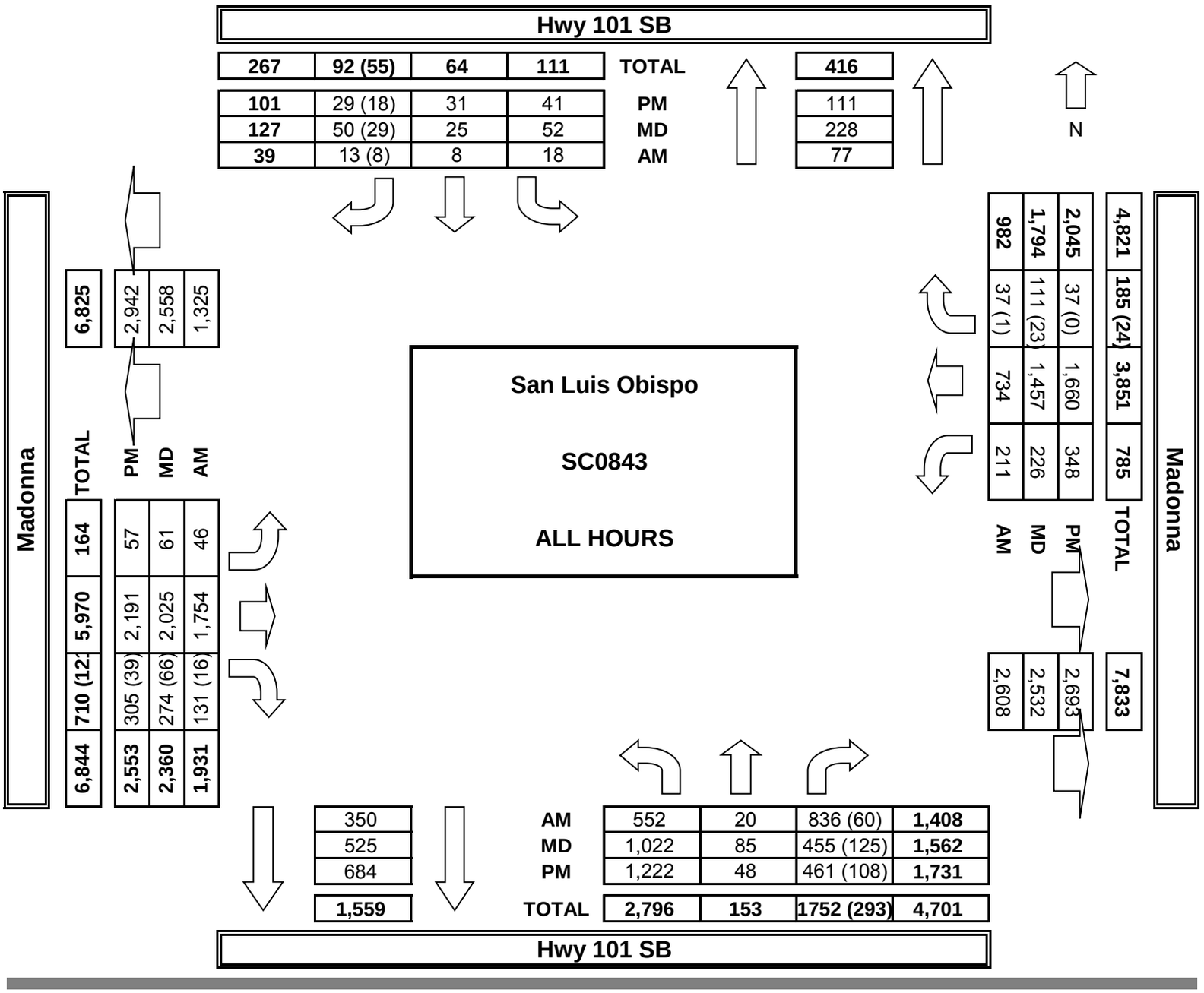
AM
PM
MD
OTHER
OTHER

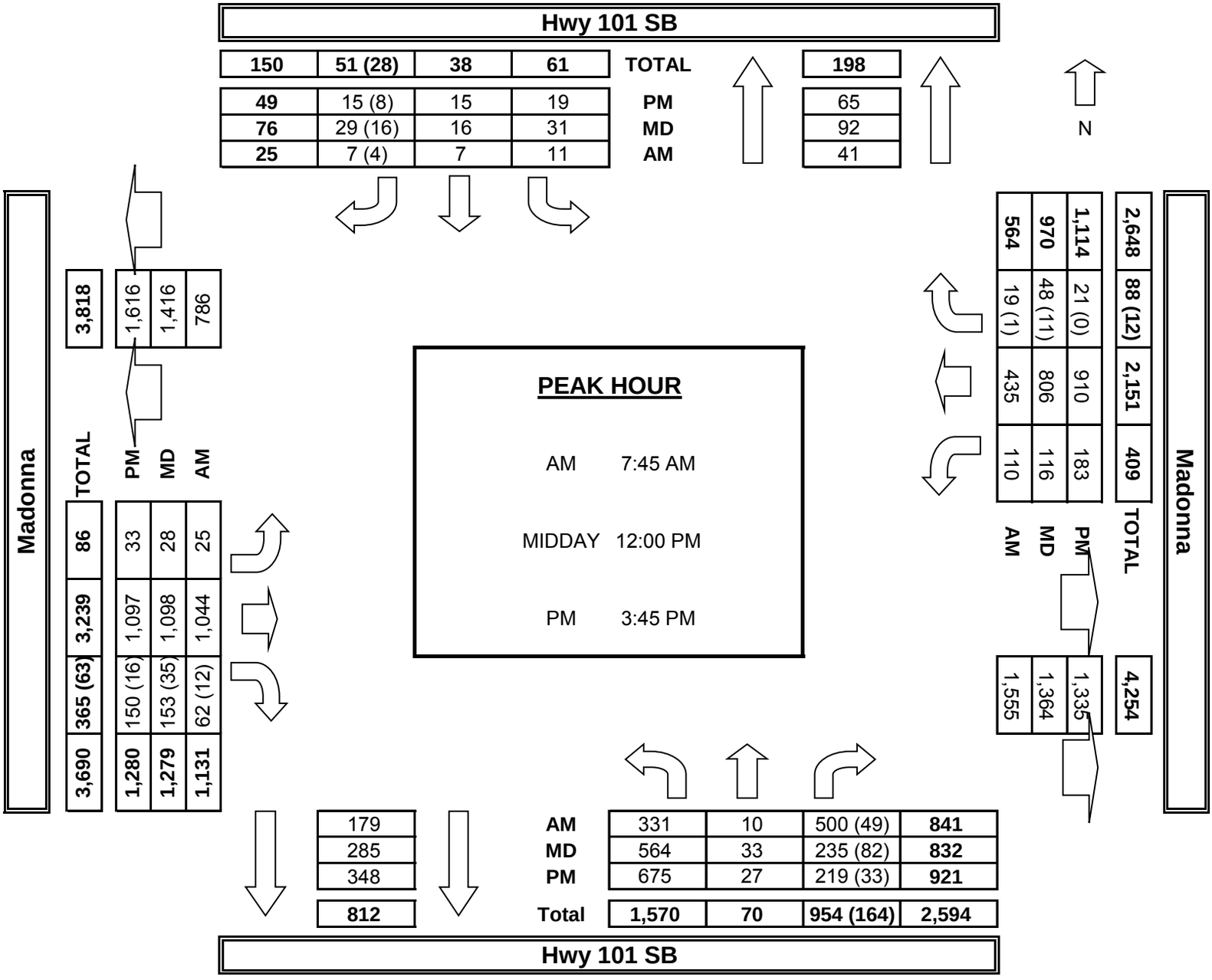
▲ N
◄ W
E ►
S ▼

		NORTHBOUND Hwy 101 SB			SOUTHBOUND Hwy 101 SB			EASTBOUND Madonna			WESTBOUND Madonna			
	LANES:	NL 1.5	NT 0.5	NR 1	SL 1.5	ST 0.5	SR 1	EL 1	ET 2.5	ER 0.5	WL 1	WT 2.5	WR 0.5	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
	7:15 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
	7:30 AM	0	0	0	0	0	0	0	5	0	0	1	0	6
	7:45 AM	0	1	0	0	0	0	0	2	0	0	0	0	3
	8:00 AM	0	0	1	0	0	1	0	3	0	0	1	0	6
	8:15 AM	0	0	0	0	0	0	0	3	0	0	1	1	5
	8:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
	8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
	VOLUMES	0	1	1	0	0	1	0	19	0	0	5	1	28
	APPROACH %	0%	50%	50%	0%	0%	100%	0%	100%	0%	0%	83%	17%	
	APP/DEPART	2	/	2	1	/	0	19	/	20	6	/	6	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	1	1	0	0	1	0	13	0	0	3	1	20
	APPROACH %	0%	50%	50%	0%	0%	100%	0%	100%	0%	0%	75%	25%	
	PEAK HR FACTOR		0.500			0.250			0.650			0.500		0.833
	APP/DEPART	2	/	2	1	/	0	13	/	14	4	/	4	0
MD	11:00 AM	0	0	0	0	0	0	0	2	0	0	1	0	3
	11:15 AM	0	0	0	3	0	0	1	5	0	0	3	0	12
	11:30 AM	0	0	0	0	0	0	0	1	0	0	3	0	4
	11:45 AM	0	0	0	0	0	1	0	1	0	0	3	0	5
	12:00 PM	0	0	0	0	0	0	0	2	0	0	1	0	3
	12:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	3
	12:30 PM	0	0	0	0	0	0	2	2	0	0	1	0	5
	12:45 PM	0	0	0	0	0	0	0	3	0	0	1	0	4
	VOLUMES	0	0	0	3	0	1	3	19	0	0	13	0	39
	APPROACH %	0%	0%	0%	75%	0%	25%	14%	86%	0%	0%	100%	0%	
	APP/DEPART	0	/	3	4	/	0	22	/	22	13	/	14	0
	BEGIN PEAK HR		11:00 AM											
	VOLUMES	0	0	0	3	0	1	1	9	0	0	10	0	24
	APPROACH %	0%	0%	0%	75%	0%	25%	10%	90%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.333			0.417			0.833		0.500
	APP/DEPART	0	/	1	4	/	0	10	/	12	10	/	11	0
PM	03:00 PM	0	0	0	0	0	0	0	2	0	0	3	0	5
	3:15 PM	0	0	0	0	0	0	0	4	0	0	2	0	6
	3:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
	3:45 PM	0	0	0	0	0	0	1	1	0	0	4	0	6
	4:00 PM	0	0	0	0	0	1	1	2	0	0	0	0	4
	4:15 PM	0	0	0	0	0	0	0	1	0	0	3	0	4
	4:30 PM	1	0	0	0	0	0	1	1	0	0	4	0	7
	4:45 PM	0	0	0	0	0	4	0	2	0	0	2	0	8
	VOLUMES	1	0	0	0	0	5	3	14	0	0	19	0	42
	APPROACH %	100%	0%	0%	0%	0%	100%	18%	82%	0%	0%	100%	0%	
	APP/DEPART	1	/	3	5	/	0	17	/	14	19	/	25	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	1	0	0	0	0	5	2	6	0	0	9	0	23
	APPROACH %	100%	0%	0%	0%	0%	100%	25%	75%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.250			0.313			0.667			0.563		0.719
	APP/DEPART	1	/	2	5	/	0	8	/	6	9	/	15	0

AimTD LLC

TURNING MOVEMENT COUNTS




Hwy 101 SB
150
51 (28)
38
61
TOTAL
198
49
15 (8)
15
19
PM
65
76
29 (16)
16
31
MD
92
25
7 (4)
7
11
AM
41
N
Madonna
3,818
1,616
1,416
786
TOTAL
PM
MD
AM
86
33
28
25
3,239
1,097
1,098
1,044
365 (63)
150 (16)
153 (35)
62 (12)
3,690
1,280
1,279
1,131
PEAK HOUR
AM 7:45 AM
MIDDAY 12:00 PM
PM 3:45 PM
564
970
1,114
2,648
19 (1)
48 (11)
21 (0)
88 (12)
435
806
910
2,151
110
116
183
409
AM
MD
PM
TOTAL
1,555
1,364
1,335
4,254
Madonna
179
285
348
812
AM
MD
PM
Total
331
564
675
1,570
10
33
27
70
500 (49)
235 (82)
219 (33)
954 (164)
841
832
921
2,594
Hwy 101 SB

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Mar 16, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Hwy 101 NB
EAST & WEST: Madonna

PROJECT #: SC0843
LOCATION #: 83
CONTROL: SIGNAL

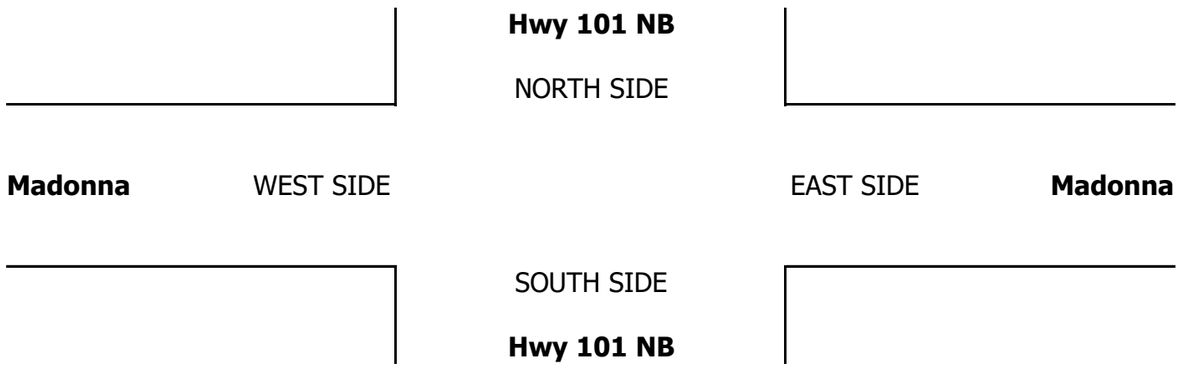
NOTES:

AM PM MD OTHER OTHER

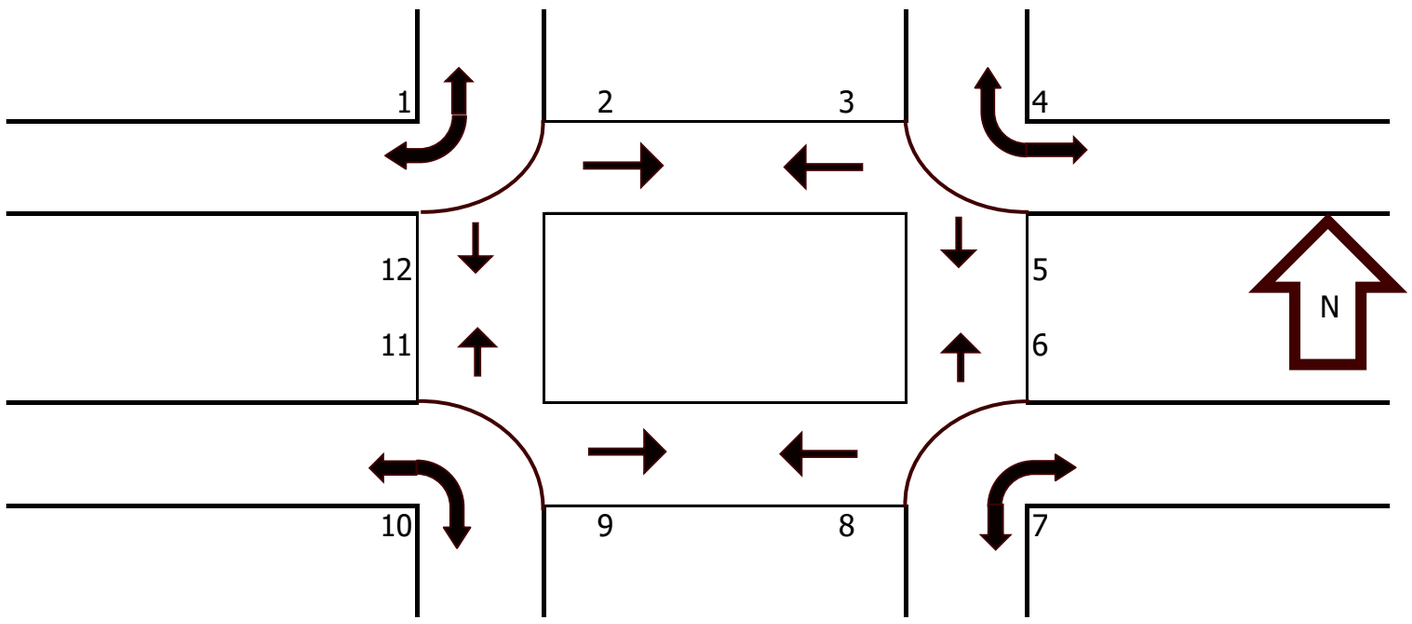
N ▲ ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Hwy 101 NB			SOUTHBOUND Hwy 101 NB			EASTBOUND Madonna			WESTBOUND Madonna				U-TURNS				
	LANES:	NL 1	NT 0.5	NR 0.5	SL X	ST X	SR X	EL 2	ET 2	ER X	WL X	WT 2	WR 0	TOTAL	NB X	SB X	EB X	WB X	TTL
AM	7:00 AM	16	0	29	0	0	0	45	117	0	0	59	11	277	0	0	0	0	0
	7:15 AM	26	0	30	0	0	0	72	169	0	0	74	12	383	0	0	0	0	0
	7:30 AM	24	1	40	0	0	0	135	201	0	0	83	23	507	0	0	0	0	0
	7:45 AM	25	0	47	0	0	0	164	321	0	0	144	20	721	0	0	0	0	0
	8:00 AM	29	1	49	0	0	0	114	255	0	0	117	25	590	0	0	1	0	1
	8:15 AM	31	2	32	0	0	0	100	255	0	0	110	25	555	0	0	0	0	0
	8:30 AM	15	0	48	0	0	0	104	218	0	0	95	34	514	0	0	0	0	0
	8:45 AM	29	0	41	0	0	0	131	191	0	0	115	26	533	0	0	0	0	0
	VOLUMES	195	4	316	0	0	0	865	1,727	0	0	797	176	4,080	0	0	1	0	1
	APPROACH %	38%	1%	61%	0%	0%	0%	33%	67%	0%	0%	82%	18%						
	APP/DEPART	515	/	1,044	0	/	0	2,592	/	2,043	973	/	993	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	100	3	176	0	0	0	482	1,049	0	0	466	104	2,380					
	APPROACH %	36%	1%	63%	0%	0%	0%	31%	69%	0%	0%	82%	18%						
	PEAK HR FACTOR		0.883			0.000			0.789			0.869		0.825					
	APP/DEPART	279	/	588	0	/	0	1,531	/	1,225	570	/	567	0					
MD	11:00 AM	35	1	25	0	0	0	111	161	0	0	152	29	514	0	0	0	0	0
	11:15 AM	35	0	36	0	0	0	95	151	0	0	168	34	519	0	0	0	0	0
	11:30 AM	37	0	33	0	0	0	132	197	0	0	164	22	585	0	0	0	0	0
	11:45 AM	51	1	33	0	0	0	115	171	0	0	182	25	578	0	0	0	0	0
	12:00 PM	65	0	21	0	0	0	132	213	0	0	219	29	679	0	0	0	0	0
	12:15 PM	53	0	32	0	0	0	129	189	0	0	163	34	600	0	0	0	0	0
	12:30 PM	57	0	21	0	0	0	119	199	0	0	191	35	622	0	0	0	0	0
	12:45 PM	48	0	33	0	0	0	159	220	0	0	181	29	670	0	0	0	0	0
	VOLUMES	381	2	234	0	0	0	992	1,501	0	0	1,420	237	4,767	0	0	0	0	0
	APPROACH %	62%	0%	38%	0%	0%	0%	40%	60%	0%	0%	86%	14%						
	APP/DEPART	617	/	1,231	0	/	0	2,493	/	1,735	1,657	/	1,801	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	223	0	107	0	0	0	539	821	0	0	754	127	2,571					
	APPROACH %	68%	0%	32%	0%	0%	0%	40%	60%	0%	0%	86%	14%						
	PEAK HR FACTOR		0.959			0.000			0.897			0.888		0.947					
	APP/DEPART	330	/	666	0	/	0	1,360	/	928	881	/	977	0					
PM	04:00 PM	40	0	35	0	0	0	158	184	0	0	211	45	673	0	0	0	0	0
	4:15 PM	43	1	28	0	0	0	109	230	0	0	188	39	638	0	0	0	0	0
	4:30 PM	45	0	31	0	0	0	117	171	0	0	213	55	632	0	0	0	0	0
	4:45 PM	56	0	33	0	0	0	149	208	0	0	224	43	713	0	0	0	0	0
	5:00 PM	50	0	32	0	0	0	131	191	0	0	249	56	709	0	0	0	0	0
	5:15 PM	52	0	34	0	0	0	132	204	0	0	235	52	709	0	0	0	0	0
	5:30 PM	56	0	36	0	0	0	143	174	0	0	226	41	676	0	0	0	0	0
	5:45 PM	44	1	31	0	0	0	152	187	0	0	179	27	621	0	0	0	0	0
	VOLUMES	386	2	260	0	0	0	1,091	1,549	0	0	1,725	358	5,371	0	0	0	0	0
	APPROACH %	60%	0%	40%	0%	0%	0%	41%	59%	0%	0%	83%	17%						
	APP/DEPART	648	/	1,451	0	/	0	2,640	/	1,809	2,083	/	2,111	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	214	0	135	0	0	0	555	777	0	0	934	192	2,807					
	APPROACH %	61%	0%	39%	0%	0%	0%	42%	58%	0%	0%	83%	17%						
	PEAK HR FACTOR		0.948			0.000			0.933			0.923		0.984					
	APP/DEPART	349	/	747	0	/	0	1,332	/	912	1,126	/	1,148	0					



		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
	7:30 AM	0	1	0	0	0	0	0	0	1	0	0	0	2
	7:45 AM	0	0	0	0	0	1	0	0	1	0	0	0	2
	8:00 AM	0	0	0	0	0	4	1	0	4	0	0	0	9
	8:15 AM	0	0	0	0	0	0	0	1	2	0	0	0	3
	8:30 AM	0	0	0	0	0	2	0	0	2	0	0	0	4
	8:45 AM	0	0	0	0	0	0	0	1	1	0	0	0	2
	TOTAL	0	1	0	0	0	7	1	2	12	0	0	0	23
MD	11:00 AM	0	0	0	0	0	0	0	0	4	0	0	0	4
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30 AM	0	0	0	0	0	1	0	2	0	0	0	0	3
	11:45 AM	0	1	0	0	0	0	0	0	1	0	0	0	2
	12:00 PM	0	0	0	0	0	1	0	0	2	0	0	0	3
	12:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	12:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	2
	12:45 PM	0	0	0	0	0	1	0	0	1	0	0	0	2
	TOTAL	0	1	0	0	1	3	0	4	8	0	0	0	17
PM	4:00 PM	0	0	0	0	0	0	0	4	1	0	0	0	5
	4:15 PM	1	0	0	0	0	0	0	0	1	0	0	0	2
	4:30 PM	1	0	0	0	0	0	0	1	1	0	0	0	3
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	1	0	0	1	0	0	0	1	0	0	0	3
	5:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
	5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	2	1	0	0	1	0	0	6	5	0	0	0	15



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

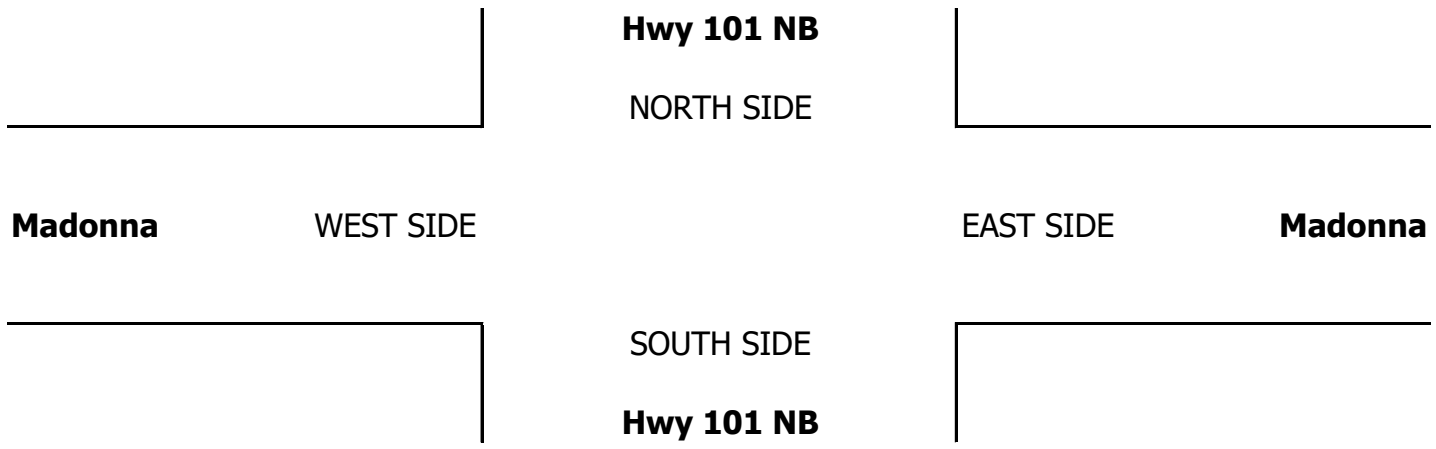
DATE:				
Wed, Mar 16, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
	NORTH & SOUTH:	Hwy 101 NB	LOCATION #:	83
	EAST & WEST:	Madonna	CONTROL:	SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

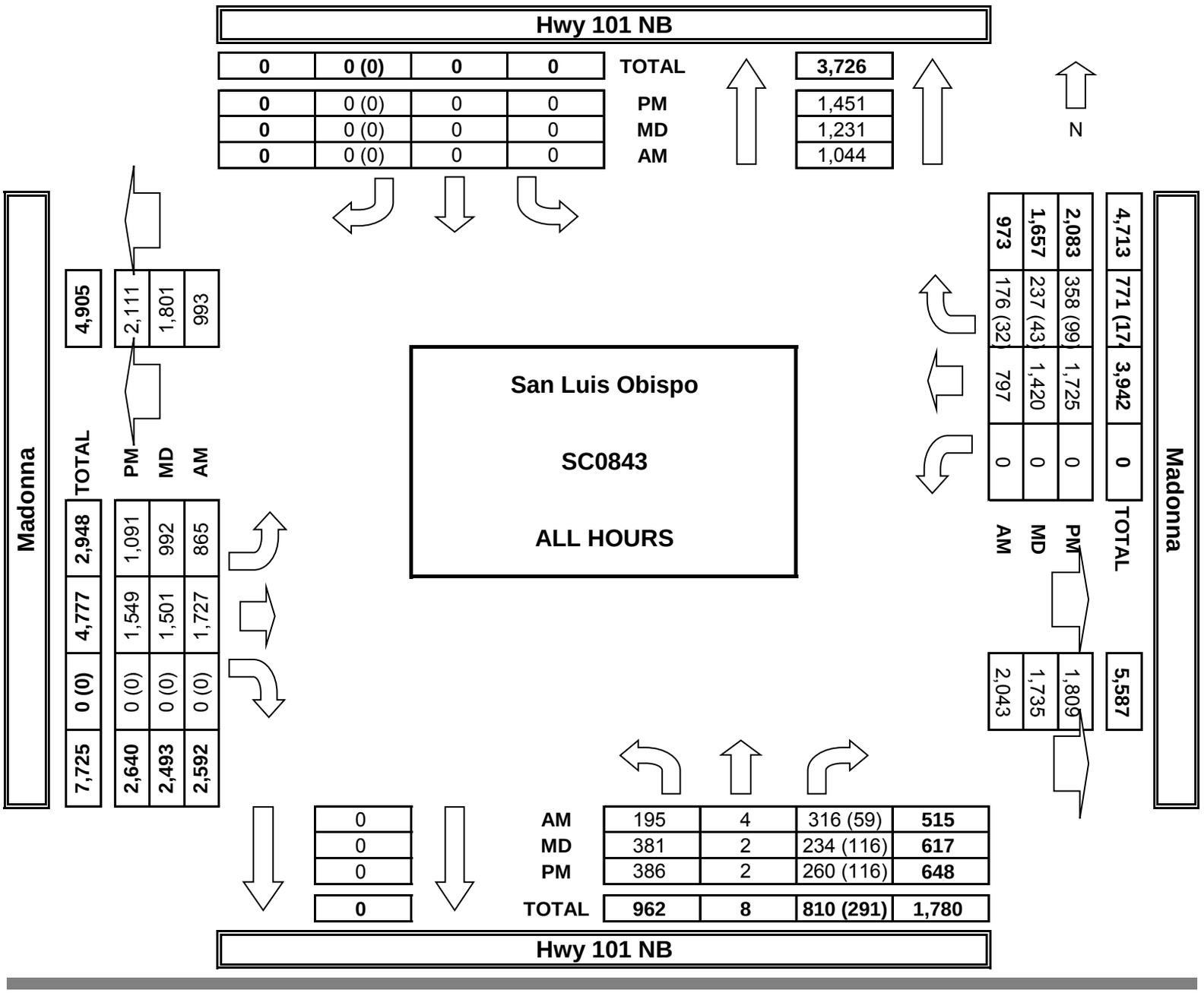
▲ N
◄ W E ►
S ▼

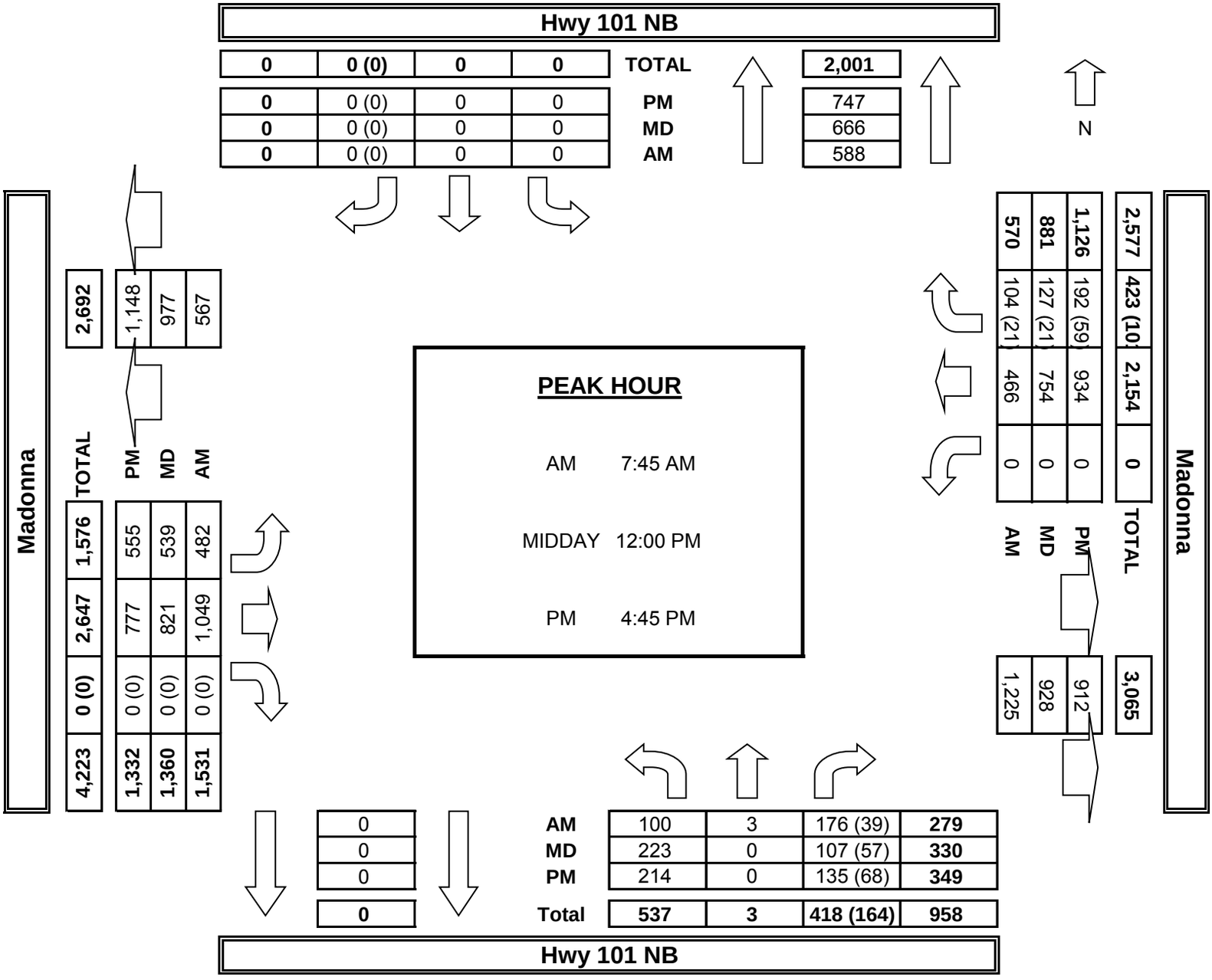
		NORTHBOUND Hwy 101 NB			SOUTHBOUND Hwy 101 NB			EASTBOUND Madonna			WESTBOUND Madonna			
	LANES:	NL 1	NT 0.5	NR 0.5	SL X	ST X	SR X	EL 2	ET 2	ER X	WL X	WT 2	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
	7:15 AM	0	0	0	0	0	0	0	2	0	0	1	0	3
	7:30 AM	0	0	0	0	0	0	0	5	0	0	1	0	6
	7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
	8:00 AM	0	0	0	0	0	0	0	3	0	0	1	0	4
	8:15 AM	0	0	0	0	0	0	0	1	0	0	2	0	3
	8:30 AM	0	0	0	0	0	0	0	3	0	0	2	0	5
	8:45 AM	0	0	0	0	0	0	0	3	0	0	0	0	3
	VOLUMES	0	0	0	0	0	0	0	20	0	0	8	0	28
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	0	/	0	20	/	20	8	/	8	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	0	0	0	0	0	0	10	0	0	5	0	15
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.500			0.625		0.625
	APP/DEPART	0	/	0	0	/	0	10	/	10	5	/	5	0
MD	11:00 AM	0	0	0	0	0	0	0	2	0	0	2	1	5
	11:15 AM	0	0	0	0	0	0	0	6	0	0	2	0	8
	11:30 AM	0	0	0	0	0	0	0	1	0	0	3	0	4
	11:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	12:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	12:15 PM	0	0	0	0	0	0	0	2	0	0	1	0	3
	12:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	3
	12:45 PM	0	0	0	0	0	0	0	3	0	0	1	0	4
	VOLUMES	0	0	0	0	0	0	0	17	0	0	11	1	29
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	92%	8%	
	APP/DEPART	0	/	1	0	/	0	17	/	17	12	/	11	0
	BEGIN PEAK HR		11:00 AM											
	VOLUMES	0	0	0	0	0	0	0	9	0	0	8	1	18
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	89%	11%	
	PEAK HR FACTOR		0.000			0.000			0.375			0.750		0.563
	APP/DEPART	0	/	1	0	/	0	9	/	9	9	/	8	0
PM	04:00 PM	0	0	0	0	0	0	0	2	0	0	3	0	5
	4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
	4:45 PM	0	0	0	0	0	0	0	2	0	0	6	0	8
	5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	5:15 PM	0	0	0	0	0	0	0	1	0	0	2	0	3
	5:30 PM	0	1	0	0	0	1	0	1	0	0	3	0	6
	5:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	3
	VOLUMES	0	1	0	0	0	1	0	9	0	0	18	0	29
	APPROACH %	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	1	/	1	1	/	0	9	/	9	18	/	19	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	0	1	0	0	0	1	0	5	0	0	11	0	18
	APPROACH %	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.250			0.250			0.625			0.458		0.563
	APP/DEPART	1	/	1	1	/	0	5	/	5	11	/	12	0



AimTD LLC

TURNING MOVEMENT COUNTS




Hwy 101 NB
0
0 (0)
0
0
TOTAL
2,001
0
0 (0)
0
0
PM
747
0
0 (0)
0
0
MD
666
0
0 (0)
0
0
AM
588
N
Madonna
2,692
1,148
977
567
TOTAL
PM
MD
AM
1,576
555
539
482
2,647
777
821
1,049
0 (0)
0 (0)
0 (0)
0 (0)
4,223
1,332
1,360
1,531
PEAK HOUR
AM 7:45 AM
MIDDAY 12:00 PM
PM 4:45 PM
1,126
192 (59)
934
0
881
127 (21)
754
0
570
104 (21)
466
0
2,577
423 (10)
2,154
0
TOTAL
PM
MD
AM
Madonna
912
928
1,225
3,065
0
0
0
0
AM
100
3
176 (39)
279
MD
223
0
107 (57)
330
PM
214
0
135 (68)
349
Total
537
3
418 (164)
958
Hwy 101 NB

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Mar 16, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Los Osos
EAST & WEST: Hwy 101 SB

PROJECT #: SC0843
LOCATION #: 81
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Los Osos			SOUTHBOUND Los Osos			EASTBOUND Hwy 101 SB			WESTBOUND Hwy 101 SB				U-TURNS				
	LANES:	NL 1	NT 2	NR X	SL X	ST 1	SR 1	EL X	ET X	ER X	WL 1	WT 0.5	WR 0.5	TOTAL	NB X	SB X	EB X	WB 0	TTL
AM	7:30 AM	3	147	0	0	117	84	0	0	0	86	0	36	473	0	0	0	0	0
	7:45 AM	7	214	0	0	140	89	0	0	0	99	1	79	629	0	0	0	0	0
	8:00 AM	4	192	0	0	173	85	0	0	0	83	0	43	580	0	0	0	0	0
	8:15 AM	2	172	0	0	133	89	0	0	0	88	1	46	531	0	0	0	0	0
	8:30 AM	9	146	0	0	142	74	0	0	0	98	0	49	518	0	0	0	0	0
	8:45 AM	8	180	0	0	168	79	0	0	0	67	0	52	554	0	0	0	0	0
	9:00 AM	10	180	0	0	148	64	0	0	0	58	0	45	505	0	0	0	0	0
	9:15 AM	4	140	0	0	111	75	0	0	0	43	0	61	434	0	0	0	0	0
	VOLUMES	47	1,371	0	0	1,132	639	0	0	0	622	2	411	4,224	0	0	0	0	0
	APPROACH %	3%	97%	0%	0%	64%	36%	0%	0%	0%	60%	0%	40%						
	APP/DEPART	1,418	/	1,782	1,771	/	1,754	0	/	0	1,035	/	688	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	22	724	0	0	588	337	0	0	0	368	2	217	2,258					
	APPROACH %	3%	97%	0%	0%	64%	36%	0%	0%	0%	63%	0%	37%						
	PEAK HR FACTOR		0.844			0.896			0.000			0.820		0.897					
	APP/DEPART	746	/	941	925	/	956	0	/	0	587	/	361	0					
MD	11:00 AM	16	228	0	0	140	97	0	0	0	31	0	82	594	0	0	0	0	0
	11:15 AM	13	210	0	0	162	96	0	0	0	26	0	86	593	0	0	0	0	0
	11:30 AM	9	249	0	0	152	105	0	0	0	47	0	91	653	0	0	0	0	0
	11:45 AM	10	228	0	0	154	120	0	0	0	43	2	102	659	0	0	0	0	0
	12:00 PM	16	247	0	0	184	126	0	0	0	42	0	84	699	0	0	0	0	0
	12:15 PM	10	239	0	0	153	125	0	0	0	50	0	88	665	0	0	0	0	0
	12:30 PM	11	213	0	0	180	120	0	0	0	42	1	80	647	0	0	0	0	0
	12:45 PM	12	270	0	0	184	114	0	0	0	33	0	86	699	0	0	0	0	0
	VOLUMES	97	1,884	0	0	1,309	903	0	0	0	314	3	699	5,209	0	0	0	0	0
	APPROACH %	5%	95%	0%	0%	59%	41%	0%	0%	0%	31%	0%	69%						
	APP/DEPART	1,981	/	2,583	2,212	/	1,623	0	/	0	1,016	/	1,003	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	49	969	0	0	701	485	0	0	0	167	1	338	2,710					
	APPROACH %	5%	95%	0%	0%	59%	41%	0%	0%	0%	33%	0%	67%						
	PEAK HR FACTOR		0.902			0.956			0.000			0.917		0.969					
	APP/DEPART	1,018	/	1,307	1,186	/	868	0	/	0	506	/	535	0					
PM	04:00 PM	9	261	0	0	195	164	0	0	0	61	0	115	805	0	0	0	0	0
	4:15 PM	10	247	0	0	186	155	0	0	0	42	0	85	725	0	0	0	0	0
	4:30 PM	11	280	0	0	164	138	0	0	0	39	2	83	717	0	0	0	0	0
	4:45 PM	13	261	0	0	168	149	0	0	0	42	0	94	727	0	0	0	0	0
	5:00 PM	12	314	0	0	193	153	0	0	0	51	0	90	813	0	0	0	0	0
	5:15 PM	15	347	0	0	187	174	0	0	0	64	0	92	879	0	0	0	0	0
	5:30 PM	13	267	0	0	167	162	0	0	0	34	0	72	715	0	0	0	0	0
	5:45 PM	11	243	0	0	178	128	0	0	0	42	0	77	679	0	0	0	0	0
	VOLUMES	94	2,220	0	0	1,438	1,223	0	0	0	375	2	708	6,060	0	0	0	0	0
	APPROACH %	4%	96%	0%	0%	54%	46%	0%	0%	0%	35%	0%	65%						
	APP/DEPART	2,314	/	2,928	2,661	/	1,813	0	/	0	1,085	/	1,319	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	51	1,202	0	0	712	614	0	0	0	196	2	359	3,136					
	APPROACH %	4%	96%	0%	0%	54%	46%	0%	0%	0%	35%	0%	64%						
	PEAK HR FACTOR		0.865			0.918			0.000			0.893		0.892					
	APP/DEPART	1,253	/	1,561	1,326	/	908	0	/	0	557	/	667	0					

Los Osos

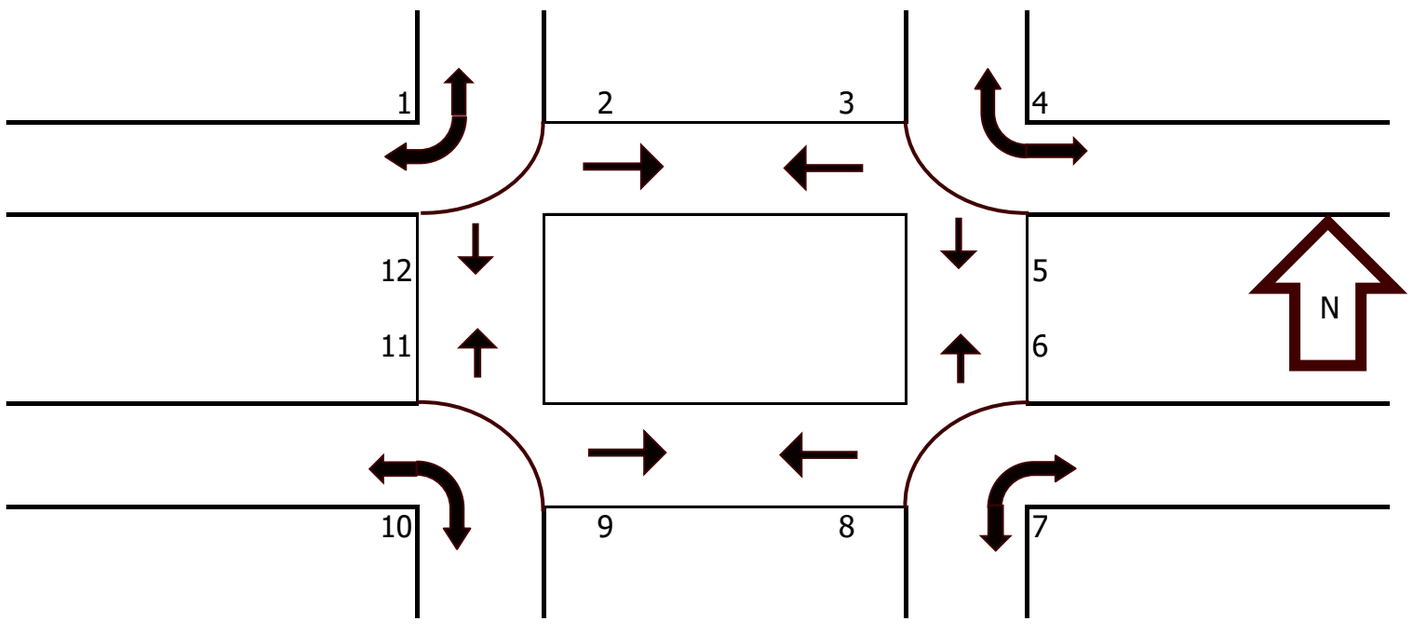
NORTH SIDE

Hwy 101 SB WEST SIDE EAST SIDE **Hwy 101 SB**

SOUTH SIDE

Los Osos

		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:30 AM	0	0	0	0	1	0	0	0	1	0	1	1	4
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	2	0	0	0	1	0	1	1	5
MD	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	2
	11:45 AM	0	0	0	0	1	0	0	0	0	0	0	1	2
	12:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	TOTAL	0	0	0	0	4	1	0	0	0	0	0	1	6
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	2	2	0	0	0	0	0	1	5
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
	5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	TOTAL	0	0	0	0	4	2	0	0	0	0	0	2	8



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Mar 16, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Los Osos
EAST & WEST: Hwy 101 SB

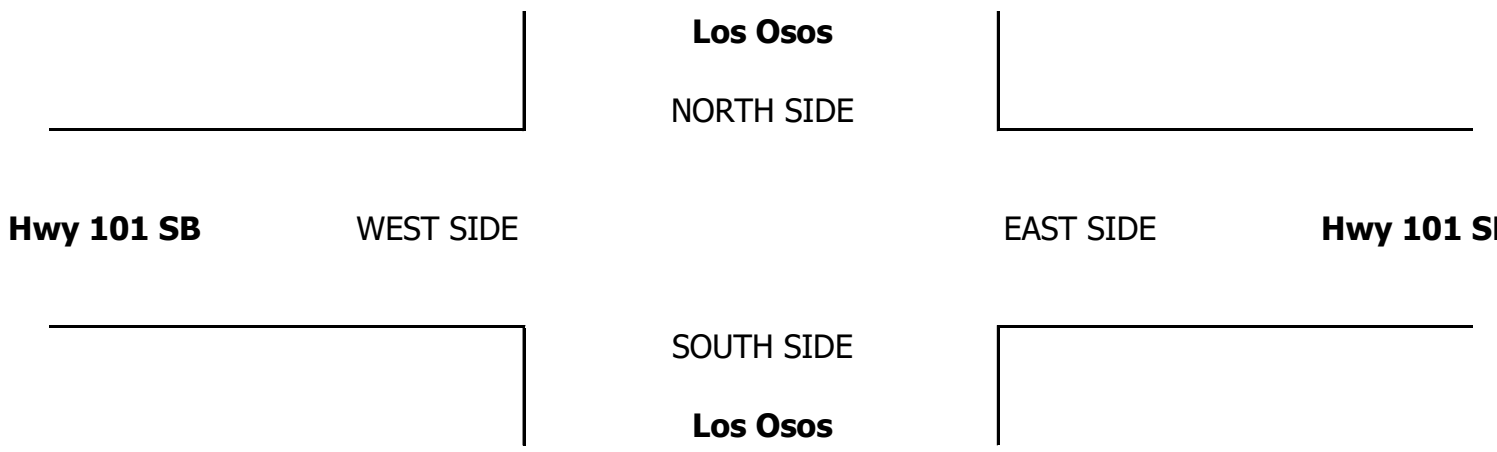
PROJECT #: SC0843
LOCATION #: 81
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

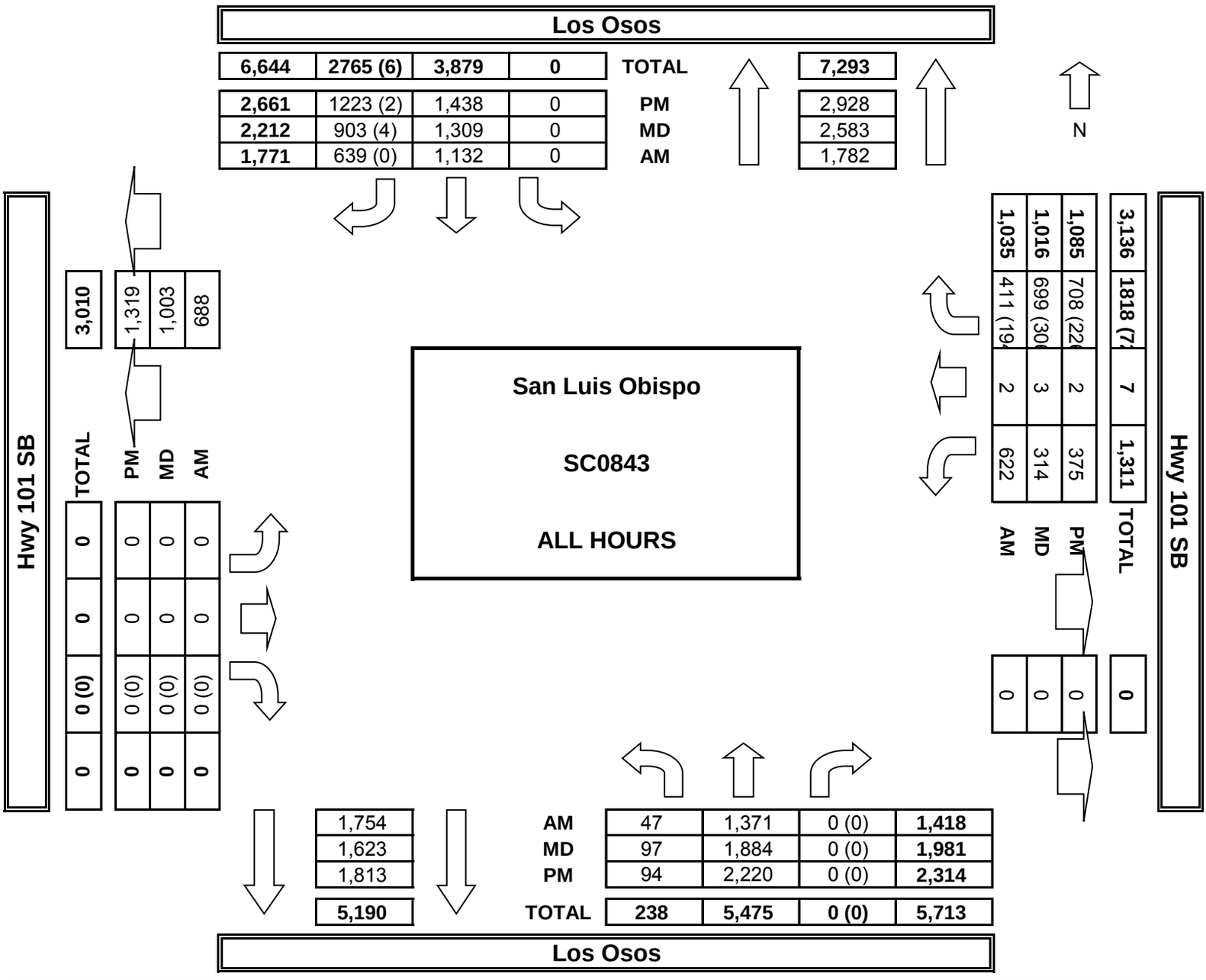
▲ N
◄ W
E ►
S ▼

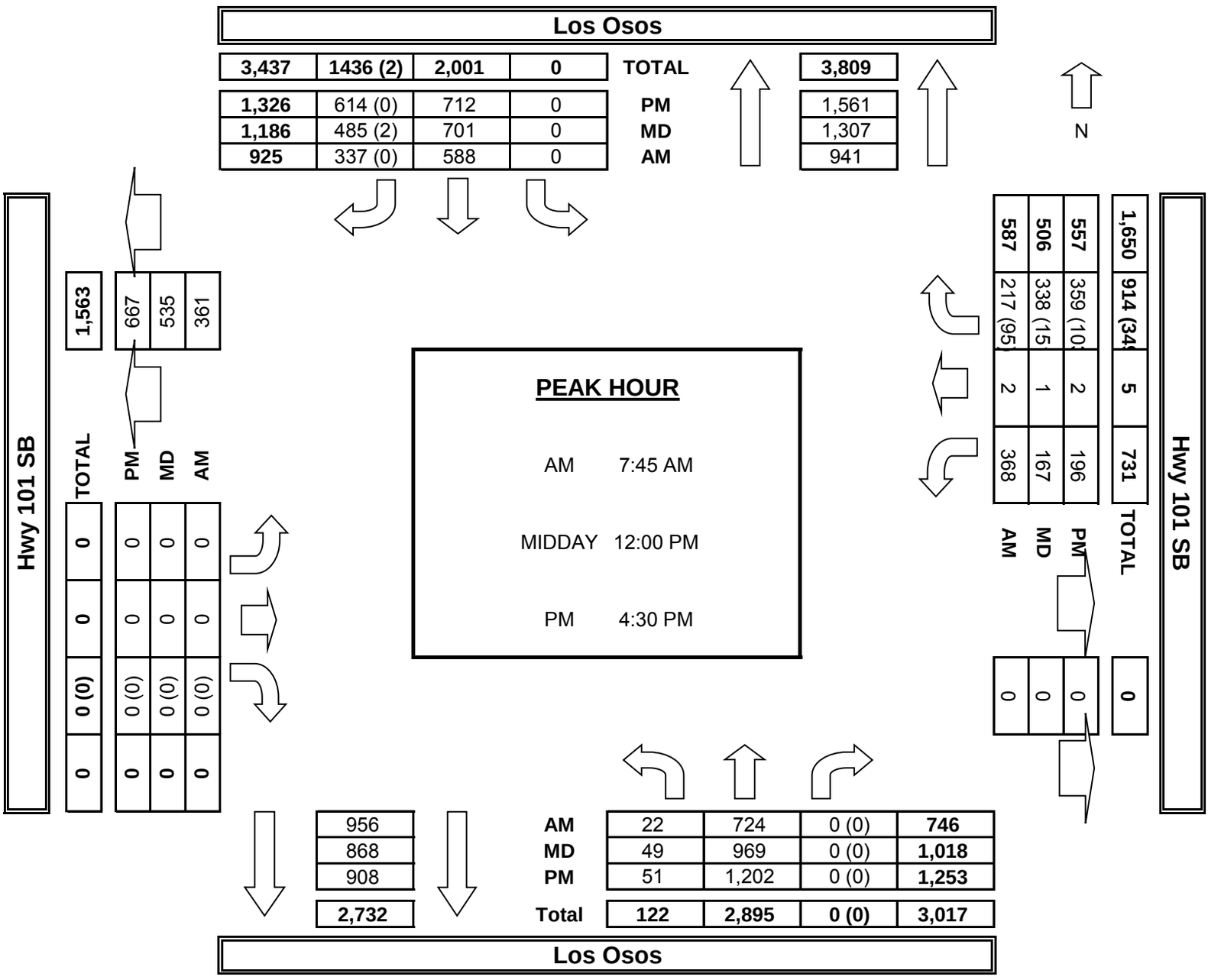
		NORTHBOUND Los Osos			SOUTHBOUND Los Osos			EASTBOUND Hwy 101 SB			WESTBOUND Hwy 101 SB			
	LANES:	NL 1	NT 2	NR X	SL X	ST 1	SR 1	EL X	ET X	ER X	WL 1	WT 0.5	WR 0.5	TOTAL
AM	7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	8:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	8:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	9:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	3
	9:15 AM	0	1	0	0	3	0	0	0	0	0	0	0	4
	VOLUMES	0	5	0	0	10	0	0	0	0	0	0	0	15
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	5	/	5	10	/	10	0	/	0	0	/	0	0
	BEGIN PEAK HR		8:30 AM											
	VOLUMES	0	3	0	0	7	0	0	0	0	0	0	0	10
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.750			0.583			0.000			0.000		0.625
	APP/DEPART	3	/	3	7	/	7	0	/	0	0	/	0	0
MD	11:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	11:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	11:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	11:45 AM	0	4	0	0	0	0	0	0	0	0	0	0	4
	12:00 PM	0	2	0	0	3	0	0	0	0	0	0	0	5
	12:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	12:30 PM	0	7	0	0	1	0	0	0	0	0	0	0	8
	12:45 PM	0	1	0	0	3	2	0	0	0	0	0	0	6
	VOLUMES	0	16	0	0	10	2	0	0	0	0	0	0	28
	APPROACH %	0%	100%	0%	0%	83%	17%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	16	/	16	12	/	10	0	/	0	0	/	2	0
	BEGIN PEAK HR		12:00 PM											
	VOLUMES	0	11	0	0	7	2	0	0	0	0	0	0	20
	APPROACH %	0%	100%	0%	0%	78%	22%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.393			0.450			0.000			0.000		0.625
	APP/DEPART	11	/	11	9	/	7	0	/	0	0	/	2	0
PM	04:00 PM	0	1	0	0	2	0	0	0	0	0	0	0	3
	4:15 PM	0	1	0	0	3	0	0	0	0	0	0	0	4
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	5:15 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
	5:30 PM	0	4	0	0	2	0	0	0	0	0	0	0	6
	5:45 PM	0	0	0	0	4	0	0	0	0	0	0	0	4
	VOLUMES	0	10	0	0	12	0	0	0	0	0	0	0	22
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	10	/	10	12	/	12	0	/	0	0	/	0	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	0	7	0	0	7	0	0	0	0	0	0	0	14
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.438			0.438			0.000			0.000		0.583
	APP/DEPART	7	/	7	7	/	7	0	/	0	0	/	0	0



AimTD LLC

TURNING MOVEMENT COUNTS




Los Osos
3,437
1436 (2)
2,001
0
TOTAL
3,809
1,326
614 (0)
712
0
PM
1,561
1,186
485 (2)
701
0
MD
1,307
925
337 (0)
588
0
AM
941
N
Hwy 101 SB
1,563
667
535
361
TOTAL
PM
MD
AM
0
0
0
0
0
0
0
0
0
0 (0)
0 (0)
0 (0)
0
0
0
0
PEAK HOUR
AM 7:45 AM
MIDDAY 12:00 PM
PM 4:30 PM
1,650
914 (34
5
731
557
506
587
359 (10
338 (15
217 (95)
2
1
2
196
167
368
TOTAL
PM
MD
AM
0
0
0
0
Hwy 101 SB
956
868
908
2,732
AM
MD
PM
Total
22
49
51
122
724
969
1,202
2,895
0 (0)
0 (0)
0 (0)
0 (0)
746
1,018
1,253
3,017
Los Osos

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Mar 16, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Broad
EAST & WEST: Orcutt

PROJECT #: SC0843
LOCATION #: 11
CONTROL: SIGNAL

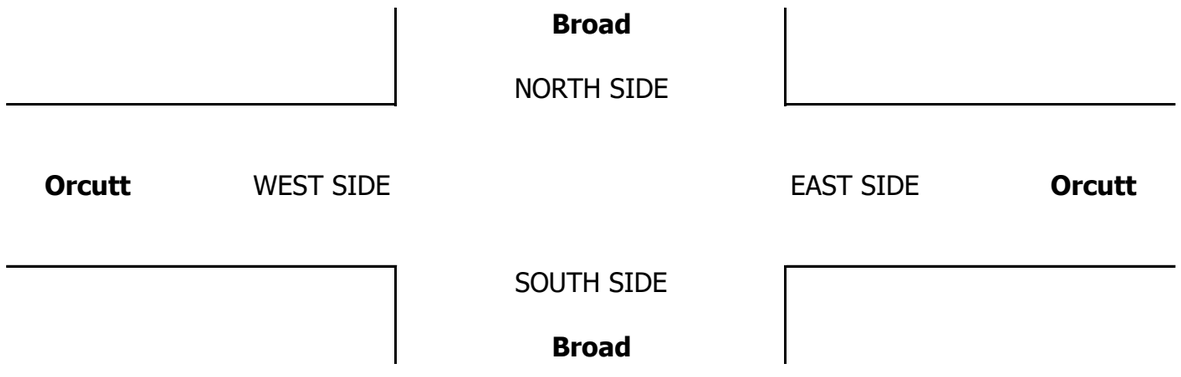
NOTES:

AM
PM
MD
OTHER
OTHER

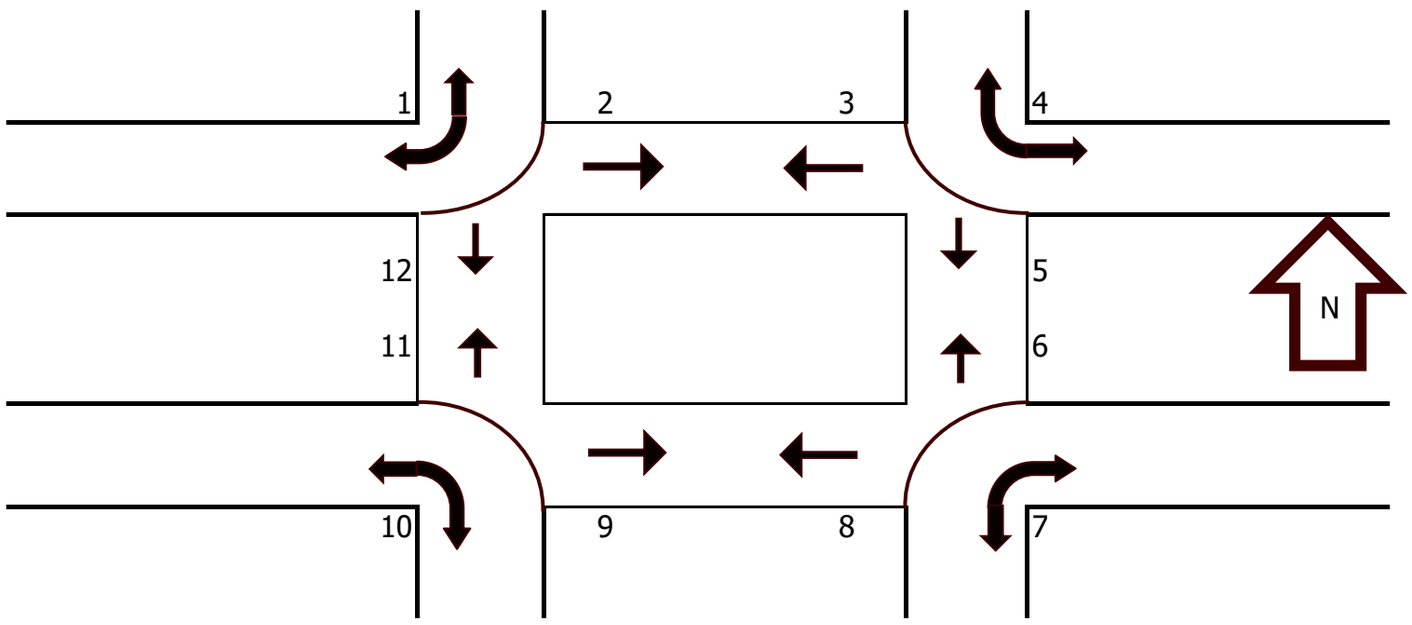
▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Broad			SOUTHBOUND Broad			EASTBOUND Orcutt			WESTBOUND Orcutt				U-TURNS				
	LANES:	NL 1	NT 2	NR 1	SL 2	ST 2	SR 0	EL 0.5	ET 0.5	ER 1	WL 1.5	WT 0.5	WR 1	TOTAL	NB 0	SB X	EB 0	WB X	TTL
AM	7:15 AM	0	127	36	43	113	0	0	0	1	42	1	43	406	0	0	0	1	1
	7:30 AM	0	146	47	54	150	1	1	0	1	51	0	71	522	0	0	0	0	0
	7:45 AM	7	207	62	101	256	1	0	1	1	61	2	99	798	3	0	0	0	3
	8:00 AM	4	154	66	71	250	2	1	1	2	75	3	74	703	3	0	0	0	3
	8:15 AM	1	152	69	86	226	0	1	1	1	73	2	66	678	1	0	0	0	1
	8:30 AM	3	152	55	63	219	2	2	1	2	64	2	72	637	1	0	0	0	1
	8:45 AM	4	158	58	73	255	0	1	0	3	44	2	56	654	3	0	0	1	4
	9:00 AM	3	156	48	58	197	6	2	1	1	43	1	45	561	1	0	0	0	1
	VOLUMES	22	1,252	441	549	1,666	12	8	5	12	453	13	526	4,959	12	0	0	2	14
	APPROACH %	1%	73%	26%	25%	75%	1%	32%	20%	48%	46%	1%	53%						
	APP/DEPART	1,715	/	1,786	2,227	/	2,141	25	/	997	992	/	35	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	15	665	252	321	951	5	4	4	6	273	9	311	2,816					
	APPROACH %	2%	71%	27%	25%	74%	0%	29%	29%	43%	46%	2%	52%						
	PEAK HR FACTOR		0.844			0.892			0.700			0.915		0.882					
	APP/DEPART	932	/	980	1,277	/	1,238	14	/	577	593	/	21	0					
MD	12:00 PM	12	250	46	80	194	3	12	1	10	95	11	90	804	1	0	0	0	1
	12:15 PM	9	238	51	71	187	1	13	4	1	49	6	51	681	3	0	0	0	3
	12:30 PM	15	254	40	75	211	5	2	5	8	59	4	73	751	6	0	0	0	6
	12:45 PM	8	199	45	90	232	2	3	11	9	71	2	66	738	7	0	0	0	7
	1:00 PM	10	234	38	77	222	0	5	1	8	65	2	87	749	4	0	0	0	4
	1:15 PM	7	209	42	107	252	2	12	3	3	48	6	77	768	3	0	0	0	3
	1:30 PM	19	258	43	81	217	4	2	7	8	65	4	77	785	7	0	0	0	7
	1:45 PM	6	220	46	93	244	2	3	10	8	65	3	63	763	5	0	0	0	5
	VOLUMES	86	1,862	351	674	1,759	19	52	42	55	517	38	584	6,039	36	0	0	0	36
	APPROACH %	4%	81%	15%	27%	72%	1%	35%	28%	37%	45%	3%	51%						
	APP/DEPART	2,299	/	2,498	2,452	/	2,367	149	/	1,067	1,139	/	107	0					
	BEGIN PEAK HR		1:00 PM																
	VOLUMES	42	921	169	358	935	8	22	21	27	243	15	304	3,065					
	APPROACH %	4%	81%	15%	28%	72%	1%	31%	30%	39%	43%	3%	54%						
	PEAK HR FACTOR		0.884			0.901			0.833			0.912		0.976					
	APP/DEPART	1,132	/	1,247	1,301	/	1,224	70	/	548	562	/	46	0					
PM	04:00 PM	6	197	59	90	224	1	4	3	5	86	4	77	756	0	0	0	0	0
	4:15 PM	12	209	58	96	237	3	3	2	8	81	3	56	768	4	0	0	0	4
	4:30 PM	5	273	57	77	186	1	3	2	7	91	5	85	792	1	0	0	0	1
	4:45 PM	5	289	45	89	221	1	6	4	6	65	4	86	821	1	0	0	0	1
	5:00 PM	11	246	42	101	229	2	12	6	8	92	3	122	874	2	0	0	0	2
	5:15 PM	7	312	65	78	248	1	9	1	3	76	2	113	915	1	0	0	0	1
	5:30 PM	11	268	72	89	210	2	6	3	4	76	4	77	822	3	0	0	0	3
	5:45 PM	3	211	53	86	195	0	6	4	9	70	5	59	701	0	0	0	0	0
	VOLUMES	60	2,005	451	706	1,750	11	49	25	50	637	30	675	6,449	12	0	0	0	12
	APPROACH %	2%	80%	18%	29%	71%	0%	40%	20%	40%	47%	2%	50%						
	APP/DEPART	2,516	/	2,729	2,467	/	2,449	124	/	1,182	1,342	/	89	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	34	1,115	224	357	908	6	33	14	21	309	13	398	3,432					
	APPROACH %	2%	81%	16%	28%	71%	0%	49%	21%	31%	43%	2%	55%						
	PEAK HR FACTOR		0.894			0.957			0.654			0.829		0.938					
	APP/DEPART	1,373	/	1,546	1,271	/	1,245	68	/	595	720	/	46	0					



		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:15 AM	0	2	2	0	0	0	0	0	0	0	0	0	4
	7:30 AM	0	1	3	0	1	2	0	0	0	0	0	0	7
	7:45 AM	0	0	1	0	1	1	0	0	0	0	0	1	4
	8:00 AM	0	3	2	0	1	2	0	0	0	0	1	1	10
	8:15 AM	0	2	0	0	0	0	0	0	0	0	1	0	3
	8:30 AM	0	2	2	0	0	1	0	0	0	0	0	0	5
	8:45 AM	0	1	2	0	0	0	0	0	0	0	0	0	3
	9:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	TOTAL	0	12	12	0	4	6	0	0	0	0	2	2	38
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	2
	12:15 PM	0	2	4	0	0	2	0	0	0	0	0	2	10
	12:30 PM	0	4	10	0	6	5	0	0	0	0	1	1	27
	12:45 PM	0	1	0	0	2	2	0	0	0	0	0	0	5
	1:00 PM	0	3	0	0	1	1	0	0	0	0	2	0	7
	1:15 PM	0	4	1	0	0	4	0	0	0	0	1	0	10
	1:30 PM	0	5	10	0	2	7	0	0	0	0	2	0	26
	1:45 PM	0	0	0	0	2	2	0	0	0	0	0	0	4
	TOTAL	0	19	25	0	13	23	0	0	0	0	7	4	91
PM	4:00 PM	0	2	0	0	3	1	0	0	0	0	0	0	6
	4:15 PM	0	1	0	0	1	3	0	0	0	0	0	2	7
	4:30 PM	0	5	1	0	0	2	0	0	0	0	2	0	10
	4:45 PM	0	0	2	0	0	1	0	0	0	0	2	0	5
	5:00 PM	0	5	1	0	3	3	0	0	0	0	0	0	12
	5:15 PM	0	2	8	0	0	3	0	1	0	0	1	1	16
	5:30 PM	1	5	3	0	1	2	0	0	0	0	1	0	13
	5:45 PM	0	2	0	0	0	1	0	0	0	0	0	1	4
	TOTAL	1	22	15	0	8	16	0	1	0	0	6	4	73



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

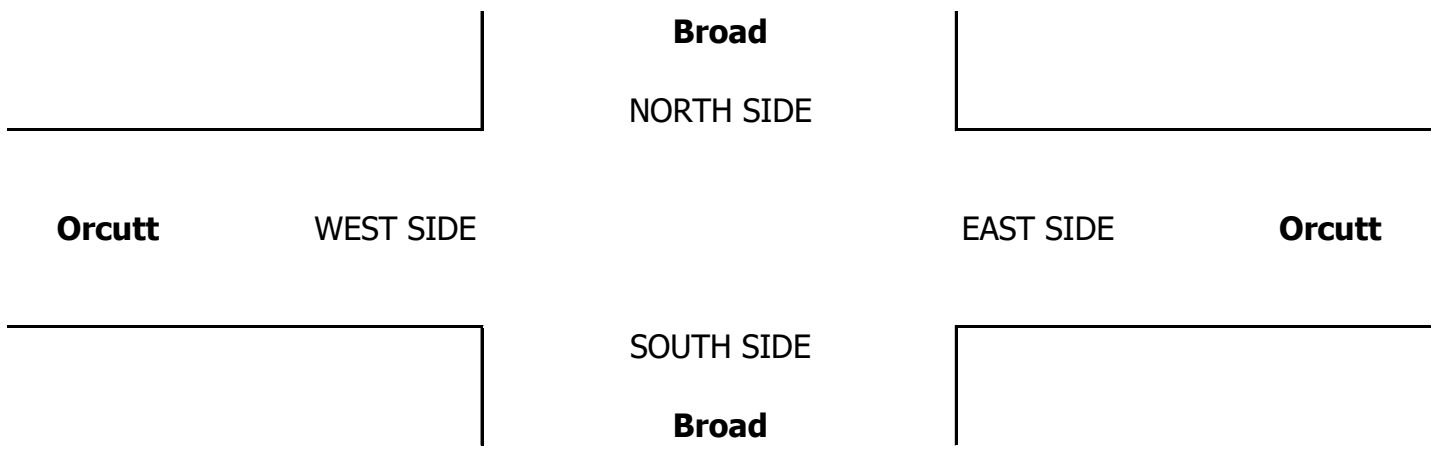
DATE:					
Wed, Mar 16, 16	LOCATION:	San Luis Obispo	PROJECT #:	SC0843
	NORTH & SOUTH:	Broad	LOCATION #:	11
	EAST & WEST:	Orcutt	CONTROL:	SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

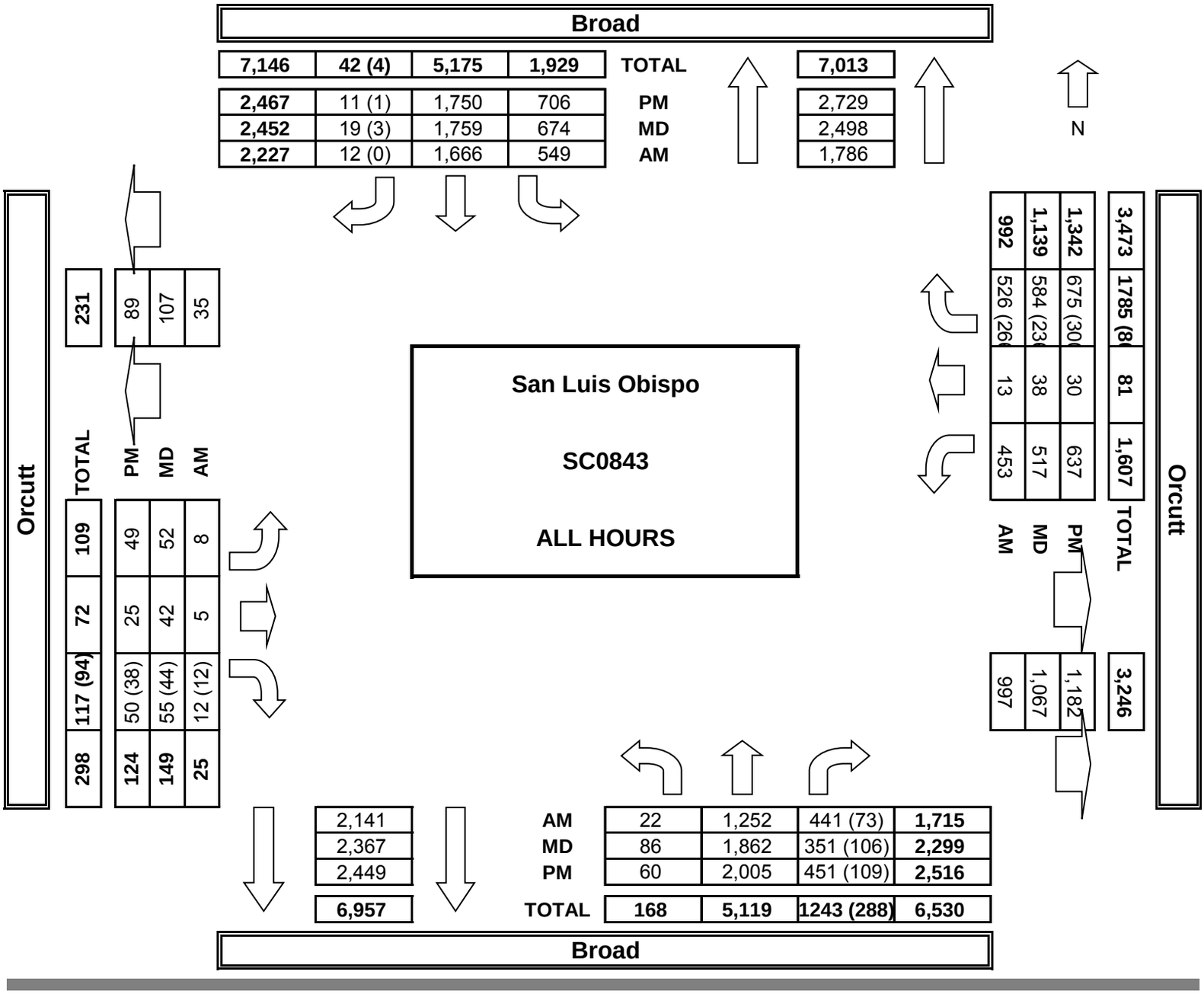
▲ N
◄ W
E ►
S ▼

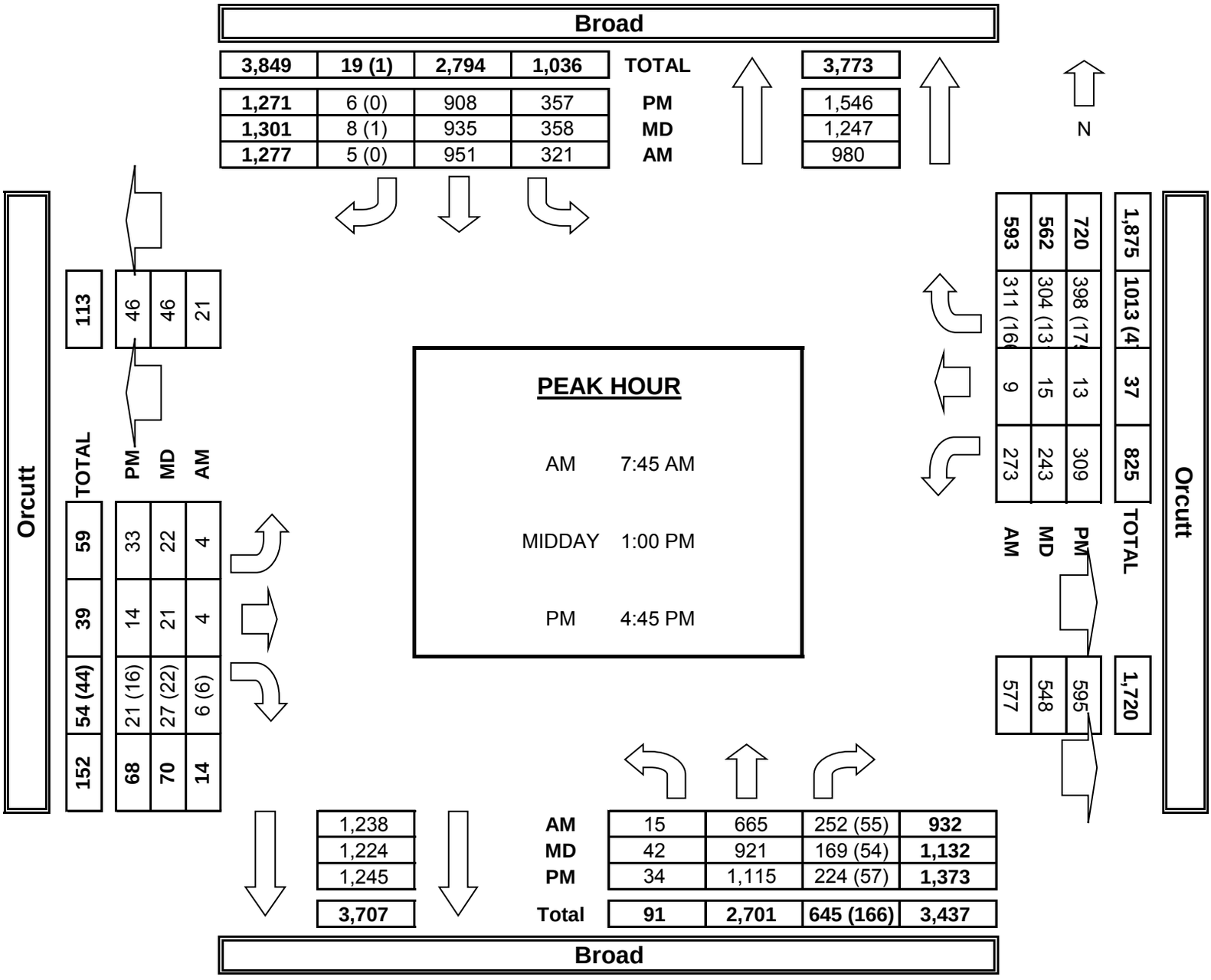
	NORTHBOUND Broad			SOUTHBOUND Broad			EASTBOUND Orcutt			WESTBOUND Orcutt			
LANES:	NL 1	NT 2	NR 1	SL 2	ST 2	SR 0	EL 0.5	ET 0.5	ER 1	WL 1.5	WT 0.5	WR 1	TOTAL
AM													
7:15 AM	0	1	0	0	2	0	0	0	0	0	0	0	3
7:30 AM	0	0	0	1	2	0	0	0	0	0	0	0	3
7:45 AM	0	0	0	0	6	0	0	1	0	1	0	2	10
8:00 AM	0	0	0	0	2	0	0	0	0	0	0	1	3
8:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
8:30 AM	0	1	0	1	4	0	0	0	0	0	0	0	6
8:45 AM	0	0	0	0	6	0	0	0	0	0	0	3	9
9:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	3
VOLUMES	0	3	0	2	26	0	0	1	0	1	0	6	39
APPROACH %	0%	100%	0%	7%	93%	0%	0%	100%	0%	14%	0%	86%	
APP/DEPART	3	/	9	28	/	27	1	/	3	7	/	0	0
BEGIN PEAK HR		7:45 AM											
VOLUMES	0	1	0	1	14	0	0	1	0	1	0	3	21
APPROACH %	0%	100%	0%	7%	93%	0%	0%	100%	0%	25%	0%	75%	
PEAK HR FACTOR		0.250			0.625			0.250			0.333		0.525
APP/DEPART	1	/	4	15	/	15	1	/	2	4	/	0	0
MD													
12:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
12:15 PM	0	2	0	0	4	0	0	0	0	0	0	0	6
12:30 PM	0	0	0	0	3	0	0	0	0	0	0	2	5
12:45 PM	0	2	0	0	0	0	0	1	0	1	0	0	4
1:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
1:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
1:30 PM	0	0	0	0	3	0	0	0	0	0	0	2	5
1:45 PM	0	2	0	0	0	0	0	1	0	0	0	0	3
VOLUMES	0	9	0	0	12	0	0	2	0	1	1	4	29
APPROACH %	0%	100%	0%	0%	100%	0%	0%	100%	0%	17%	17%	67%	
APP/DEPART	9	/	13	12	/	13	2	/	2	6	/	1	0
BEGIN PEAK HR		12:00 PM											
VOLUMES	0	5	0	0	8	0	0	1	0	1	0	2	17
APPROACH %	0%	100%	0%	0%	100%	0%	0%	100%	0%	33%	0%	67%	
PEAK HR FACTOR		0.625			0.500			0.250			0.375		0.708
APP/DEPART	5	/	7	8	/	9	1	/	1	3	/	0	0
PM													
04:00 PM	0	0	0	0	3	0	0	0	0	1	0	0	4
4:15 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
4:30 PM	0	2	0	0	2	0	1	0	0	1	0	1	7
4:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	4
5:00 PM	0	5	0	0	2	0	0	0	0	0	1	0	8
5:15 PM	0	4	0	0	0	0	0	0	0	3	0	1	8
5:30 PM	0	0	0	1	0	0	0	0	0	0	0	1	2
5:45 PM	0	4	0	0	1	0	0	0	0	0	0	1	6
VOLUMES	0	18	0	1	10	0	1	1	0	5	1	4	41
APPROACH %	0%	100%	0%	9%	91%	0%	50%	50%	0%	50%	10%	40%	
APP/DEPART	18	/	23	11	/	15	2	/	2	10	/	1	0
BEGIN PEAK HR		4:30 PM											
VOLUMES	0	13	0	0	6	0	1	0	0	4	1	2	27
APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	57%	14%	29%	
PEAK HR FACTOR		0.650			0.750			0.250			0.438		0.844
APP/DEPART	13	/	16	6	/	10	1	/	0	7	/	1	0



AimTD LLC

TURNING MOVEMENT COUNTS




Broad
3,849
19 (1)
2,794
1,036
TOTAL
3,773
1,271
6 (0)
908
357
PM
1,546
1,301
8 (1)
935
358
MD
1,247
1,277
5 (0)
951
321
AM
980
N
Orcutt
113
46
46
21
TOTAL
PM
MD
AM
59
33
22
4
39
14
21
4
54 (44)
21 (16)
27 (22)
6 (6)
152
68
70
14
PEAK HOUR
AM 7:45 AM
MIDDAY 1:00 PM
PM 4:45 PM
1,875
1013 (4
37
825
720
398 (17
13
309
562
304 (13
15
243
593
311 (16
9
273
TOTAL
PM
MD
AM
595
548
577
1,720
Orcutt
1,238
1,224
1,245
3,707
AM
MD
PM
Total
15
665
252 (55)
932
42
921
169 (54)
1,132
34
1,115
224 (57)
1,373
91
2,701
645 (166)
3,437
Broad

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 15, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Broad
EAST & WEST: Rockview

PROJECT #: SC0843
LOCATION #: 10
CONTROL: STOP E/W

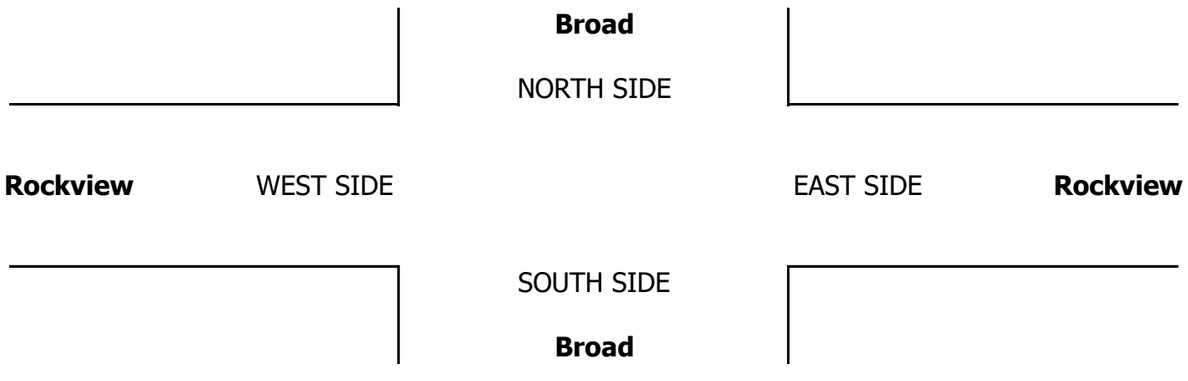
NOTES:

AM PM MD OTHER OTHER

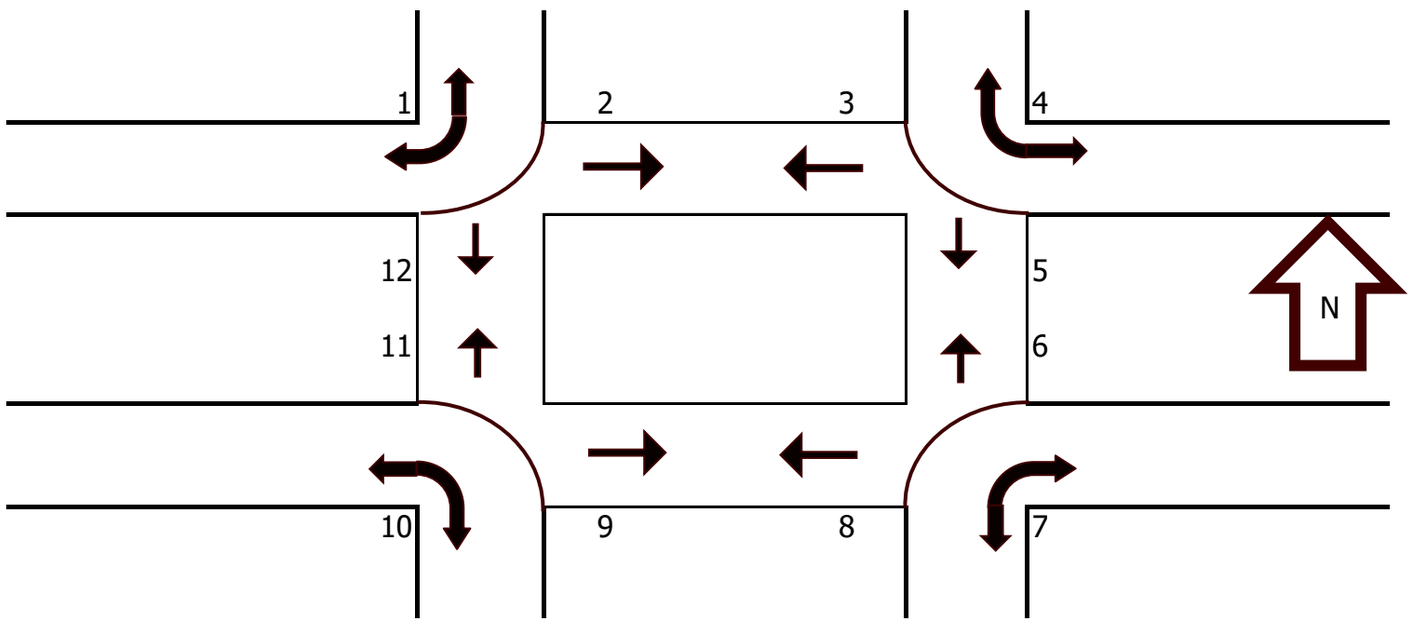
▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Broad			SOUTHBOUND Broad			EASTBOUND Rockview			WESTBOUND Rockview				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	1	142	0	0	148	0	1	0	3	0	0	0	295	0	0	0	0	0
	7:15 AM	2	171	0	0	187	0	3	0	9	0	0	0	372	0	0	0	0	0
	7:30 AM	2	208	0	0	204	0	2	0	5	0	0	0	421	0	0	0	0	0
	7:45 AM	5	255	0	1	363	2	1	0	10	0	0	0	637	1	1	0	0	2
	8:00 AM	7	250	0	1	298	2	1	0	10	0	0	0	569	0	1	0	0	1
	8:15 AM	7	214	0	1	299	0	2	0	14	0	0	0	537	0	1	0	0	1
	8:30 AM	7	228	0	0	278	1	0	0	4	0	0	0	518	0	0	0	0	0
	8:45 AM	6	247	0	1	313	2	2	0	9	0	0	0	580	1	1	0	0	2
	VOLUMES	37	1,715	0	4	2,090	7	12	0	64	0	0	0	3,929	2	4	0	0	6
	APPROACH %	2%	98%	0%	0%	99%	0%	16%	0%	84%	0%	0%	0%						
	APP/DEPART	1,752	/	1,731	2,101	/	2,156	76	/	0	0	/	42	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	26	947	0	3	1,238	5	4	0	38	0	0	0	2,261					
	APPROACH %	3%	97%	0%	0%	99%	0%	10%	0%	90%	0%	0%	0%						
	PEAK HR FACTOR		0.936			0.851			0.656			0.000		0.887					
	APP/DEPART	973	/	954	1,246	/	1,277	42	/	0	0	/	30	0					
MD	11:00 AM	5	253	0	2	287	0	0	0	2	0	0	0	549	0	2	0	0	2
	11:15 AM	7	250	0	0	215	1	1	0	5	0	0	0	479	1	0	1	0	2
	11:30 AM	3	302	0	0	266	0	2	0	3	0	0	0	576	0	0	0	0	0
	11:45 AM	9	271	0	0	268	4	0	0	8	0	0	0	560	1	0	0	0	1
	12:00 PM	6	313	0	1	268	3	2	0	11	0	0	0	604	1	1	0	0	2
	12:15 PM	10	274	0	1	314	1	3	0	8	0	0	0	611	0	1	0	0	1
	12:30 PM	6	278	0	0	305	2	1	0	3	0	0	0	595	0	0	0	0	0
	12:45 PM	8	284	0	0	303	0	3	0	3	0	0	0	601	2	0	0	0	2
	VOLUMES	54	2,225	0	4	2,226	11	12	0	43	0	0	0	4,575	5	4	1	0	10
	APPROACH %	2%	98%	0%	0%	99%	0%	22%	0%	78%	0%	0%	0%						
	APP/DEPART	2,279	/	2,240	2,241	/	2,274	55	/	0	0	/	61	0					
	BEGIN PEAK HR		12:00 PM																
	VOLUMES	30	1,149	0	2	1,190	6	9	0	25	0	0	0	2,411					
	APPROACH %	3%	97%	0%	0%	99%	1%	26%	0%	74%	0%	0%	0%						
	PEAK HR FACTOR		0.924			0.948			0.654			0.000		0.986					
	APP/DEPART	1,179	/	1,160	1,198	/	1,218	34	/	0	0	/	33	0					
PM	04:00 PM	3	275	0	0	341	2	1	0	4	0	0	0	626	0	0	0	0	0
	4:15 PM	9	277	0	1	321	2	0	0	6	0	0	0	616	0	1	0	0	1
	4:30 PM	6	368	0	3	318	0	1	0	8	0	0	0	704	0	3	0	0	3
	4:45 PM	12	340	0	2	281	3	1	0	8	0	0	0	647	0	2	0	0	2
	5:00 PM	17	344	0	0	289	1	1	0	10	0	0	0	662	0	0	0	0	0
	5:15 PM	16	315	0	0	346	9	2	0	3	0	0	0	691	1	0	0	0	1
	5:30 PM	7	295	0	1	303	2	4	0	2	0	0	0	614	0	1	0	0	1
	5:45 PM	9	269	0	2	215	1	2	0	5	0	0	0	503	0	2	0	0	2
	VOLUMES	79	2,483	0	9	2,414	20	12	0	46	0	0	0	5,063	1	9	0	0	10
	APPROACH %	3%	97%	0%	0%	99%	1%	21%	0%	79%	0%	0%	0%						
	APP/DEPART	2,562	/	2,504	2,443	/	2,461	58	/	0	0	/	98	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	51	1,367	0	5	1,234	13	5	0	29	0	0	0	2,704					
	APPROACH %	4%	96%	0%	0%	99%	1%	15%	0%	85%	0%	0%	0%						
	PEAK HR FACTOR		0.948			0.882			0.773			0.000		0.960					
	APP/DEPART	1,418	/	1,377	1,252	/	1,264	34	/	0	0	/	63	0					



		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:00 AM	0	0	0	0	2	0	0	0	0	0	0	1	3
	7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	7:30 AM	1	0	0	0	2	0	0	0	0	0	1	0	4
	7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
	8:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	2
	8:45 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
	TOTAL	1	0	0	0	11	1	0	0	0	0	1	1	15
MD	11:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	2
	11:15 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
	11:30 AM	0	0	0	0	0	4	0	0	0	0	0	0	4
	11:45 AM	1	0	0	0	3	2	0	0	0	1	0	0	7
	12:00 PM	1	0	0	0	0	2	0	0	0	0	0	0	3
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	12:45 PM	1	0	0	0	1	2	0	0	0	0	0	0	4
	TOTAL	3	0	0	0	7	12	0	0	0	1	1	0	24
PM	4:00 PM	0	0	0	0	1	2	0	0	0	0	0	0	3
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	1	0	0	0	0	0	1	2
	4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	2
	5:30 PM	0	0	0	0	1	3	0	0	0	0	0	0	4
	5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
	TOTAL	0	0	0	0	2	10	0	0	0	0	0	1	13



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Tue, Mar 15, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Broad
EAST & WEST: Rockview

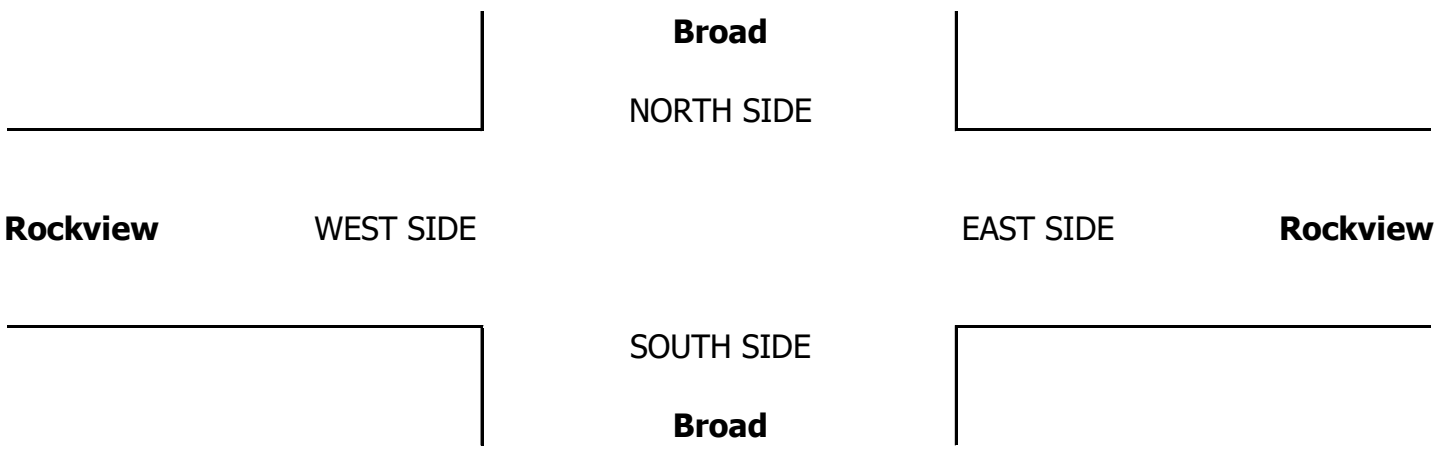
PROJECT #: SC0843
LOCATION #: 10
CONTROL: STOP E/W

NOTES:

AM
PM
MD
OTHER
OTHER

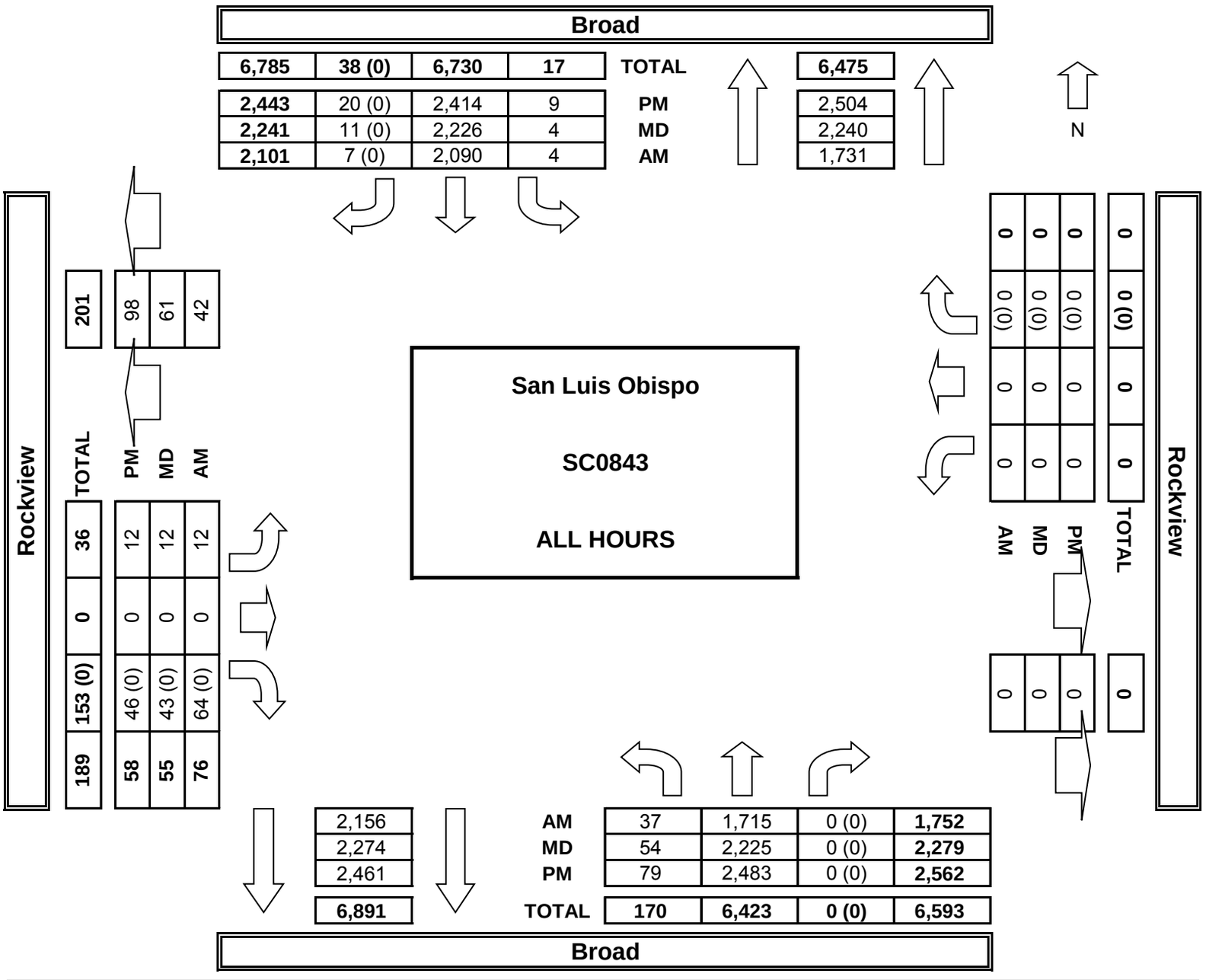
N ▲ ▼ S
◄ W
E ►

		NORTHBOUND Broad			SOUTHBOUND Broad			EASTBOUND Rockview			WESTBOUND Rockview			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
	7:15 AM	0	0	0	0	5	0	0	0	0	0	0	0	5
	7:30 AM	0	1	0	0	3	0	0	0	0	0	0	0	4
	7:45 AM	0	1	0	0	2	0	0	0	1	0	0	0	4
	8:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	4
	8:15 AM	0	0	0	0	3	0	0	0	0	0	0	0	3
	8:30 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
	8:45 AM	0	1	0	0	3	0	0	0	0	0	0	0	4
	VOLUMES	0	5	0	0	22	0	0	0	1	0	0	0	28
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	
	APP/DEPART	5	/	5	22	/	23	1	/	0	0	/	0	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	0	4	0	0	12	0	0	0	1	0	0	0	17
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	
	PEAK HR FACTOR		0.500			0.600			0.250			0.000		0.850
	APP/DEPART	4	/	4	12	/	13	1	/	0	0	/	0	0
MD	11:00 AM	0	3	0	0	22	0	0	0	0	0	0	0	25
	11:15 AM	0	4	0	0	1	0	0	0	0	0	0	0	5
	11:30 AM	0	1	0	0	3	0	0	0	0	0	0	0	4
	11:45 AM	0	7	0	0	7	0	0	0	0	0	0	0	14
	12:00 PM	0	3	0	0	0	0	0	0	1	0	0	0	4
	12:15 PM	0	3	0	0	1	0	0	0	0	0	0	0	4
	12:30 PM	0	1	0	0	2	0	0	0	0	0	0	0	3
	12:45 PM	0	3	0	0	1	0	0	0	0	0	0	0	4
	VOLUMES	0	25	0	0	37	0	0	0	1	0	0	0	63
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	
	APP/DEPART	25	/	25	37	/	38	1	/	0	0	/	0	0
	BEGIN PEAK HR		11:00 AM											
	VOLUMES	0	15	0	0	33	0	0	0	0	0	0	0	48
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.536			0.375			0.000			0.000		0.480
	APP/DEPART	15	/	15	33	/	33	0	/	0	0	/	0	0
PM	04:00 PM	0	1	0	0	0	0	0	0	1	0	0	0	2
	4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
	4:30 PM	0	4	0	0	2	0	0	0	0	0	0	0	6
	4:45 PM	0	2	0	0	3	0	0	0	0	0	0	0	5
	5:00 PM	0	5	0	0	2	0	0	0	0	0	0	0	7
	5:15 PM	0	4	0	0	1	0	0	0	0	0	0	0	5
	5:30 PM	0	4	0	0	2	0	0	0	0	0	0	0	6
	5:45 PM	0	4	0	0	3	0	0	0	0	0	0	0	7
	VOLUMES	0	25	0	0	14	0	0	0	1	0	0	0	40
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	
	APP/DEPART	25	/	25	14	/	15	1	/	0	0	/	0	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	0	17	0	0	8	0	0	0	0	0	0	0	25
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.850			0.667			0.000			0.000		0.893
	APP/DEPART	17	/	17	8	/	8	0	/	0	0	/	0	0



AimTD LLC

TURNING MOVEMENT COUNTS



Broad

3,696	**24 (0)**	**3,662**	**10**	**TOTAL**	**3,491**
1,252	13 (0)	1,234	5	**PM**	1,377
1,198	6 (0)	1,190	2	**MD**	1,160
1,246	5 (0)	1,238	3	**AM**	954

N

Rockview (west)

	TOTAL	PM	MD	AM
	126	63	33	30
	18	5	9	4
	0	0	0	0
	92 (0)	29 (0)	25 (0)	38 (0)
	110	**34**	**34**	**42**

PEAK HOUR

AM 7:45 AM

MIDDAY 12:00 PM

PM 4:30 PM

Rockview (east)

AM	MD	PM	TOTAL
0	**0**	**0**	**0**
0 (0)	0 (0)	0 (0)	**0 (0)**
0	0	0	**0**
0	0	0	**0**
0	0	0	**0**

Broad

1,277	**AM**	26	947	0 (0)	**973**
1,218	**MD**	30	1,149	0 (0)	**1,179**
1,264	**PM**	51	1,367	0 (0)	**1,418**
3,759	**Total**	**107**	**3,463**	**0 (0)**	**3,570**

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Mar 16, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Broad
EAST & WEST: Capitolio

PROJECT #: SC0843
LOCATION #: 12
CONTROL: STOP W

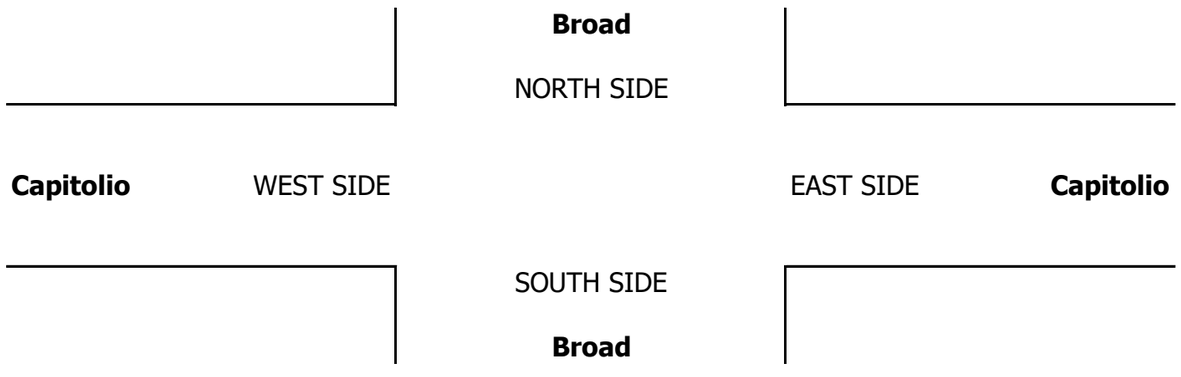
NOTES:

AM
PM
MD
OTHER
OTHER

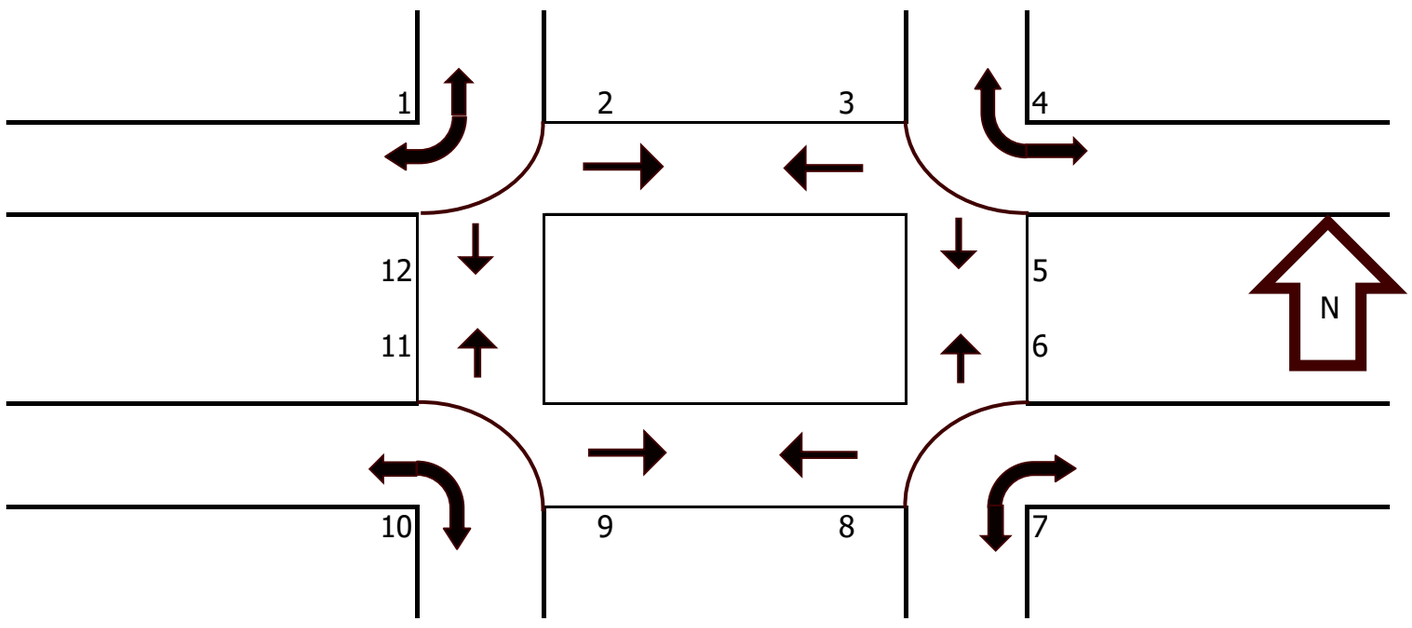
▲ N
◄ W E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Broad			SOUTHBOUND Broad			EASTBOUND Capitolio			WESTBOUND Capitolio				U-TURNS				
	LANES:	NL X	NT 2	NR 0	SL 1	ST 2	SR X	EL X	ET X	ER X	WL 1	WT X	WR 1	TOTAL	NB 0	SB 0	EB X	WB 0	TTL
AM	7:15 AM	0	156	9	13	152	0	0	0	0	2	0	7	339	0	0	0	0	0
	7:30 AM	0	196	9	20	181	0	0	0	0	2	0	12	420	0	0	0	0	0
	7:45 AM	0	257	10	32	291	0	0	0	0	1	0	14	605	0	1	0	0	1
	8:00 AM	0	229	13	35	298	0	0	0	0	3	0	16	594	0	1	0	0	1
	8:15 AM	0	223	14	33	285	0	0	0	0	1	0	11	567	0	1	0	0	1
	8:30 AM	0	203	3	25	283	0	0	0	0	2	0	13	529	0	0	0	0	0
	8:45 AM	0	205	11	35	275	0	0	0	0	2	0	10	538	0	0	0	0	0
	9:00 AM	0	217	6	21	223	0	0	0	0	6	0	13	486	0	2	0	0	2
	VOLUMES	0	1,686	75	214	1,988	0	0	0	0	19	0	96	4,078	0	5	0	0	5
	APPROACH %	0%	96%	4%	10%	90%	0%	0%	0%	0%	17%	0%	83%						
	APP/DEPART	1,761	/	1,787	2,202	/	2,007	0	/	284	115	/	0	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	912	40	125	1,157	0	0	0	0	7	0	54	2,295					
	APPROACH %	0%	96%	4%	10%	90%	0%	0%	0%	0%	11%	0%	89%						
	PEAK HR FACTOR		0.891			0.962			0.000			0.803		0.948					
	APP/DEPART	952	/	969	1,282	/	1,164	0	/	162	61	/	0	0					
MD	11:30 AM	0	249	6	21	253	0	0	0	0	5	0	22	556	0	0	0	0	0
	11:45 AM	0	283	9	7	284	0	0	0	0	6	0	18	607	0	0	0	0	0
	12:00 PM	0	321	4	25	295	0	0	0	0	6	0	30	681	0	1	0	0	1
	12:15 PM	0	313	5	18	248	0	0	0	0	2	0	22	608	0	2	0	0	2
	12:30 PM	0	266	6	23	266	0	0	0	0	5	0	33	599	0	0	0	0	0
	12:45 PM	0	127	1	8	141	0	0	0	0	2	0	11	290	0	0	0	0	0
	1:00 PM	0	272	6	24	284	0	0	0	0	7	0	23	616	0	0	0	0	0
	1:15 PM	0	229	7	20	295	0	0	0	0	6	0	21	578	0	0	0	0	0
	VOLUMES	0	2,060	44	146	2,066	0	0	0	0	39	0	180	4,535	0	3	0	0	3
	APPROACH %	0%	98%	2%	7%	93%	0%	0%	0%	0%	18%	0%	82%						
	APP/DEPART	2,104	/	2,243	2,212	/	2,105	0	/	187	219	/	0	0					
	BEGIN PEAK HR		11:45 AM																
	VOLUMES	0	1,183	24	73	1,093	0	0	0	0	19	0	103	2,495					
	APPROACH %	0%	98%	2%	6%	94%	0%	0%	0%	0%	16%	0%	84%						
	PEAK HR FACTOR		0.928			0.911			0.000			0.803		0.916					
	APP/DEPART	1,207	/	1,289	1,166	/	1,112	0	/	94	122	/	0	0					
PM	04:15 PM	0	280	7	23	310	0	0	0	0	5	0	36	661	0	0	0	0	0
	4:30 PM	0	316	2	16	275	0	0	0	0	13	0	38	660	0	0	0	0	0
	4:45 PM	0	302	4	19	280	0	0	0	0	5	0	21	631	0	0	0	0	0
	5:00 PM	0	338	8	15	309	0	0	0	0	2	0	40	712	0	0	0	0	0
	5:15 PM	0	341	4	20	331	0	0	0	0	5	0	31	732	0	1	0	0	1
	5:30 PM	0	317	6	16	284	0	0	0	0	2	0	21	646	0	0	0	0	0
	5:45 PM	0	260	8	16	257	0	0	0	0	5	0	13	559	0	0	0	0	0
	6:00 PM	0	235	5	13	241	0	0	0	0	3	0	11	508	0	0	0	0	0
	VOLUMES	0	2,389	44	138	2,287	0	0	0	0	40	0	211	5,109	0	1	0	0	1
	APPROACH %	0%	98%	2%	6%	94%	0%	0%	0%	0%	16%	0%	84%						
	APP/DEPART	2,433	/	2,601	2,425	/	2,327	0	/	181	251	/	0	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	0	1,297	18	70	1,195	0	0	0	0	25	0	130	2,735					
	APPROACH %	0%	99%	1%	6%	94%	0%	0%	0%	0%	16%	0%	84%						
	PEAK HR FACTOR		0.950			0.901			0.000			0.760		0.934					
	APP/DEPART	1,315	/	1,428	1,265	/	1,220	0	/	87	155	/	0	0					



		PEDESTRIAN CROSSINGS												
		1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
AM	7:15 AM	0	0	0	0	1	1	0	0	0	0	0	1	3
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
	7:45 AM	0	0	0	0	0	1	0	0	0	0	0	1	2
	8:00 AM	0	0	0	0	1	0	0	0	0	0	0	1	2
	8:15 AM	0	0	0	0	3	4	0	0	0	0	0	3	10
	8:30 AM	0	0	0	0	1	3	0	0	0	0	0	0	4
	8:45 AM	0	0	0	0	0	1	0	0	0	0	0	1	2
	9:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	2
	TOTAL	0	0	0	0	6	12	0	0	0	0	0	8	26
MD	11:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	11:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
	12:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
	12:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	2
	12:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	2
	12:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	3	5	0	0	0	0	0	0	8
PM	4:15 PM	0	0	0	1	1	1	0	0	0	0	0	0	3
	4:30 PM	0	0	0	0	1	0	0	0	0	0	0	1	2
	4:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	5:00 PM	0	0	0	0	4	2	0	0	0	0	1	0	7
	5:15 PM	0	0	0	0	2	1	0	0	0	0	0	0	3
	5:30 PM	0	0	0	0	0	1	0	0	0	0	0	1	2
	5:45 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
	6:00 PM	0	0	0	0	2	1	0	0	0	0	0	0	3
	TOTAL	0	0	0	1	14	6	0	0	0	0	2	2	25



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE: Wed, Mar 16, 16

LOCATION: San Luis Obispo
NORTH & SOUTH: Broad
EAST & WEST: Capitolio

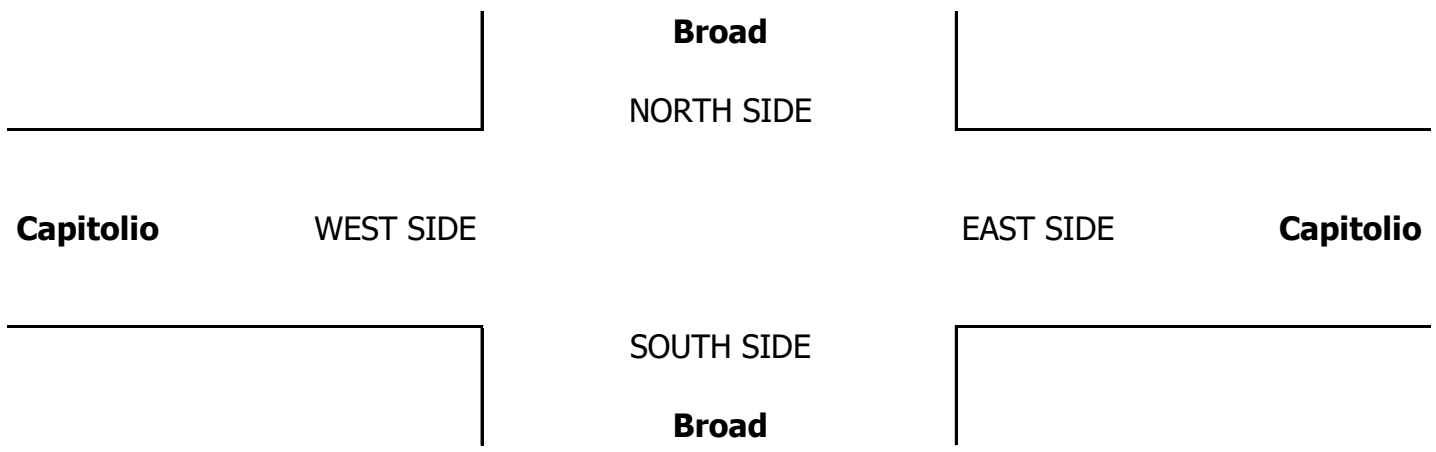
PROJECT #: SC0843
LOCATION #: 12
CONTROL: STOP W

NOTES:

AM
PM
MD
OTHER
OTHER

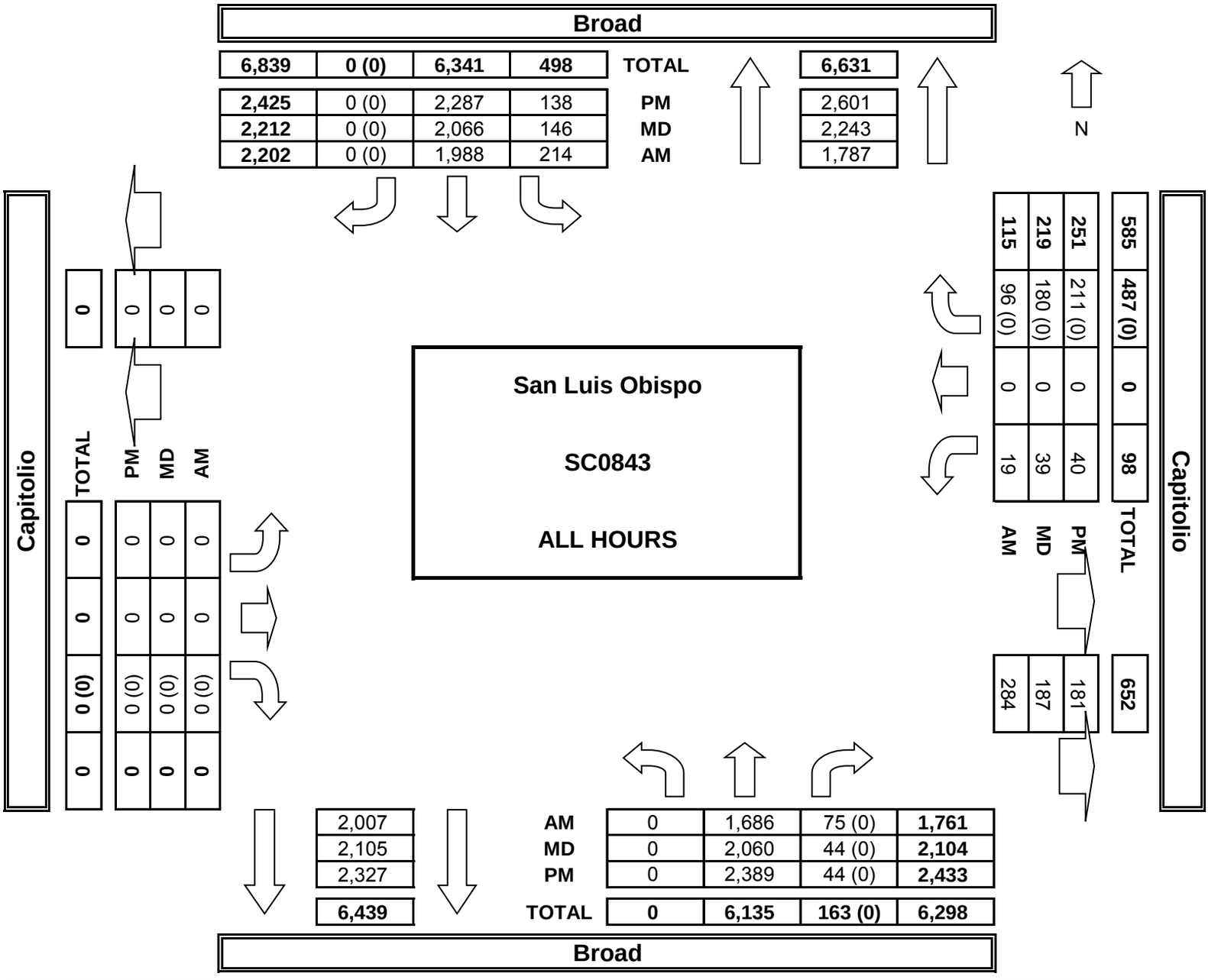
N
W
E
S

		NORTHBOUND Broad			SOUTHBOUND Broad			EASTBOUND Capitolio			WESTBOUND Capitolio			
	LANES:	NL X	NT 2	NR 0	SL 1	ST 2	SR X	EL X	ET X	ER X	WL 1	WT X	WR 1	TOTAL
AM	7:15 AM	0	1	0	0	3	0	0	0	0	0	0	0	4
	7:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	7:45 AM	0	0	0	1	5	0	0	0	0	0	0	0	6
	8:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	3
	8:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
	8:30 AM	0	2	0	0	6	0	0	0	0	0	0	0	8
	8:45 AM	0	0	0	2	5	0	0	0	0	0	0	0	7
	9:00 AM	0	1	0	1	2	0	0	0	0	0	0	0	4
	VOLUMES	0	6	0	4	26	0	0	0	0	0	0	0	36
	APPROACH %	0%	100%	0%	13%	87%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	6	/	6	30	/	26	0	/	4	0	/	0	0
	BEGIN PEAK HR		8:15 AM											
	VOLUMES	0	3	0	3	15	0	0	0	0	0	0	0	21
	APPROACH %	0%	100%	0%	17%	83%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.375			0.643			0.000			0.000		0.656
	APP/DEPART	3	/	3	18	/	15	0	/	3	0	/	0	0
MD	11:30 AM	0	0	0	1	3	0	0	0	0	0	0	0	4
	11:45 AM	0	4	0	0	4	0	0	0	0	0	0	0	8
	12:00 PM	0	2	0	0	3	0	0	0	0	0	0	0	5
	12:15 PM	0	2	0	0	4	0	0	0	0	0	0	0	6
	12:30 PM	0	0	0	0	3	0	0	0	0	0	0	0	3
	12:45 PM	0	3	0	0	2	0	0	0	0	0	0	0	5
	1:00 PM	0	2	1	0	1	0	0	0	0	0	0	0	4
	1:15 PM	0	2	0	0	4	0	0	0	0	0	0	1	7
	VOLUMES	0	15	1	1	24	0	0	0	0	0	0	1	42
	APPROACH %	0%	94%	6%	4%	96%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	16	/	16	25	/	24	0	/	2	1	/	0	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	0	8	0	1	14	0	0	0	0	0	0	0	23
	APPROACH %	0%	100%	0%	7%	93%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.500			0.938			0.000			0.000		0.719
	APP/DEPART	8	/	8	15	/	14	0	/	1	0	/	0	0
PM	04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	3	0	1	4	0	0	0	0	0	0	0	8
	4:45 PM	0	2	0	0	1	0	0	0	0	0	0	0	3
	5:00 PM	0	7	0	0	2	0	0	0	0	0	0	0	9
	5:15 PM	0	2	0	0	4	0	0	0	0	0	0	0	6
	5:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
	5:45 PM	0	3	0	0	1	0	0	0	0	0	0	0	4
	6:00 PM	0	2	0	0	1	0	0	0	0	0	0	0	3
	VOLUMES	0	20	0	1	14	0	0	0	0	0	0	0	35
	APPROACH %	0%	100%	0%	7%	93%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	20	/	20	15	/	14	0	/	1	0	/	0	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	14	0	1	11	0	0	0	0	0	0	0	26
	APPROACH %	0%	100%	0%	8%	92%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.500			0.600			0.000			0.000		0.722
	APP/DEPART	14	/	14	12	/	11	0	/	1	0	/	0	0



AimTD LLC

TURNING MOVEMENT COUNTS



Broad

3,713	**0 (0)**	**3,445**	**268**	**TOTAL**
1,265	0 (0)	1,195	70	**PM**
1,166	0 (0)	1,093	73	**MD**
1,282	0 (0)	1,157	125	**AM**

3,686	TOTAL
1,428	PM
1,289	MD
969	AM

N

Capitolio

	TOTAL	**PM**	**MD**	**AM**
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0 (0)	0 (0)	0 (0)	0 (0)
	0	**0**	**0**	**0**

PEAK HOUR

AM	7:45 AM
MIDDAY	11:45 AM
PM	4:30 PM

Capitolio

	AM	**MD**	**PM**	**TOTAL**
	61	**122**	**155**	**338**
	54 (0)	103 (0)	130 (0)	**287 (0)**
	0	0	0	**0**
	7	19	25	**51**

AM	**MD**	**PM**	**TOTAL**
162	94	87	**343**

Broad

1,164	**AM**	0	912	40 (0)	**952**
1,112	**MD**	0	1,183	24 (0)	**1,207**
1,220	**PM**	0	1,297	18 (0)	**1,315**
3,496	**Total**	**0**	**3,392**	**82 (0)**	**3,474**

Appendix C

Analysis Worksheets for Existing (2017) Conditions

Appendix C.1

Intersection Auto LOS Worksheets for Existing (2017) Conditions

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	3	1331	8	11	983
Future Vol, veh/h	5	3	1331	8	11	983
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	67	67	90	90	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	4	1479	9	13	1117

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2064	740	0	0	1480	0
Stage 1	1480	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	47	359	-	-	451	-
Stage 1	175	-	-	-	-	-
Stage 2	521	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	46	359	-	-	451	-
Mov Cap-2 Maneuver	134	-	-	-	-	-
Stage 1	175	-	-	-	-	-
Stage 2	506	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.1	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	175	451	-
HCM Lane V/C Ratio	-	-	0.068	0.028	-
HCM Control Delay (s)	-	-	27.1	13.2	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	274	106	40	31	29	61	1255	177	102	980	44
Future Volume (veh/h)	119	274	106	40	31	29	61	1255	177	102	980	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.86	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1976	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	151	347	114	47	49	34	76	1569	211	119	1140	51
Adj No. of Lanes	1	2	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.79	0.79	0.79	0.76	0.76	0.76	0.80	0.80	0.80	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	375	549	175	141	148	123	97	1721	758	145	1817	787
Arrive On Green	0.21	0.21	0.21	0.08	0.08	0.08	0.05	0.49	0.49	0.08	0.51	0.51
Sat Flow, veh/h	1774	2597	826	1774	1863	1542	1774	3539	1558	1774	3539	1533
Grp Volume(v), veh/h	151	246	215	47	49	34	76	1569	211	119	1140	51
Grp Sat Flow(s),veh/h/ln	1774	1863	1560	1774	1863	1542	1774	1770	1558	1774	1770	1533
Q Serve(g_s), s	9.1	14.9	15.7	3.1	3.1	2.6	5.3	50.8	10.0	8.2	28.7	2.1
Cycle Q Clear(g_c), s	9.1	14.9	15.7	3.1	3.1	2.6	5.3	50.8	10.0	8.2	28.7	2.1
Prop In Lane	1.00		0.53	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	375	394	330	141	148	123	97	1721	758	145	1817	787
V/C Ratio(X)	0.40	0.62	0.65	0.33	0.33	0.28	0.78	0.91	0.28	0.82	0.63	0.06
Avail Cap(c_a), veh/h	457	480	402	300	315	261	286	1994	878	257	1994	864
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.2	44.5	44.8	54.0	54.0	53.8	58.0	29.4	19.0	56.1	21.7	15.2
Incr Delay (d2), s/veh	0.3	0.8	1.5	0.5	0.5	0.4	5.0	5.7	0.1	4.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	7.7	6.9	1.5	1.6	1.1	2.7	26.0	4.3	4.2	14.0	0.9
LnGrp Delay(d),s/veh	42.5	45.3	46.3	54.6	54.5	54.3	63.0	35.2	19.0	60.5	22.1	15.2
LnGrp LOS	D	D	D	D	D	D	E	D	B	E	C	B
Approach Vol, veh/h		612			130			1856			1310	
Approach Delay, s/veh		44.9			54.5			34.5			25.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.7	66.4		30.3	10.3	69.8		13.9
Change Period (Y+Rc), s	3.5	6.0		4.0	3.5	6.0		4.0
Max Green Setting (Gmax), s	18.0	70.0		32.0	20.0	70.0		21.0
Max Q Clear Time (g_c+I1), s	10.2	52.8		17.7	7.3	30.7		5.1
Green Ext Time (p_c), s	0.1	7.6		2.1	0.1	9.5		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	33.7
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	53	475	79	76	37	11
Future Vol, veh/h	53	475	79	76	37	11
Conflicting Peds, #/hr	0	0	0	15	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	68	68	69	69	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	699	114	110	46	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	240	0	-	0	1039	186
Stage 1	-	-	-	-	185	-
Stage 2	-	-	-	-	854	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1327	-	-	-	255	856
Stage 1	-	-	-	-	847	-
Stage 2	-	-	-	-	417	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1326	-	-	-	224	843
Mov Cap-2 Maneuver	-	-	-	-	224	-
Stage 1	-	-	-	-	835	-
Stage 2	-	-	-	-	372	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	21.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1326	-	-	-	224	843
HCM Lane V/C Ratio	0.059	-	-	-	0.206	0.016
HCM Control Delay (s)	7.9	0	-	-	25.2	9.3
HCM Lane LOS	A	A	-	-	D	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.8	0.1

Intersection	
Intersection Delay, s/veh	15.7
Intersection LOS	C

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Lane Configurations									
Traffic Vol, veh/h	0	435	122	0	54	90	0	53	274
Future Vol, veh/h	0	435	122	0	54	90	0	53	274
Peak Hour Factor	0.92	0.80	0.80	0.92	0.64	0.64	0.92	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	544	153	0	84	141	0	64	330
Number of Lanes	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay	17	11.8	15.6
HCM LOS	C	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	54%	0%	100%
Vol Right, %	0%	100%	0%	46%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	53	274	290	267	54	90
LT Vol	53	0	0	0	54	0
Through Vol	0	0	290	145	0	90
RT Vol	0	274	0	122	0	0
Lane Flow Rate	64	330	362	334	84	141
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.13	0.561	0.62	0.541	0.17	0.264
Departure Headway (Hd)	7.33	6.114	6.158	5.833	7.26	6.749
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	488	588	584	617	492	530
Service Time	5.089	3.872	3.912	3.587	5.032	4.521
HCM Lane V/C Ratio	0.131	0.561	0.62	0.541	0.171	0.266
HCM Control Delay	11.2	16.5	18.5	15.3	11.5	11.9
HCM Lane LOS	B	C	C	C	B	B
HCM 95th-tile Q	0.4	3.5	4.2	3.2	0.6	1.1

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	19	34	0	337	275	0	33	107
Future Vol, veh/h	0	19	34	0	337	275	0	33	107
Peak Hour Factor	0.92	0.88	0.88	0.92	0.90	0.90	0.92	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	22	39	0	374	306	0	39	126
Number of Lanes	0	1	0	0	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	8.8	10.9	9.2
HCM LOS	A	B	A

Lane	NBLn1	NBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	36%	24%
Vol Thru, %	100%	0%	0%	76%
Vol Right, %	0%	100%	64%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	337	275	53	140
LT Vol	0	0	19	33
Through Vol	337	0	0	107
RT Vol	0	275	34	0
Lane Flow Rate	374	306	60	165
Geometry Grp	7	7	2	5
Degree of Util (X)	0.503	0.351	0.087	0.22
Departure Headway (Hd)	4.839	4.136	5.22	4.812
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	749	874	686	746
Service Time	2.539	1.836	3.254	2.836
HCM Lane V/C Ratio	0.499	0.35	0.087	0.221
HCM Control Delay	12.3	9.1	8.8	9.2
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2.9	1.6	0.3	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	506	263	47	224	324	228	1025	53	204	953	46
Future Volume (veh/h)	145	506	263	47	224	324	228	1025	53	204	953	46
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.96	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	173	602	239	52	249	346	265	1192	62	219	1025	46
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	562	446	67	436	373	361	1145	490	313	1095	488
Arrive On Green	0.09	0.30	0.30	0.04	0.25	0.25	0.10	0.32	0.32	0.09	0.31	0.31
Sat Flow, veh/h	1774	1863	1479	1774	1770	1513	3442	3539	1513	3442	3539	1576
Grp Volume(v), veh/h	173	602	239	52	249	346	265	1192	62	219	1025	46
Grp Sat Flow(s),veh/h/ln	1774	1863	1479	1774	1770	1513	1721	1770	1513	1721	1770	1576
Q Serve(g_s), s	6.0	19.6	8.7	1.9	8.0	14.5	4.8	21.0	1.9	4.0	18.3	1.3
Cycle Q Clear(g_c), s	6.0	19.6	8.7	1.9	8.0	14.5	4.8	21.0	1.9	4.0	18.3	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	562	446	67	436	373	361	1145	490	313	1095	488
V/C Ratio(X)	1.05	1.07	0.54	0.78	0.57	0.93	0.73	1.04	0.13	0.70	0.94	0.09
Avail Cap(c_a), veh/h	164	562	446	164	436	373	371	1145	490	318	1095	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	22.7	18.9	31.0	21.4	23.9	28.2	21.9	15.5	28.6	21.8	15.9
Incr Delay (d2), s/veh	85.5	58.7	1.3	17.7	1.8	28.9	7.2	37.8	0.5	6.6	15.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	19.0	3.7	1.2	4.1	9.1	2.6	16.0	0.8	2.2	11.2	0.6
LnGrp Delay(d),s/veh	115.0	81.3	20.1	48.7	23.2	52.8	35.3	59.8	16.0	35.2	37.3	16.3
LnGrp LOS	F	F	C	D	C	D	D	F	B	D	D	B
Approach Vol, veh/h		1014			647			1519			1290	
Approach Delay, s/veh		72.7			41.1			53.7			36.2	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	25.0	6.4	23.6	10.8	24.1	10.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	21.0	6.0	16.0	7.0	20.0	6.0	16.0
Max Q Clear Time (g_c+I1), s	5.9	23.0	3.9	21.6	6.8	20.3	8.0	16.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	237	288	42	73	14	452	472	25	10	65	37
Future Volume (veh/h)	266	237	288	42	73	14	452	472	25	10	65	37
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.78	1.00		0.98	1.00		0.92	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	344	352	355	47	81	12	545	569	25	15	100	46
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	1	1
Peak Hour Factor	0.73	0.73	0.73	0.90	0.90	0.90	0.83	0.83	0.83	0.65	0.65	0.65
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	481	505	641	134	119	18	664	1483	65	24	469	773
Arrive On Green	0.27	0.27	0.27	0.08	0.08	0.08	0.19	0.43	0.43	0.01	0.25	0.25
Sat Flow, veh/h	1774	1863	1236	1774	1581	234	3442	3440	151	1774	1863	1367
Grp Volume(v), veh/h	344	352	355	47	0	93	545	292	302	15	100	46
Grp Sat Flow(s),veh/h/ln	1774	1863	1236	1774	0	1815	1721	1770	1821	1774	1863	1367
Q Serve(g_s), s	16.8	16.3	20.7	2.4	0.0	4.8	14.5	10.8	10.8	0.8	4.1	1.6
Cycle Q Clear(g_c), s	16.8	16.3	20.7	2.4	0.0	4.8	14.5	10.8	10.8	0.8	4.1	1.6
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	481	505	641	134	0	137	664	763	785	24	469	773
V/C Ratio(X)	0.72	0.70	0.55	0.35	0.00	0.68	0.82	0.38	0.38	0.62	0.21	0.06
Avail Cap(c_a), veh/h	537	564	680	482	0	493	970	813	837	407	720	957
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	31.4	19.3	42.1	0.0	43.1	37.1	18.6	18.6	47.0	28.3	11.3
Incr Delay (d2), s/veh	4.0	3.3	0.9	1.6	0.0	5.8	3.7	0.3	0.3	22.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	8.8	7.2	1.2	0.0	2.6	7.2	5.3	5.5	0.5	2.1	1.0
LnGrp Delay(d),s/veh	35.6	34.7	20.2	43.6	0.0	48.9	40.7	18.9	18.9	69.5	28.6	11.3
LnGrp LOS	D	C	C	D		D	D	B	B	E	C	B
Approach Vol, veh/h		1051			140			1139			161	
Approach Delay, s/veh		30.1			47.1			29.3			27.5	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.5	29.1		12.2	6.3	46.3		30.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	27.0	37.0		26.0	22.0	44.0		29.0
Max Q Clear Time (g_c+I1), s	18.5	6.1		6.8	2.8	12.8		22.7
Green Ext Time (p_c), s	2.0	5.0		0.6	0.0	5.0		3.1

Intersection Summary	
HCM 2010 Ctrl Delay	30.5
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	4.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	41	212	19	53	73	44
Future Vol, veh/h	41	212	19	53	73	44
Conflicting Peds, #/hr	0	120	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	82	82	71	71
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	53	272	23	65	103	62

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	444	0	419	308
Stage 1	-	-	-	-	308	-
Stage 2	-	-	-	-	111	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1116	-	591	732
Stage 1	-	-	-	-	745	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1116	-	512	648
Mov Cap-2 Maneuver	-	-	-	-	512	-
Stage 1	-	-	-	-	660	-
Stage 2	-	-	-	-	895	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	556	-	-	1116	-
HCM Lane V/C Ratio	0.296	-	-	0.021	-
HCM Control Delay (s)	14.2	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.2	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	33
Intersection LOS	D

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	112	3	81	0	6	4	6	0	83	619	1
Future Vol, veh/h	0	112	3	81	0	6	4	6	0	83	619	1
Peak Hour Factor	0.92	0.86	0.86	0.86	0.92	0.50	0.50	0.50	0.92	0.66	0.66	0.66
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	130	3	94	0	12	8	12	0	126	938	2
Number of Lanes	0	0	1	0	0	0	1	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	1
HCM Control Delay	15.6	10.8	40.2
HCM LOS	C	B	E

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	57%	38%	18%	0%	0%
Vol Thru, %	0%	100%	100%	2%	25%	82%	100%	0%
Vol Right, %	0%	0%	0%	41%	38%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	83	413	207	196	16	33	53	17
LT Vol	83	0	0	112	6	6	0	0
Through Vol	0	413	206	3	4	27	53	0
RT Vol	0	0	1	81	6	0	0	17
Lane Flow Rate	126	625	314	228	32	43	70	22
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.219	0.999	0.501	0.45	0.067	0.083	0.134	0.038
Departure Headway (Hd)	6.257	5.75	5.746	7.115	7.532	6.987	6.893	6.177
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	573	632	628	506	474	511	519	577
Service Time	3.992	3.484	3.481	4.865	5.297	4.75	4.656	3.94
HCM Lane V/C Ratio	0.22	0.989	0.5	0.451	0.068	0.084	0.135	0.038
HCM Control Delay	10.7	59.3	14.1	15.6	10.8	10.4	10.7	9.2
HCM Lane LOS	B	F	B	C	B	B	B	A
HCM 95th-tile Q	0.8	15.2	2.8	2.3	0.2	0.3	0.5	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	6	80	17
Future Vol, veh/h	0	6	80	17
Peak Hour Factor	0.92	0.76	0.76	0.76
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	8	105	22
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	10.4
HCM LOS	B

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	34	42	767	264	11
Future Vol, veh/h	9	34	42	767	264	11
Conflicting Peds, #/hr	0	1	0	0	0	11
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	80	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	38	53	959	357	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	959	198	383	0	-	0
Stage 1	375	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	255	810	1172	-	-	-
Stage 1	665	-	-	-	-	-
Stage 2	521	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	238	801	1171	-	-	-
Mov Cap-2 Maneuver	362	-	-	-	-	-
Stage 1	658	-	-	-	-	-
Stage 2	492	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1171	-	639	-	-
HCM Lane V/C Ratio	0.045	-	0.075	-	-
HCM Control Delay (s)	8.2	-	11.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	1	34	136	62	620	10	17	136	168
Future Vol, veh/h	0	0	0	1	34	136	62	620	10	17	136	168
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	0	0	9
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	93	93	93	74	74	74	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	1	37	146	84	838	14	26	209	258

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	1172	1544	429	477	0	0	854	0	0
Stage 1	1015	1015	-	-	-	-	-	-	-
Stage 2	157	529	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	185	114	574	1082	-	-	781	-	-
Stage 1	311	314	-	-	-	-	-	-	-
Stage 2	855	525	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	164	0	572	1082	-	-	781	-	-
Mov Cap-2 Maneuver	164	0	-	-	-	-	-	-	-
Stage 1	286	0	-	-	-	-	-	-	-
Stage 2	827	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.5	0.8	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1082	-	-	562	781	-	-
HCM Lane V/C Ratio	0.077	-	-	0.327	0.033	-	-
HCM Control Delay (s)	8.6	-	-	14.5	9.8	-	-
HCM Lane LOS	A	-	-	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	1.4	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	408	10	75	2	0	9	0	339	6	1	131	0
Future Volume (veh/h)	408	10	75	2	0	9	0	339	6	1	131	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.94	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	537	13	99	5	0	20	0	429	8	1	179	0
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	1	2	0
Peak Hour Factor	0.76	0.76	0.76	0.39	0.39	0.39	0.79	0.79	0.79	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	598	14	110	8	0	32	0	847	16	319	844	0
Arrive On Green	0.42	0.42	0.42	0.02	0.00	0.02	0.00	0.24	0.24	0.24	0.24	0.00
Sat Flow, veh/h	1441	35	266	324	0	1294	0	3642	66	942	3632	0
Grp Volume(v), veh/h	649	0	0	25	0	0	0	214	223	1	179	0
Grp Sat Flow(s),veh/h/ln	1741	0	0	1618	0	0	0	1770	1846	942	1770	0
Q Serve(g_s), s	13.0	0.0	0.0	0.6	0.0	0.0	0.0	3.9	3.9	0.0	1.5	0.0
Cycle Q Clear(g_c), s	13.0	0.0	0.0	0.6	0.0	0.0	0.0	3.9	3.9	3.9	1.5	0.0
Prop In Lane	0.83		0.15	0.20		0.80	0.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h	723	0	0	40	0	0	0	422	440	319	844	0
V/C Ratio(X)	0.90	0.00	0.00	0.63	0.00	0.00	0.00	0.51	0.51	0.00	0.21	0.00
Avail Cap(c_a), veh/h	747	0	0	695	0	0	0	760	792	499	1519	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.2	0.0	0.0	18.0	0.0	0.0	0.0	12.3	12.3	14.0	11.4	0.0
Incr Delay (d2), s/veh	13.5	0.0	0.0	15.4	0.0	0.0	0.0	0.9	0.9	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	0.0	0.0	0.4	0.0	0.0	0.0	2.0	2.1	0.0	0.7	0.0
LnGrp Delay(d),s/veh	23.6	0.0	0.0	33.4	0.0	0.0	0.0	13.2	13.2	14.0	11.5	0.0
LnGrp LOS	C			C				B	B	B	B	
Approach Vol, veh/h		649			25			437			180	
Approach Delay, s/veh		23.6			33.4			13.2			11.5	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		12.9		19.5		12.9		4.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		5.9		15.0		5.9		2.6
Green Ext Time (p_c), s		2.7		0.5		2.7		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B

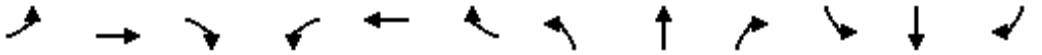
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	0	19	0	2	4	25	301	0	3	165	27
Future Vol, veh/h	29	0	19	0	2	4	25	301	0	3	165	27
Conflicting Peds, #/hr	0	0	13	0	0	3	0	0	0	0	0	9
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	50	50	50	75	75	75	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	0	24	0	4	8	33	401	0	4	194	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	498	694	135	585	710	204	235	0	0	401	0	0
Stage 1	226	226	-	468	468	-	-	-	-	-	-	-
Stage 2	272	468	-	117	242	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	455	365	889	394	357	803	1329	-	-	1154	-	-
Stage 1	756	716	-	545	560	-	-	-	-	-	-	-
Stage 2	711	560	-	875	704	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	432	351	870	370	344	801	1313	-	-	1151	-	-
Mov Cap-2 Maneuver	432	351	-	370	344	-	-	-	-	-	-	-
Stage 1	731	707	-	531	546	-	-	-	-	-	-	-
Stage 2	679	546	-	837	695	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.5	11.6	0.6	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1313	-	-	540	-	555	1151	-	-
HCM Lane V/C Ratio	0.025	-	-	0.111	-	0.022	0.003	-	-
HCM Control Delay (s)	7.8	-	-	12.5	0	11.6	8.1	0	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	-	0.1	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	263	160	5	0	430	56	2	1	0	32	3	143
Future Volume (veh/h)	263	160	5	0	430	56	2	1	0	32	3	143
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.98		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	325	198	6	0	467	53	5	3	0	37	3	88
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.81	0.81	0.81	0.92	0.92	0.92	0.38	0.38	0.38	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	678	1239	38	194	784	665	219	90	0	386	6	184
Arrive On Green	0.16	0.69	0.69	0.00	0.42	0.42	0.12	0.12	0.00	0.12	0.12	0.12
Sat Flow, veh/h	1774	1798	54	1173	1863	1581	501	740	0	1403	51	1502
Grp Volume(v), veh/h	325	0	204	0	467	53	8	0	0	37	0	91
Grp Sat Flow(s),veh/h/ln	1774	0	1853	1173	1863	1581	1241	0	0	1403	0	1553
Q Serve(g_s), s	3.0	0.0	1.4	0.0	7.2	0.7	0.0	0.0	0.0	0.0	0.0	2.0
Cycle Q Clear(g_c), s	3.0	0.0	1.4	0.0	7.2	0.7	2.0	0.0	0.0	0.7	0.0	2.0
Prop In Lane	1.00		0.03	1.00		1.00	0.62		0.00	1.00		0.97
Lane Grp Cap(c), veh/h	678	0	1277	194	784	665	309	0	0	386	0	190
V/C Ratio(X)	0.48	0.00	0.16	0.00	0.60	0.08	0.03	0.00	0.00	0.10	0.00	0.48
Avail Cap(c_a), veh/h	1302	0	2846	1503	2862	2430	1304	0	0	1122	0	1005
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.8	0.0	2.0	0.0	8.3	6.4	14.4	0.0	0.0	14.6	0.0	15.2
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.0	0.7	0.1	0.0	0.0	0.0	0.1	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.7	0.0	3.8	0.3	0.1	0.0	0.0	0.4	0.0	1.0
LnGrp Delay(d),s/veh	5.4	0.0	2.1	0.0	9.0	6.5	14.4	0.0	0.0	14.7	0.0	17.0
LnGrp LOS	A		A		A	A	B			B		B
Approach Vol, veh/h		529			520			8			128	
Approach Delay, s/veh		4.1			8.8			14.4			16.4	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		29.1		8.0	10.0	19.1		8.0
Change Period (Y+Rc), s		3.5		3.5	4.0	3.5		3.5
Max Green Setting (Gmax), s		57.0		24.0	19.0	57.0		30.0
Max Q Clear Time (g_c+I1), s		3.4		4.0	5.0	9.2		4.0
Green Ext Time (p_c), s		5.4		0.6	1.1	5.4		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	7.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	15	22	55	9	29	26	1291	153	43	1207	12
Future Volume (veh/h)	13	15	22	55	9	29	26	1291	153	43	1207	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	16	18	9	69	11	29	28	1403	130	45	1271	13
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.83	0.83	0.83	0.80	0.80	0.80	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	65	458	104	10	463	43	1614	149	60	1808	18
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.02	0.49	0.49	0.03	0.50	0.50
Sat Flow, veh/h	9	221	1557	17	33	1574	1774	3265	301	1774	3588	37
Grp Volume(v), veh/h	34	0	9	80	0	29	28	756	777	45	627	657
Grp Sat Flow(s),veh/h/ln	231	0	1557	50	0	1574	1774	1770	1796	1774	1770	1855
Q Serve(g_s), s	0.3	0.0	0.3	0.3	0.0	0.9	1.1	25.5	26.0	1.7	18.4	18.4
Cycle Q Clear(g_c), s	19.8	0.0	0.3	19.8	0.0	0.9	1.1	25.5	26.0	1.7	18.4	18.4
Prop In Lane	0.47		1.00	0.86		1.00	1.00		0.17	1.00		0.02
Lane Grp Cap(c), veh/h	146	0	458	114	0	463	43	875	888	60	892	935
V/C Ratio(X)	0.23	0.00	0.02	0.70	0.00	0.06	0.66	0.86	0.87	0.75	0.70	0.70
Avail Cap(c_a), veh/h	146	0	458	117	0	466	105	875	888	131	892	935
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	16.9	31.6	0.0	17.1	32.6	15.1	15.2	32.3	12.9	12.9
Incr Delay (d2), s/veh	0.8	0.0	0.0	16.6	0.0	0.1	15.8	11.1	11.7	17.3	4.6	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.1	2.0	0.0	0.4	0.7	14.9	15.6	1.1	10.0	10.5
LnGrp Delay(d),s/veh	20.2	0.0	16.9	48.1	0.0	17.2	48.4	26.2	26.9	49.7	17.5	17.3
LnGrp LOS	C		B	D		B	D	C	C	D	B	B
Approach Vol, veh/h		43			109			1561			1329	
Approach Delay, s/veh		19.5			39.9			26.9			18.5	
Approach LOS		B			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.3	37.4		23.9	5.6	38.0		23.9
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	33.0		16.0	4.0	34.0		20.0
Max Q Clear Time (g_c+I1), s	3.7	28.0		21.8	3.1	20.4		21.8
Green Ext Time (p_c), s	0.0	4.8		0.0	0.0	12.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		23.6
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	2	158	30	5	7	30	1297	73	1	831	479
Future Volume (veh/h)	30	2	158	30	5	7	30	1297	73	1	831	479
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	41	3	83	55	9	9	37	1582	89	1	894	515
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.74	0.74	0.74	0.55	0.55	0.55	0.82	0.82	0.82	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	22	136	283	46	27	382	2343	131	283	2439	1065
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	379	163	1022	1071	347	199	380	3400	190	295	3539	1545
Grp Volume(v), veh/h	127	0	0	73	0	0	37	819	852	1	894	515
Grp Sat Flow(s),veh/h/ln	1564	0	0	1618	0	0	380	1770	1821	295	1770	1545
Q Serve(g_s), s	1.7	0.0	0.0	0.0	0.0	0.0	2.0	12.0	12.3	0.1	4.7	7.0
Cycle Q Clear(g_c), s	3.4	0.0	0.0	1.6	0.0	0.0	6.7	12.0	12.3	12.4	4.7	7.0
Prop In Lane	0.32		0.65	0.75		0.12	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	314	0	0	356	0	0	382	1220	1255	283	2439	1065
V/C Ratio(X)	0.40	0.00	0.00	0.21	0.00	0.00	0.10	0.67	0.68	0.00	0.37	0.48
Avail Cap(c_a), veh/h	651	0	0	664	0	0	382	1220	1255	283	2439	1065
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.3	0.0	0.0	17.6	0.0	0.0	4.3	4.0	4.1	7.7	2.9	3.3
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.3	0.0	0.0	0.5	3.0	3.0	0.0	0.4	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	0.8	0.0	0.0	0.3	6.7	7.0	0.0	2.4	3.3
LnGrp Delay(d),s/veh	19.2	0.0	0.0	17.9	0.0	0.0	4.8	7.0	7.1	7.7	3.3	4.8
LnGrp LOS	B			B			A	A	A	A	A	A
Approach Vol, veh/h		127			73			1708			1410	
Approach Delay, s/veh		19.2			17.9			7.0			3.9	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		10.0		35.0		10.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		16.0		31.0		16.0
Max Q Clear Time (g_c+I1), s		14.3		5.4		14.4		3.6
Green Ext Time (p_c), s		15.5		0.8		15.4		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	6.4
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	1	20	13	2	615	7	676	25	26	919	64
Future Volume (veh/h)	92	1	20	13	2	615	7	676	25	26	919	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	151	2	33	15	2	482	8	760	26	30	1056	74
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.61	0.61	0.61	0.84	0.84	0.84	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	420	19	64	610	72	561	15	1230	42	49	1246	87
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.01	0.35	0.35	0.03	0.37	0.37
Sat Flow, veh/h	779	53	179	1299	204	1582	1774	3485	119	1774	3349	235
Grp Volume(v), veh/h	186	0	0	17	0	482	8	386	400	30	558	572
Grp Sat Flow(s),veh/h/ln	1011	0	0	1504	0	1582	1774	1770	1835	1774	1770	1814
Q Serve(g_s), s	5.9	0.0	0.0	0.0	0.0	12.8	0.2	8.2	8.2	0.8	13.1	13.1
Cycle Q Clear(g_c), s	6.3	0.0	0.0	0.3	0.0	12.8	0.2	8.2	8.2	0.8	13.1	13.1
Prop In Lane	0.81		0.18	0.88		1.00	1.00		0.06	1.00		0.13
Lane Grp Cap(c), veh/h	503	0	0	683	0	561	15	624	647	49	659	675
V/C Ratio(X)	0.37	0.00	0.00	0.02	0.00	0.86	0.53	0.62	0.62	0.61	0.85	0.85
Avail Cap(c_a), veh/h	544	0	0	742	0	628	156	624	647	156	659	675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.3	0.0	0.0	9.5	0.0	13.6	22.4	12.1	12.1	21.8	13.1	13.1
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	10.6	26.3	4.5	4.4	11.6	12.8	12.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.0	0.1	0.0	7.2	0.2	4.8	4.9	0.5	8.7	8.9
LnGrp Delay(d),s/veh	11.8	0.0	0.0	9.5	0.0	24.2	48.7	16.7	16.5	33.4	25.8	25.6
LnGrp LOS	B			A		C	D	B	B	C	C	C
Approach Vol, veh/h		186			499			794			1160	
Approach Delay, s/veh		11.8			23.7			16.9			25.9	
Approach LOS		B			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	20.0		20.1	4.4	20.9		20.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	16.0		18.0	4.0	16.0		18.0
Max Q Clear Time (g_c+I1), s	2.8	10.2		8.3	2.2	15.1		14.8
Green Ext Time (p_c), s	0.0	4.8		2.9	0.0	0.8		1.3

Intersection Summary		
HCM 2010 Ctrl Delay		21.8
HCM 2010 LOS		C

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	26	907	77	52	345
Future Vol, veh/h	13	26	907	77	52	345
Conflicting Peds, #/hr	0	0	0	2	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	0	25	-	0	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	86	86	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	48	1055	90	54	359

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1523	1055	0	-	1055	0
Stage 1	1055	-	-	-	-	-
Stage 2	468	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	130	274	-	0	660	-
Stage 1	335	-	-	0	-	-
Stage 2	630	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	119	274	-	-	660	-
Mov Cap-2 Maneuver	119	-	-	-	-	-
Stage 1	335	-	-	-	-	-
Stage 2	578	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.2	0	1.4
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	119	274	660	-
HCM Lane V/C Ratio	-	0.202	0.176	0.082	-
HCM Control Delay (s)	-	42.8	20.9	10.9	-
HCM Lane LOS	-	E	C	B	-
HCM 95th %tile Q(veh)	-	0.7	0.6	0.3	-

Intersection	
Int Delay, s/veh	6.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	44	265	685	106	65	259
Future Vol, veh/h	44	265	685	106	65	259
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	80	80	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	305	856	133	71	282

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1346	494	0	0	989	0
Stage 1	923	-	-	-	-	-
Stage 2	423	-	-	-	-	-
Critical Hdwy	7.33	6.93	-	-	4.13	-
Critical Hdwy Stg 1	6.53	-	-	-	-	-
Critical Hdwy Stg 2	6.13	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	119	522	-	-	697	-
Stage 1	291	-	-	-	-	-
Stage 2	608	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	110	522	-	-	697	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	291	-	-	-	-	-
Stage 2	546	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.1	0	2.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	110	522	697	-
HCM Lane V/C Ratio	-	-	0.46	0.584	0.101	-
HCM Control Delay (s)	-	-	63	21.1	10.7	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	2	3.7	0.3	-

Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	127	371	434	16	81	247
Future Vol, veh/h	127	371	434	16	81	247
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	0	0	-	150	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	83	83	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	157	458	523	19	96	294

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1010	-	0	-	523	0
Stage 1	523	-	-	-	-	-
Stage 2	487	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	266	0	-	0	1043	-
Stage 1	595	0	-	0	-	-
Stage 2	618	0	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	242	-	-	-	1043	-
Mov Cap-2 Maneuver	374	-	-	-	-	-
Stage 1	595	-	-	-	-	-
Stage 2	561	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.4	0	2.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	374	-	1043	-
HCM Lane V/C Ratio	-	0.419	-	0.092	-
HCM Control Delay (s)	-	21.4	0	8.8	-
HCM Lane LOS	-	C	A	A	-
HCM 95th %tile Q(veh)	-	2	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	40	12	22	55	87	17	604	19	58	845	50
Future Volume (veh/h)	11	40	12	22	55	87	17	604	19	58	845	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.98		0.97	1.00		0.95	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	12	45	9	27	67	60	20	702	21	68	994	54
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82	0.86	0.86	0.86	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	352	263	53	100	149	114	396	2301	69	595	2239	122
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	1.00	1.00	1.00	0.66	0.66	0.66
Sat Flow, veh/h	1243	1491	298	168	842	644	536	3503	105	723	3408	185
Grp Volume(v), veh/h	12	0	54	154	0	0	20	354	369	68	516	532
Grp Sat Flow(s),veh/h/ln	1243	0	1790	1654	0	0	536	1770	1838	723	1770	1824
Q Serve(g_s), s	0.0	0.0	1.5	0.6	0.0	0.0	0.5	0.0	0.0	2.1	8.5	8.5
Cycle Q Clear(g_c), s	0.4	0.0	1.5	4.9	0.0	0.0	9.0	0.0	0.0	2.1	8.5	8.5
Prop In Lane	1.00		0.17	0.18		0.39	1.00		0.06	1.00		0.10
Lane Grp Cap(c), veh/h	352	0	316	362	0	0	396	1162	1207	595	1162	1198
V/C Ratio(X)	0.03	0.00	0.17	0.42	0.00	0.00	0.05	0.30	0.31	0.11	0.44	0.44
Avail Cap(c_a), veh/h	568	0	626	642	0	0	396	1162	1207	595	1162	1198
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.97	0.97	0.97	0.45	0.45	0.45
Uniform Delay (d), s/veh	20.5	0.0	21.0	22.3	0.0	0.0	1.0	0.0	0.0	3.9	5.0	5.0
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.8	0.0	0.0	0.2	0.7	0.6	0.2	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.8	2.4	0.0	0.0	0.1	0.2	0.2	0.4	4.2	4.3
LnGrp Delay(d),s/veh	20.6	0.0	21.2	23.1	0.0	0.0	1.2	0.7	0.6	4.1	5.5	5.5
LnGrp LOS	C		C	C			A	A	A	A	A	A
Approach Vol, veh/h		66			154			743			1116	
Approach Delay, s/veh		21.1			23.1			0.7			5.5	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.4		15.6		44.4		15.6
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		29.0		21.0		29.0		21.0
Max Q Clear Time (g_c+I1), s		11.0		3.5		10.5		6.9
Green Ext Time (p_c), s		12.4		1.2		12.6		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	30	37	4	24	22	19	560	9	28	775	62
Future Volume (veh/h)	66	30	37	4	24	22	19	560	9	28	775	62
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.90	0.93		0.98	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	96	43	44	8	46	34	21	609	10	33	912	71
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.69	0.69	0.69	0.52	0.52	0.52	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	414	317	366	220	163	494	2175	36	500	1583	123
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.09	0.81	0.81	0.96	0.96	0.96
Sat Flow, veh/h	1296	1863	1427	1208	989	731	1774	3561	58	797	3316	258
Grp Volume(v), veh/h	96	43	44	8	0	80	21	303	316	33	487	496
Grp Sat Flow(s),veh/h/ln	1296	1863	1427	1208	0	1720	1774	1770	1850	797	1770	1804
Q Serve(g_s), s	3.9	1.1	1.5	0.3	0.0	2.3	0.3	2.5	2.5	0.1	1.6	1.6
Cycle Q Clear(g_c), s	6.2	1.1	1.5	1.4	0.0	2.3	0.3	2.5	2.5	0.1	1.6	1.6
Prop In Lane	1.00		1.00	1.00		0.43	1.00		0.03	1.00		0.14
Lane Grp Cap(c), veh/h	359	414	317	366	0	383	494	1081	1130	500	845	862
V/C Ratio(X)	0.27	0.10	0.14	0.02	0.00	0.21	0.04	0.28	0.28	0.07	0.58	0.58
Avail Cap(c_a), veh/h	460	559	428	460	0	516	494	1081	1130	500	845	862
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.94	0.94	0.94	0.90	0.90	0.90
Uniform Delay (d), s/veh	21.5	18.6	18.7	19.1	0.0	19.0	5.4	2.4	2.4	0.7	0.7	0.7
Incr Delay (d2), s/veh	0.4	0.1	0.2	0.0	0.0	0.3	0.2	0.6	0.6	0.2	2.6	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.6	0.6	0.1	0.0	1.1	0.2	1.3	1.4	0.1	1.1	1.1
LnGrp Delay(d),s/veh	21.9	18.7	18.9	19.2	0.0	19.3	5.6	3.0	3.0	0.9	3.3	3.3
LnGrp LOS	C	B	B	B		B	A	A	A	A	A	A
Approach Vol, veh/h		183			88			640			1016	
Approach Delay, s/veh		20.4			19.3			3.1			3.2	
Approach LOS		C			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	8.0	33.7		18.3		41.7		18.3
Change Period (Y+Rc), s	4.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	4.0	24.0		18.0		32.0		18.0
Max Q Clear Time (g_c+I1), s	2.3	3.6		4.3		4.5		8.2
Green Ext Time (p_c), s	0.0	8.0		1.2		8.9		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	62	14	97	101	149	10	417	81	139	622	44
Future Volume (veh/h)	22	62	14	97	101	149	10	417	81	139	622	44
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.93	0.95		0.93	0.99		0.96	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	28	78	8	108	112	72	12	496	69	174	778	40
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.79	0.79	0.79	0.90	0.90	0.90	0.84	0.84	0.84	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	357	474	374	395	474	375	435	1384	191	589	1709	88
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.02	0.89	0.89	0.13	1.00	1.00
Sat Flow, veh/h	1147	1863	1470	1242	1863	1474	1774	3104	430	1774	3415	176
Grp Volume(v), veh/h	28	78	8	108	112	72	12	282	283	174	403	415
Grp Sat Flow(s),veh/h/ln	1147	1863	1470	1242	1863	1474	1774	1770	1764	1774	1770	1821
Q Serve(g_s), s	1.2	2.0	0.2	4.4	2.9	2.3	0.2	1.5	1.5	3.2	0.0	0.0
Cycle Q Clear(g_c), s	4.1	2.0	0.2	6.4	2.9	2.3	0.2	1.5	1.5	3.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		0.10
Lane Grp Cap(c), veh/h	357	474	374	395	474	375	435	789	786	589	885	911
V/C Ratio(X)	0.08	0.16	0.02	0.27	0.24	0.19	0.03	0.36	0.36	0.30	0.46	0.46
Avail Cap(c_a), veh/h	390	528	417	431	528	418	532	789	786	589	885	911
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.69	0.69	0.69
Uniform Delay (d), s/veh	19.4	17.4	16.8	19.9	17.8	17.5	8.8	1.9	1.9	6.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.4	0.3	0.2	0.0	1.2	1.3	0.2	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.0	0.1	1.6	1.5	1.0	0.1	0.9	0.9	1.4	0.3	0.3
LnGrp Delay(d),s/veh	19.5	17.6	16.8	20.3	18.0	17.8	8.8	3.1	3.2	7.0	1.2	1.1
LnGrp LOS	B	B	B	C	B	B	A	A	A	A	A	A
Approach Vol, veh/h		114			292			577			992	
Approach Delay, s/veh		18.0			18.8			3.3			2.2	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	35.0		20.3	8.0	31.7		20.3
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	25.0		17.0	4.0	25.0		17.0
Max Q Clear Time (g_c+I1), s	2.2	2.0		8.4	5.2	3.5		6.1
Green Ext Time (p_c), s	0.0	10.5		1.4	0.0	10.1		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	14	124	39	39	470	0	0	448	282
Future Volume (veh/h)	0	0	0	14	124	39	39	470	0	0	448	282
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.92	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				20	175	17	44	534	0	0	515	277
Adj No. of Lanes				0	3	0	1	2	0	0	1	1
Peak Hour Factor				0.71	0.71	0.71	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				69	642	62	587	2430	0	0	1279	1063
Arrive On Green				0.15	0.15	0.15	0.69	0.69	0.00	0.00	1.00	1.00
Sat Flow, veh/h				473	4378	425	680	3632	0	0	1863	1548
Grp Volume(v), veh/h				78	65	70	44	534	0	0	515	277
Grp Sat Flow(s),veh/h/ln				1839	1695	1742	680	1770	0	0	1863	1548
Q Serve(g_s), s				2.3	2.0	2.1	1.3	3.3	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				2.3	2.0	2.1	1.3	3.3	0.0	0.0	0.0	0.0
Prop In Lane				0.26		0.24	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				270	249	255	587	2430	0	0	1279	1063
V/C Ratio(X)				0.29	0.26	0.27	0.07	0.22	0.00	0.00	0.40	0.26
Avail Cap(c_a), veh/h				674	622	639	587	2430	0	0	1279	1063
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.92	0.92
Uniform Delay (d), s/veh				22.8	22.7	22.8	3.1	3.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.6	0.5	0.6	0.2	0.2	0.0	0.0	0.9	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	1.0	1.1	0.3	1.6	0.0	0.0	0.3	0.2
LnGrp Delay(d),s/veh				23.4	23.3	23.3	3.4	3.7	0.0	0.0	0.9	0.5
LnGrp LOS				C	C	C	A	A			A	A
Approach Vol, veh/h					212			578			792	
Approach Delay, s/veh					23.3			3.7			0.8	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		46.2		13.8		46.2		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		28.0		22.0		28.0		
Max Q Clear Time (g_c+I1), s		2.0		4.3		5.3		
Green Ext Time (p_c), s		7.7		0.9		7.4		

Intersection Summary		
HCM 2010 Ctrl Delay		4.8
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	176	89	202	265	10	115	174	134	13	143	12
Future Volume (veh/h)	8	176	89	202	265	10	115	174	134	13	143	12
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	0.99		0.97	0.99		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	9	205	74	246	323	3	167	252	149	20	220	9
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.82	0.82	0.82	0.69	0.69	0.69	0.65	0.65	0.65
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	439	459	367	585	707	582	470	389	230	326	635	26
Arrive On Green	0.01	0.25	0.25	0.14	0.38	0.38	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1774	1863	1491	1774	1863	1533	1141	1088	643	975	1775	73
Grp Volume(v), veh/h	9	205	74	246	323	3	167	0	401	20	0	229
Grp Sat Flow(s),veh/h/ln	1774	1863	1491	1774	1863	1533	1141	0	1731	975	0	1847
Q Serve(g_s), s	0.2	4.0	1.7	3.9	5.7	0.1	5.5	0.0	8.4	0.8	0.0	3.9
Cycle Q Clear(g_c), s	0.2	4.0	1.7	3.9	5.7	0.1	9.4	0.0	8.4	9.2	0.0	3.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.37	1.00		0.04
Lane Grp Cap(c), veh/h	439	459	367	585	707	582	470	0	619	326	0	661
V/C Ratio(X)	0.02	0.45	0.20	0.42	0.46	0.01	0.36	0.00	0.65	0.06	0.00	0.35
Avail Cap(c_a), veh/h	994	1244	996	903	1244	1024	561	0	757	449	0	893
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.1	13.9	13.0	8.6	10.1	8.4	13.7	0.0	11.7	15.5	0.0	10.2
Incr Delay (d2), s/veh	0.0	0.7	0.3	0.5	0.5	0.0	0.5	0.0	1.4	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.1	0.7	2.0	3.0	0.0	1.8	0.0	4.2	0.2	0.0	2.0
LnGrp Delay(d),s/veh	12.1	14.5	13.2	9.1	10.6	8.4	14.1	0.0	13.0	15.6	0.0	10.5
LnGrp LOS	B	B	B	A	B	A	B		B	B		B
Approach Vol, veh/h		288			572			568			249	
Approach Delay, s/veh		14.1			9.9			13.4			10.9	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	3.4	20.5		19.5	9.2	14.7		19.5
Change Period (Y+Rc), s	3.0	4.0		4.0	3.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	29.0		19.0	14.0	29.0		21.0
Max Q Clear Time (g_c+I1), s	2.2	7.7		11.4	5.9	6.0		11.2
Green Ext Time (p_c), s	0.0	3.7		3.1	0.6	3.8		3.6

Intersection Summary	
HCM 2010 Ctrl Delay	12.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	248	12	146	406	20	33	305	145	7	184	64
Future Volume (veh/h)	72	248	12	146	406	20	33	305	145	7	184	64
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.94	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	107	370	15	154	427	21	37	343	133	8	222	65
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.67	0.67	0.67	0.95	0.95	0.95	0.89	0.89	0.89	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	785	643	200	846	701	311	403	156	164	441	129
Arrive On Green	0.08	0.42	0.42	0.11	0.45	0.45	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1774	1863	1525	1774	1863	1544	1086	1256	487	912	1374	402
Grp Volume(v), veh/h	107	370	15	154	427	21	37	0	476	8	0	287
Grp Sat Flow(s),veh/h/ln	1774	1863	1525	1774	1863	1544	1086	0	1743	912	0	1776
Q Serve(g_s), s	4.1	9.9	0.4	5.8	11.2	0.5	2.0	0.0	17.6	0.6	0.0	9.0
Cycle Q Clear(g_c), s	4.1	9.9	0.4	5.8	11.2	0.5	11.0	0.0	17.6	18.1	0.0	9.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.28	1.00		0.23
Lane Grp Cap(c), veh/h	142	785	643	200	846	701	311	0	559	164	0	569
V/C Ratio(X)	0.75	0.47	0.02	0.77	0.50	0.03	0.12	0.00	0.85	0.05	0.00	0.50
Avail Cap(c_a), veh/h	490	785	643	490	846	701	341	0	608	190	0	619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.0	14.4	11.6	29.7	13.3	10.4	23.4	0.0	21.9	30.3	0.0	18.9
Incr Delay (d2), s/veh	7.9	2.0	0.1	6.2	2.1	0.1	0.2	0.0	10.6	0.1	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	5.5	0.2	3.2	6.2	0.2	0.6	0.0	10.1	0.1	0.0	4.5
LnGrp Delay(d),s/veh	38.9	16.4	11.7	35.8	15.5	10.5	23.6	0.0	32.4	30.5	0.0	19.6
LnGrp LOS	D	B	B	D	B	B	C		C	C		B
Approach Vol, veh/h		492			602			513			295	
Approach Delay, s/veh		21.1			20.5			31.8			19.9	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	32.5		25.6	8.5	34.8		25.6
Change Period (Y+Rc), s	3.0	3.5		3.5	3.0	3.5		3.5
Max Green Setting (Gmax), s	19.0	29.0		24.0	19.0	29.0		24.0
Max Q Clear Time (g_c+I1), s	7.8	11.9		20.1	6.1	13.2		19.6
Green Ext Time (p_c), s	0.4	5.1		1.9	0.3	4.9		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	23.6
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations			↕				↕				↕				↕	
Traffic Vol, veh/h	0	12	25	2	0	47	38	14	0	1	13	10	0	64	81	30
Future Vol, veh/h	0	12	25	2	0	47	38	14	0	1	13	10	0	64	81	30
Peak Hour Factor	0.92	0.70	0.70	0.70	0.92	0.85	0.85	0.85	0.92	0.75	0.75	0.75	0.92	0.59	0.59	0.59
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	17	36	3	0	55	45	16	0	1	17	13	0	108	137	51
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.3	8.7	7.7	9.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	31%	47%	37%
Vol Thru, %	54%	64%	38%	46%
Vol Right, %	42%	5%	14%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	24	39	99	175
LT Vol	1	12	47	64
Through Vol	13	25	38	81
RT Vol	10	2	14	30
Lane Flow Rate	32	56	116	297
Geometry Grp	1	1	1	1
Degree of Util (X)	0.039	0.075	0.154	0.36
Departure Headway (Hd)	4.441	4.863	4.765	4.364
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	806	737	752	825
Service Time	2.471	2.895	2.793	2.382
HCM Lane V/C Ratio	0.04	0.076	0.154	0.36
HCM Control Delay	7.7	8.3	8.7	9.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.5	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	29	290	22	18	136	0	0	136	107
Future Volume (veh/h)	0	0	0	29	290	22	18	136	0	0	136	107
Number				5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.91	0.96		1.00	1.00		0.92
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				35	349	23	20	155	0	0	158	82
Adj No. of Lanes				0	3	0	1	1	0	0	1	1
Peak Hour Factor				0.83	0.83	0.83	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				201	2133	143	438	683	0	0	683	532
Arrive On Green				0.47	0.47	0.47	0.73	0.73	0.00	0.00	0.12	0.12
Sat Flow, veh/h				432	4571	306	1095	1863	0	0	1863	1451
Grp Volume(v), veh/h				149	124	133	20	155	0	0	158	82
Grp Sat Flow(s),veh/h/ln				1841	1695	1772	1095	1863	0	0	1863	1451
Q Serve(g_s), s				2.8	2.5	2.6	0.5	1.6	0.0	0.0	4.6	3.0
Cycle Q Clear(g_c), s				2.8	2.5	2.6	5.1	1.6	0.0	0.0	4.6	3.0
Prop In Lane				0.23		0.17	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				859	791	827	438	683	0	0	683	532
V/C Ratio(X)				0.17	0.16	0.16	0.05	0.23	0.00	0.00	0.23	0.15
Avail Cap(c_a), veh/h				859	791	827	438	683	0	0	683	532
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				9.3	9.2	9.2	6.7	5.3	0.0	0.0	18.7	18.0
Incr Delay (d2), s/veh				0.4	0.4	0.4	0.2	0.8	0.0	0.0	0.8	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.5	1.3	1.4	0.2	0.9	0.0	0.0	2.5	1.3
LnGrp Delay(d),s/veh				9.7	9.6	9.6	6.9	6.1	0.0	0.0	19.5	18.7
LnGrp LOS				A	A	A	A	A			B	B
Approach Vol, veh/h					407			175			240	
Approach Delay, s/veh					9.7			6.2			19.2	
Approach LOS					A			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		28.0		22.0				22.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary		
HCM 2010 Ctrl Delay		11.7
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	35	330	20	25	45	0	0	21	21
Future Volume (veh/h)	0	0	0	35	330	20	25	45	0	0	21	21
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.83	0.97		1.00	1.00		0.96
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1863
Adj Flow Rate, veh/h				39	367	21	34	62	0	0	32	26
Adj No. of Lanes				0	3	0	0	1	0	0	1	1
Peak Hour Factor				0.90	0.90	0.90	0.73	0.73	0.73	0.66	0.66	0.66
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				145	1446	84	342	589	0	0	962	783
Arrive On Green				0.10	0.10	0.10	0.52	0.52	0.00	0.00	0.52	0.52
Sat Flow, veh/h				457	4567	264	505	1140	0	0	1863	1515
Grp Volume(v), veh/h				157	131	139	96	0	0	0	32	26
Grp Sat Flow(s),veh/h/ln				1840	1695	1753	1645	0	0	0	1863	1515
Q Serve(g_s), s				4.7	4.3	4.4	0.0	0.0	0.0	0.0	0.5	0.5
Cycle Q Clear(g_c), s				4.7	4.3	4.4	1.6	0.0	0.0	0.0	0.5	0.5
Prop In Lane				0.25		0.15	0.35		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				583	537	555	931	0	0	0	962	783
V/C Ratio(X)				0.27	0.24	0.25	0.10	0.00	0.00	0.00	0.03	0.03
Avail Cap(c_a), veh/h				583	537	555	931	0	0	0	962	783
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				20.5	20.3	20.3	7.4	0.0	0.0	0.0	7.1	7.1
Incr Delay (d2), s/veh				1.1	1.1	1.1	0.2	0.0	0.0	0.0	0.1	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.6	2.2	2.3	0.9	0.0	0.0	0.0	0.3	0.2
LnGrp Delay(d),s/veh				21.6	21.3	21.4	7.6	0.0	0.0	0.0	7.2	7.2
LnGrp LOS				C	C	C	A				A	A
Approach Vol, veh/h					427			96			58	
Approach Delay, s/veh					21.5			7.6			7.2	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		36.0				36.0		24.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		31.0				31.0		19.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		17.7
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	76	293	20	52	92	0	0	74	39
Future Volume (veh/h)	0	0	0	76	293	20	52	92	0	0	74	39
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.93	0.97		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				88	341	20	57	100	0	0	86	35
Adj No. of Lanes				0	3	0	0	1	0	0	1	0
Peak Hour Factor				0.86	0.86	0.86	0.92	0.92	0.92	0.86	0.86	0.86
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				439	1840	109	267	433	0	0	473	193
Arrive On Green				0.45	0.45	0.45	0.38	0.38	0.00	0.00	0.38	0.38
Sat Flow, veh/h				976	4088	243	483	1130	0	0	1234	502
Grp Volume(v), veh/h				164	137	148	157	0	0	0	0	121
Grp Sat Flow(s),veh/h/ln				1814	1695	1797	1613	0	0	0	0	1736
Q Serve(g_s), s				3.3	2.9	3.0	0.0	0.0	0.0	0.0	0.0	2.8
Cycle Q Clear(g_c), s				3.3	2.9	3.0	3.4	0.0	0.0	0.0	0.0	2.8
Prop In Lane				0.54		0.14	0.36		0.00	0.00		0.29
Lane Grp Cap(c), veh/h				816	763	809	700	0	0	0	0	666
V/C Ratio(X)				0.20	0.18	0.18	0.22	0.00	0.00	0.00	0.00	0.18
Avail Cap(c_a), veh/h				816	763	809	700	0	0	0	0	666
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				10.0	9.9	9.9	12.5	0.0	0.0	0.0	0.0	12.3
Incr Delay (d2), s/veh				0.6	0.5	0.5	0.7	0.0	0.0	0.0	0.0	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	1.4	1.6	1.9	0.0	0.0	0.0	0.0	1.4
LnGrp Delay(d),s/veh				10.5	10.4	10.4	13.2	0.0	0.0	0.0	0.0	12.9
LnGrp LOS				B	B	B	B					B
Approach Vol, veh/h					449			157			121	
Approach Delay, s/veh					10.4			13.2			12.9	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.0		32.0		28.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		23.0		27.0		23.0		
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		
Green Ext Time (p_c), s		0.0		0.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		11.4
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	303	321	28	0	0	0	0	200	22	141	320	0
Future Volume (veh/h)	303	321	28	0	0	0	0	200	22	141	320	0
Number	5	2	12				3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	284	583	30				0	206	14	174	395	0
Adj No. of Lanes	1	2	0				0	1	0	1	1	0
Peak Hour Factor	0.76	0.76	0.76				0.97	0.97	0.97	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	908	1793	92				0	554	38	384	599	0
Arrive On Green	0.51	0.51	0.51				0.00	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1774	3505	180				0	1722	117	1152	1863	0
Grp Volume(v), veh/h	284	309	304				0	0	220	174	395	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1822				0	0	1839	1152	1863	0
Q Serve(g_s), s	5.6	5.8	5.9				0.0	0.0	5.5	8.2	11.0	0.0
Cycle Q Clear(g_c), s	5.6	5.8	5.9				0.0	0.0	5.5	13.8	11.0	0.0
Prop In Lane	1.00		0.10				0.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h	908	953	932				0	0	592	384	599	0
V/C Ratio(X)	0.31	0.32	0.33				0.00	0.00	0.37	0.45	0.66	0.00
Avail Cap(c_a), veh/h	908	953	932				0	0	766	494	776	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.5	8.6	8.6				0.0	0.0	15.7	21.0	17.5	0.0
Incr Delay (d2), s/veh	0.9	0.9	0.9				0.0	0.0	0.4	0.8	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	3.2	3.1				0.0	0.0	2.9	2.7	5.8	0.0
LnGrp Delay(d),s/veh	9.4	9.5	9.5				0.0	0.0	16.1	21.8	18.8	0.0
LnGrp LOS	A	A	A						B	C	B	
Approach Vol, veh/h		897						220			569	
Approach Delay, s/veh		9.5						16.1			19.8	
Approach LOS		A						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		35.7		24.3				24.3
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		25.0		25.0				25.0
Max Q Clear Time (g_c+I1), s		7.9		15.8				7.5
Green Ext Time (p_c), s		5.1		3.4				4.8

Intersection Summary	
HCM 2010 Ctrl Delay	13.8
HCM 2010 LOS	B

Notes

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Vol, veh/h	0	0	0	0	0	14	148	21	0	8	197	0	0	0	228	114
Future Vol, veh/h	0	0	0	0	0	14	148	21	0	8	197	0	0	0	228	114
Peak Hour Factor	0.92	1.00	1.00	1.00	0.92	0.80	0.80	0.80	0.92	0.93	0.93	0.93	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	18	185	26	0	9	212	0	0	0	259	130
Number of Lanes	0	0	0	0	0	0	2	0	0	0	1	0	0	0	1	1

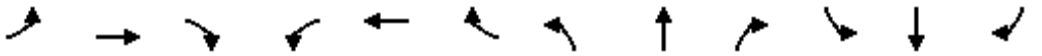
Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	10.1	11.7	10.6
HCM LOS	B	B	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	4%	16%	0%	0%	0%
Vol Thru, %	96%	84%	78%	100%	0%
Vol Right, %	0%	0%	22%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	205	88	95	228	114
LT Vol	8	14	0	0	0
Through Vol	197	74	74	228	0
RT Vol	0	0	21	0	114
Lane Flow Rate	220	110	119	259	130
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.344	0.186	0.192	0.39	0.17
Departure Headway (Hd)	5.62	6.071	5.834	5.422	4.716
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	635	585	609	658	753
Service Time	3.703	3.868	3.631	3.199	2.493
HCM Lane V/C Ratio	0.346	0.188	0.195	0.394	0.173
HCM Control Delay	11.7	10.3	10	11.7	8.5
HCM Lane LOS	B	B	A	B	A
HCM 95th-tile Q	1.5	0.7	0.7	1.8	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	37	17	133	20	4	1	355	160	7	276	2
Future Volume (veh/h)	8	37	17	133	20	4	1	355	160	7	276	2
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.99	1.00		0.96	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	10	47	12	205	31	3	1	418	160	9	337	2
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.78	0.78	0.78	0.65	0.65	0.65	0.85	0.85	0.85	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	554	127	655	90	7	462	527	202	280	769	5
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	122	1385	317	1219	224	18	1033	1318	505	828	1923	11
Grp Volume(v), veh/h	69	0	0	239	0	0	1	0	578	9	0	339
Grp Sat Flow(s),veh/h/ln	1824	0	0	1461	0	0	1033	0	1823	828	0	1935
Q Serve(g_s), s	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	11.1	0.4	0.0	5.1
Cycle Q Clear(g_c), s	0.9	0.0	0.0	4.5	0.0	0.0	5.1	0.0	11.1	11.5	0.0	5.1
Prop In Lane	0.14		0.17	0.86		0.01	1.00		0.28	1.00		0.01
Lane Grp Cap(c), veh/h	833	0	0	752	0	0	462	0	729	280	0	774
V/C Ratio(X)	0.08	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.79	0.03	0.00	0.44
Avail Cap(c_a), veh/h	833	0	0	752	0	0	462	0	729	280	0	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.5	0.0	0.0	8.5	0.0	0.0	10.6	0.0	10.5	15.6	0.0	8.7
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.1	0.0	0.0	0.0	0.0	8.6	0.2	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	2.1	0.0	0.0	0.0	0.0	7.2	0.1	0.0	3.0
LnGrp Delay(d),s/veh	7.7	0.0	0.0	9.6	0.0	0.0	10.6	0.0	19.2	15.8	0.0	10.5
LnGrp LOS	A			A			B		B	B		B
Approach Vol, veh/h		69			239			579			348	
Approach Delay, s/veh		7.7			9.6			19.2			10.7	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		20.0		20.0		20.0		20.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		13.1		2.9		13.5		6.5
Green Ext Time (p_c), s		1.7		1.1		1.5		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	14.3
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	560	249	0	0	0	136	0	221	0	190	219
Future Volume (vph)	0	560	249	0	0	0	136	0	221	0	190	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5				4.2		4.2		4.2	4.5
Lane Util. Factor		0.95	1.00				1.00		1.00		1.00	1.00
Frpb, ped/bikes		1.00	1.00				1.00		0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00				1.00		1.00		1.00	1.00
Frt		1.00	0.85				1.00		0.85		1.00	0.85
Flt Protected		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (prot)		3539	1583				1770		1559		1863	1572
Flt Permitted		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (perm)		3539	1583				1770		1559		1863	1572
Peak-hour factor, PHF	0.83	0.83	0.83	1.00	1.00	1.00	0.81	0.81	0.81	0.87	0.87	0.87
Adj. Flow (vph)	0	675	300	0	0	0	168	0	273	0	218	252
RTOR Reduction (vph)	0	0	77	0	0	0	0	0	212	0	0	100
Lane Group Flow (vph)	0	675	223	0	0	0	168	0	61	0	218	152
Confl. Peds. (#/hr)						3			6			4
Confl. Bikes (#/hr)												9
Turn Type		NA	Perm				Prot		Perm		NA	custom
Protected Phases		2					3				4	2
Permitted Phases			2						4			4
Actuated Green, G (s)		23.8	23.8				12.1		13.9		13.9	37.7
Effective Green, g (s)		23.8	23.8				12.1		13.9		13.9	37.7
Actuated g/C Ratio		0.38	0.38				0.19		0.22		0.22	0.60
Clearance Time (s)		4.5	4.5				4.2		4.2		4.2	4.5
Vehicle Extension (s)		3.0	3.0				3.0		3.0		3.0	3.0
Lane Grp Cap (vph)		1343	600				341		345		413	945
v/s Ratio Prot		c0.19					c0.09				c0.12	0.06
v/s Ratio Perm			0.14						0.04			0.04
v/c Ratio		0.50	0.37				0.49		0.18		0.53	0.16
Uniform Delay, d1		14.9	14.0				22.6		19.8		21.5	5.5
Progression Factor		1.00	1.00				1.00		1.00		1.00	1.00
Incremental Delay, d2		0.3	0.4				1.1		0.2		1.2	0.1
Delay (s)		15.2	14.4				23.7		20.0		22.7	5.6
Level of Service		B	B				C		C		C	A
Approach Delay (s)		15.0			0.0			21.4			13.5	
Approach LOS		B			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	62.7	Sum of lost time (s)	12.9
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	5	4	29	5	4	1	520	22	2	436	9
Future Volume (veh/h)	30	5	4	29	5	4	1	520	22	2	436	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.97	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	7	6	46	8	6	1	650	28	3	597	12
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.70	0.70	0.70	0.63	0.63	0.63	0.80	0.80	0.80	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	425	69	42	483	73	412	425	972	42	377	999	20
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1040	252	155	1226	266	1506	808	1770	76	757	1819	37
Grp Volume(v), veh/h	56	0	0	54	0	6	1	0	678	3	0	609
Grp Sat Flow(s),veh/h/ln	1447	0	0	1491	0	1506	808	0	1846	757	0	1855
Q Serve(g_s), s	0.5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	11.8	0.1	0.0	10.0
Cycle Q Clear(g_c), s	1.5	0.0	0.0	1.0	0.0	0.1	10.0	0.0	11.8	11.9	0.0	10.0
Prop In Lane	0.77		0.11	0.85		1.00	1.00		0.04	1.00		0.02
Lane Grp Cap(c), veh/h	537	0	0	556	0	412	425	0	1014	377	0	1019
V/C Ratio(X)	0.10	0.00	0.00	0.10	0.00	0.01	0.00	0.00	0.67	0.01	0.00	0.60
Avail Cap(c_a), veh/h	721	0	0	768	0	634	697	0	1635	632	0	1643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	0.0	0.0	12.3	0.0	12.0	10.2	0.0	7.3	11.5	0.0	6.8
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.5	0.0	0.1	0.0	0.0	6.1	0.0	0.0	5.1
LnGrp Delay(d),s/veh	12.5	0.0	0.0	12.4	0.0	12.0	10.2	0.0	8.0	11.5	0.0	7.4
LnGrp LOS	B			B		B	B		A	B		A
Approach Vol, veh/h		56			60			679			612	
Approach Delay, s/veh		12.5			12.3			8.0			7.4	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		28.8		16.4		28.8		16.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		18.0		40.0		19.0
Max Q Clear Time (g_c+I1), s		13.8		3.5		13.9		3.0
Green Ext Time (p_c), s		10.9		0.4		10.9		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	8.1
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	171	415	353	111	9	261	326	371	16	508	39
Future Volume (veh/h)	70	171	415	353	111	9	261	326	371	16	508	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	75	184	249	268	311	10	293	366	254	18	584	38
Adj No. of Lanes	1	1	1	1	1	0	2	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	375	393	485	351	354	11	352	1412	925	22	1041	68
Arrive On Green	0.21	0.21	0.21	0.20	0.20	0.20	0.10	0.40	0.40	0.01	0.31	0.31
Sat Flow, veh/h	1774	1863	1527	1774	1793	58	3442	3539	1533	1774	3370	219
Grp Volume(v), veh/h	75	184	249	268	0	321	293	366	254	18	306	316
Grp Sat Flow(s),veh/h/ln	1774	1863	1527	1774	0	1851	1721	1770	1533	1774	1770	1819
Q Serve(g_s), s	4.5	11.1	17.1	18.2	0.0	21.5	10.7	8.9	10.2	1.3	18.5	18.6
Cycle Q Clear(g_c), s	4.5	11.1	17.1	18.2	0.0	21.5	10.7	8.9	10.2	1.3	18.5	18.6
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	375	393	485	351	0	366	352	1412	925	22	546	562
V/C Ratio(X)	0.20	0.47	0.51	0.76	0.00	0.88	0.83	0.26	0.27	0.83	0.56	0.56
Avail Cap(c_a), veh/h	375	393	485	416	0	434	431	1412	925	69	554	569
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	44.1	36.0	48.5	0.0	49.8	56.3	25.7	12.5	63.0	36.9	36.9
Incr Delay (d2), s/veh	1.2	4.0	3.9	6.9	0.0	16.1	11.0	0.4	0.7	52.8	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	6.1	7.7	9.6	0.0	12.6	5.6	4.4	6.6	0.9	9.2	9.5
LnGrp Delay(d),s/veh	42.7	48.1	39.8	55.4	0.0	65.9	67.3	26.2	13.2	115.8	38.2	38.2
LnGrp LOS	D	D	D	E		E	E	C	B	F	D	D
Approach Vol, veh/h		508			589			913			640	
Approach Delay, s/veh		43.2			61.1			35.8			40.4	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	57.0		33.0	18.1	45.5		31.3
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0
Max Green Setting (Gmax), s	5.0	51.0		27.0	16.0	40.0		30.0
Max Q Clear Time (g_c+I1), s	3.3	12.2		19.1	12.7	20.6		23.5
Green Ext Time (p_c), s	0.0	9.7		1.5	0.4	7.7		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	43.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1044	62	110	435	19	331	10	500	11	7	7
Future Volume (veh/h)	25	1044	62	110	435	19	331	10	500	11	7	7
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	27	1135	54	124	489	20	439	0	585	14	16	5
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.77	0.77	0.77	0.62	0.62	0.62
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	38	1959	93	158	2315	94	610	0	410	305	320	271
Arrive On Green	0.02	0.39	0.39	0.09	0.46	0.46	0.17	0.00	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1774	4963	236	1774	5008	204	3548	0	1562	1774	1863	1578
Grp Volume(v), veh/h	27	775	414	124	330	179	439	0	585	14	16	5
Grp Sat Flow(s),veh/h/ln	1774	1695	1809	1774	1695	1821	1774	0	1562	1774	1863	1578
Q Serve(g_s), s	1.4	16.7	16.7	6.4	5.4	5.5	10.9	0.0	16.0	0.6	0.7	0.2
Cycle Q Clear(g_c), s	1.4	16.7	16.7	6.4	5.4	5.5	10.9	0.0	16.0	0.6	0.7	0.2
Prop In Lane	1.00		0.13	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	38	1338	714	158	1567	842	610	0	410	305	320	271
V/C Ratio(X)	0.70	0.58	0.58	0.78	0.21	0.21	0.72	0.00	1.43	0.05	0.05	0.02
Avail Cap(c_a), veh/h	95	1338	714	382	1567	842	610	0	410	305	320	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	22.1	22.1	41.5	14.9	14.9	36.4	0.0	34.4	32.1	32.2	32.0
Incr Delay (d2), s/veh	20.9	1.8	3.4	8.2	0.3	0.6	7.1	0.0	205.9	0.3	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	8.1	9.0	3.5	2.6	2.9	5.9	0.0	33.9	0.3	0.4	0.1
LnGrp Delay(d),s/veh	66.1	23.9	25.5	49.7	15.2	15.5	43.5	0.0	240.3	32.4	32.4	32.1
LnGrp LOS	E	C	C	D	B	B	D		F	C	C	C
Approach Vol, veh/h		1216			633			1024			35	
Approach Delay, s/veh		25.4			22.0			156.0			32.4	
Approach LOS		C			C			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.3	40.7		20.0	6.0	47.0		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	20.0	25.0		16.0	5.0	40.0		16.0
Max Q Clear Time (g_c+I1), s	3.4	18.7		2.7	3.4	7.5		18.0
Green Ext Time (p_c), s	0.3	4.7		0.1	0.0	14.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	70.7
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	482	1049	0	0	466	104	100	3	176	0	0	0
Future Volume (veh/h)	482	1049	0	0	466	104	100	3	176	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900			
Adj Flow Rate, veh/h	610	1328	0	0	536	96	114	3	156			
Adj No. of Lanes	2	2	0	0	2	0	1	1	0			
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.88	0.88	0.88			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	1353	2761	0	0	1030	184	237	4	205			
Arrive On Green	0.39	0.78	0.00	0.00	0.34	0.34	0.13	0.13	0.13			
Sat Flow, veh/h	3442	3632	0	0	3087	534	1774	29	1534			
Grp Volume(v), veh/h	610	1328	0	0	316	316	114	0	159			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1759	1774	0	1563			
Q Serve(g_s), s	12.2	12.3	0.0	0.0	13.3	13.4	5.5	0.0	9.1			
Cycle Q Clear(g_c), s	12.2	12.3	0.0	0.0	13.3	13.4	5.5	0.0	9.1			
Prop In Lane	1.00		0.00	0.00		0.30	1.00		0.98			
Lane Grp Cap(c), veh/h	1353	2761	0	0	609	605	237	0	209			
V/C Ratio(X)	0.45	0.48	0.00	0.00	0.52	0.52	0.48	0.00	0.76			
Avail Cap(c_a), veh/h	1353	2761	0	0	609	605	401	0	353			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.95	0.95	1.00	0.00	1.00			
Uniform Delay (d), s/veh	20.8	3.6	0.0	0.0	24.4	24.4	37.3	0.0	38.8			
Incr Delay (d2), s/veh	0.2	0.6	0.0	0.0	3.0	3.0	1.5	0.0	5.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.8	6.1	0.0	0.0	7.0	7.0	2.8	0.0	4.3			
LnGrp Delay(d),s/veh	21.1	4.2	0.0	0.0	27.3	27.4	38.8	0.0	44.4			
LnGrp LOS	C	A			C	C	D		D			
Approach Vol, veh/h		1938			632			273				
Approach Delay, s/veh		9.5			27.4			42.1				
Approach LOS		A			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		76.6			40.6	36.0		16.4
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		64.0			28.0	32.0		21.0
Max Q Clear Time (g_c+I1), s		14.3			14.2	15.4		11.1
Green Ext Time (p_c), s		20.3			9.7	3.5		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	16.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	368	2	217	22	724	0	0	588	337
Future Volume (veh/h)	0	0	0	368	2	217	22	724	0	0	588	337
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.90	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				449	2	265	26	862	0	0	653	374
Adj No. of Lanes				0	1	1	1	2	0	0	2	1
Peak Hour Factor				0.82	0.82	0.82	0.84	0.84	0.84	0.90	0.90	0.90
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				526	2	426	471	2154	0	0	1037	452
Arrive On Green				0.30	0.30	0.30	0.27	0.61	0.00	0.00	0.29	0.29
Sat Flow, veh/h				1767	8	1432	1774	3632	0	0	3632	1544
Grp Volume(v), veh/h				451	0	265	26	862	0	0	653	374
Grp Sat Flow(s),veh/h/ln				1774	0	1432	1774	1770	0	0	1770	1544
Q Serve(g_s), s				23.2	0.0	15.5	1.1	12.2	0.0	0.0	15.5	21.9
Cycle Q Clear(g_c), s				23.2	0.0	15.5	1.1	12.2	0.0	0.0	15.5	21.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				528	0	426	471	2154	0	0	1037	452
V/C Ratio(X)				0.85	0.00	0.62	0.06	0.40	0.00	0.00	0.63	0.83
Avail Cap(c_a), veh/h				691	0	558	471	2154	0	0	1244	543
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.84	0.84	0.00	0.00	0.95	0.95
Uniform Delay (d), s/veh				32.1	0.0	29.4	26.6	9.8	0.0	0.0	29.7	32.0
Incr Delay (d2), s/veh				8.1	0.0	1.5	0.0	0.5	0.0	0.0	2.8	15.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				12.6	0.0	6.3	0.5	6.0	0.0	0.0	7.9	11.3
LnGrp Delay(d),s/veh				40.2	0.0	30.9	26.6	10.3	0.0	0.0	32.5	47.1
LnGrp LOS				D		C	C	B			C	D
Approach Vol, veh/h					716			888			1027	
Approach Delay, s/veh					36.7			10.8			37.8	
Approach LOS					D			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	30.6	33.3				63.9		33.1
Change Period (Y+Rc), s	4.9	* 4.9				4.9		4.2
Max Green Setting (Gmax), s	12.5	* 34				50.1		37.8
Max Q Clear Time (g_c+I1), s	13.1	23.9				14.2		25.2
Green Ext Time (p_c), s	4.1	4.5				7.4		3.6

Intersection Summary	
HCM 2010 Ctrl Delay	28.4
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	4	6	273	9	311	15	665	252	321	951	5
Future Volume (veh/h)	4	4	6	273	9	311	15	665	252	321	951	5
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	6	6	0	304	0	158	18	792	235	361	1069	6
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	2	2	0
Peak Hour Factor	0.70	0.70	0.70	0.92	0.92	0.92	0.84	0.84	0.84	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	10	10	18	533	0	445	2	1712	991	462	2196	12
Arrive On Green	0.01	0.01	0.00	0.15	0.00	0.15	0.00	0.48	0.48	0.13	0.61	0.61
Sat Flow, veh/h	909	909	1583	3548	0	1545	1774	3539	1558	3442	3608	20
Grp Volume(v), veh/h	12	0	0	304	0	158	18	792	235	361	524	551
Grp Sat Flow(s),veh/h/ln	1817	0	1583	1774	0	1545	1774	1770	1558	1721	1770	1858
Q Serve(g_s), s	0.6	0.0	0.0	7.6	0.0	7.8	0.1	14.2	6.2	9.7	15.7	15.7
Cycle Q Clear(g_c), s	0.6	0.0	0.0	7.6	0.0	7.8	0.1	14.2	6.2	9.7	15.7	15.7
Prop In Lane	0.50		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	21	0	18	533	0	445	2	1712	991	462	1077	1131
V/C Ratio(X)	0.58	0.00	0.00	0.57	0.00	0.36	9.67	0.46	0.24	0.78	0.49	0.49
Avail Cap(c_a), veh/h	76	0	66	1117	0	699	93	1712	991	759	1077	1131
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.9	0.0	0.0	37.6	0.0	27.2	47.6	16.4	7.5	39.9	10.4	10.4
Incr Delay (d2), s/veh	22.9	0.0	0.0	1.0	0.0	0.5	4120.6	0.9	0.6	2.9	1.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	3.8	0.0	3.4	3.5	7.1	3.9	4.8	8.0	8.4
LnGrp Delay(d),s/veh	69.8	0.0	0.0	38.6	0.0	27.6	4168.2	17.3	8.1	42.8	11.9	11.9
LnGrp LOS	E			D		C	F	B	A	D	B	B
Approach Vol, veh/h		12			462			1045			1436	
Approach Delay, s/veh		69.8			34.8			86.7			19.7	
Approach LOS		E			C			F			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	64.0		19.3	17.8	52.1		6.1
Change Period (Y+Rc), s	6.0	* 6		5.0	5.0	6.0		5.0
Max Green Setting (Gmax), s	5.0	* 58		30.0	21.0	42.0		4.0
Max Q Clear Time (g_c+I1), s	2.1	17.7		9.8	11.7	16.2		2.6
Green Ext Time (p_c), s	0.0	8.9		2.0	1.1	6.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.0
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	38	26	947	1238	5
Future Vol, veh/h	4	38	26	947	1238	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	180	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	94	94	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	58	28	1007	1456	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2018	731	1462	0	-	0
Stage 1	1459	-	-	-	-	-
Stage 2	559	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	51	364	458	-	-	-
Stage 1	180	-	-	-	-	-
Stage 2	536	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	48	364	458	-	-	-
Mov Cap-2 Maneuver	48	-	-	-	-	-
Stage 1	180	-	-	-	-	-
Stage 2	503	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.3	0.4	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	458	-	224	-	-
HCM Lane V/C Ratio	0.06	-	0.284	-	-
HCM Control Delay (s)	13.4	-	27.3	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.2	-	1.1	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	54	912	40	125	1157
Future Vol, veh/h	7	54	912	40	125	1157
Conflicting Peds, #/hr	0	0	0	13	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	89	89	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	68	1025	45	130	1205

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1923	548	0	0	1083	0
Stage 1	1060	-	-	-	-	-
Stage 2	863	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	59	480	-	-	640	-
Stage 1	294	-	-	-	-	-
Stage 2	373	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	46	474	-	-	640	-
Mov Cap-2 Maneuver	155	-	-	-	-	-
Stage 1	290	-	-	-	-	-
Stage 2	297	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	1.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	155	474	640	-
HCM Lane V/C Ratio	-	-	0.056	0.142	0.203	-
HCM Control Delay (s)	-	-	29.6	13.9	12.1	-
HCM Lane LOS	-	-	D	B	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0.5	0.8	-

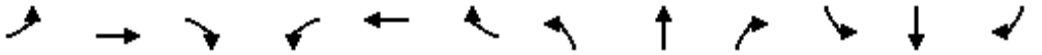
Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	15	1151	2	5	909
Future Vol, veh/h	12	15	1151	2	5	909
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	20	1279	2	6	1136

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1860	639	0	0	1279	0
Stage 1	1279	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	65	419	-	-	539	-
Stage 1	225	-	-	-	-	-
Stage 2	522	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	64	419	-	-	539	-
Mov Cap-2 Maneuver	167	-	-	-	-	-
Stage 1	225	-	-	-	-	-
Stage 2	516	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.7	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	251	539	-
HCM Lane V/C Ratio	-	-	0.143	0.012	-
HCM Control Delay (s)	-	-	21.7	11.8	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.5	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	104	89	209	138	113	88	1073	111	27	1070	38
Future Volume (veh/h)	81	104	89	209	138	113	88	1073	111	27	1070	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1976	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	109	141	86	222	241	126	95	1154	119	36	1446	50
Adj No. of Lanes	1	2	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.74	0.74	0.74	0.78	0.78	0.78	0.93	0.93	0.93	0.74	0.74	0.74
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	284	348	192	261	274	211	113	1949	861	40	1803	783
Arrive On Green	0.16	0.16	0.16	0.15	0.15	0.15	0.06	0.55	0.55	0.02	0.51	0.51
Sat Flow, veh/h	1774	2176	1204	1774	1863	1439	1774	3539	1564	1774	3539	1537
Grp Volume(v), veh/h	109	119	108	222	241	126	95	1154	119	36	1446	50
Grp Sat Flow(s),veh/h/ln	1774	1863	1517	1774	1863	1439	1774	1770	1564	1774	1770	1537
Q Serve(g_s), s	7.3	7.6	8.6	16.3	16.9	10.9	7.1	29.0	4.9	2.7	45.1	2.2
Cycle Q Clear(g_c), s	7.3	7.6	8.6	16.3	16.9	10.9	7.1	29.0	4.9	2.7	45.1	2.2
Prop In Lane	1.00		0.79	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	284	298	242	261	274	211	113	1949	861	40	1803	783
V/C Ratio(X)	0.38	0.40	0.45	0.85	0.88	0.60	0.84	0.59	0.14	0.90	0.80	0.06
Avail Cap(c_a), veh/h	426	447	364	280	294	227	260	1949	861	233	1912	830
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	50.2	50.6	55.4	55.7	53.1	61.7	20.0	14.6	65.0	27.1	16.6
Incr Delay (d2), s/veh	0.9	0.9	1.3	20.5	24.1	3.7	15.1	0.5	0.1	44.7	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	4.0	3.7	9.4	10.5	4.5	3.9	14.2	2.1	1.8	22.5	0.9
LnGrp Delay(d),s/veh	51.0	51.1	51.9	76.0	79.8	56.9	76.8	20.4	14.6	109.7	29.5	16.6
LnGrp LOS	D	D	D	E	E	E	E	C	B	F	C	B
Approach Vol, veh/h		336			589			1368			1532	
Approach Delay, s/veh		51.3			73.4			23.8			31.0	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.0	77.4		25.3	12.5	71.9		23.6
Change Period (Y+Rc), s	3.5	6.0		4.0	3.5	6.0		4.0
Max Green Setting (Gmax), s	18.0	70.0		32.0	20.0	70.0		21.0
Max Q Clear Time (g_c+I1), s	4.7	31.0		10.6	9.1	47.1		18.9
Green Ext Time (p_c), s	0.1	31.3		1.8	0.2	18.8		0.7

Intersection Summary			
HCM 2010 Ctrl Delay		36.8	
HCM 2010 LOS		D	

Notes

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	213	315	35	71	53
Future Vol, veh/h	11	213	315	35	71	53
Conflicting Peds, #/hr	0	0	0	35	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	62	62	85	85	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	344	371	41	83	62

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	447	0	-	0	805	428
Stage 1	-	-	-	-	426	-
Stage 2	-	-	-	-	379	-
Critical Hdwy	4.12	-	-	-	7.12	6.22
Critical Hdwy Stg 1	-	-	-	-	6.12	-
Critical Hdwy Stg 2	-	-	-	-	6.12	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1113	-	-	-	301	627
Stage 1	-	-	-	-	606	-
Stage 2	-	-	-	-	643	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1111	-	-	-	287	605
Mov Cap-2 Maneuver	-	-	-	-	287	-
Stage 1	-	-	-	-	574	-
Stage 2	-	-	-	-	630	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	17.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1111	-	-	-	287	605
HCM Lane V/C Ratio	0.016	-	-	-	0.288	0.102
HCM Control Delay (s)	8.3	0	-	-	22.5	11.6
HCM Lane LOS	A	A	-	-	C	B
HCM 95th %tile Q(veh)	0	-	-	-	1.2	0.3

Intersection	
Intersection Delay, s/veh	14.4
Intersection LOS	B

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Lane Configurations									
Traffic Vol, veh/h	0	205	82	0	224	293	0	99	171
Future Vol, veh/h	0	205	82	0	224	293	0	99	171
Peak Hour Factor	0.92	0.64	0.64	0.92	0.94	0.94	0.92	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	320	128	0	238	312	0	132	228
Number of Lanes	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay	13.2	16.1	13.3
HCM LOS	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	45%	0%	100%
Vol Right, %	0%	100%	0%	55%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	99	171	137	150	224	293
LT Vol	99	0	0	0	224	0
Through Vol	0	0	137	68	0	293
RT Vol	0	171	0	82	0	0
Lane Flow Rate	132	228	214	235	238	312
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.277	0.401	0.388	0.401	0.455	0.551
Departure Headway (Hd)	7.545	6.325	6.533	6.144	6.867	6.358
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	475	568	549	583	522	564
Service Time	5.312	4.09	4.303	3.913	4.632	4.123
HCM Lane V/C Ratio	0.278	0.401	0.39	0.403	0.456	0.553
HCM Control Delay	13.2	13.3	13.4	13	15.3	16.7
HCM Lane LOS	B	B	B	B	C	C
HCM 95th-tile Q	1.1	1.9	1.8	1.9	2.3	3.3

Intersection	
Intersection Delay, s/veh	15
Intersection LOS	B

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	167	37	0	204	119	0	20	360
Future Vol, veh/h	0	167	37	0	204	119	0	20	360
Peak Hour Factor	0.92	0.79	0.79	0.92	0.87	0.87	0.92	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	211	47	0	234	137	0	24	429
Number of Lanes	0	1	0	0	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	13.6	11.2	19
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	82%	5%
Vol Thru, %	100%	0%	0%	95%
Vol Right, %	0%	100%	18%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	204	119	204	380
LT Vol	0	0	167	20
Through Vol	204	0	0	360
RT Vol	0	119	37	0
Lane Flow Rate	234	137	258	452
Geometry Grp	7	7	2	5
Degree of Util (X)	0.386	0.198	0.431	0.676
Departure Headway (Hd)	5.925	5.214	6.012	5.38
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	607	687	599	670
Service Time	3.666	2.955	4.056	3.416
HCM Lane V/C Ratio	0.386	0.199	0.431	0.675
HCM Control Delay	12.4	9.2	13.6	19
HCM Lane LOS	B	A	B	C
HCM 95th-tile Q	1.8	0.7	2.2	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	300	197	101	388	230	315	965	78	291	957	146
Future Volume (veh/h)	117	300	197	101	388	230	315	965	78	291	957	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.90	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	141	361	131	107	413	192	358	1097	88	338	1113	93
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.83	0.83	0.83	0.94	0.94	0.94	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	471	379	137	538	245	375	1158	501	322	1103	484
Arrive On Green	0.09	0.25	0.25	0.08	0.24	0.24	0.11	0.33	0.33	0.09	0.31	0.31
Sat Flow, veh/h	1774	1863	1497	1774	2273	1036	3442	3539	1531	3442	3539	1555
Grp Volume(v), veh/h	141	361	131	107	320	285	358	1097	88	338	1113	93
Grp Sat Flow(s),veh/h/ln	1774	1863	1497	1774	1770	1539	1721	1770	1531	1721	1770	1555
Q Serve(g_s), s	5.0	11.5	4.6	3.8	10.8	11.1	6.6	19.4	2.6	6.0	20.0	2.8
Cycle Q Clear(g_c), s	5.0	11.5	4.6	3.8	10.8	11.1	6.6	19.4	2.6	6.0	20.0	2.8
Prop In Lane	1.00		1.00	1.00		0.67	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	471	379	137	419	364	375	1158	501	322	1103	484
V/C Ratio(X)	0.85	0.77	0.35	0.78	0.76	0.78	0.95	0.95	0.18	1.05	1.01	0.19
Avail Cap(c_a), veh/h	166	471	379	166	441	384	375	1158	501	322	1103	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	22.2	19.6	29.1	22.8	23.0	28.4	21.1	15.4	29.1	22.1	16.2
Incr Delay (d2), s/veh	32.0	7.4	0.5	17.8	7.4	9.7	34.5	16.5	0.8	64.1	29.4	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	6.9	1.9	2.5	6.1	5.7	4.9	12.1	1.2	5.7	14.2	1.3
LnGrp Delay(d),s/veh	60.6	29.6	20.2	46.9	30.2	32.7	63.0	37.6	16.2	93.2	51.5	17.1
LnGrp LOS	E	C	C	D	C	C	E	D	B	F	F	B
Approach Vol, veh/h		633			712			1543			1544	
Approach Delay, s/veh		34.6			33.7			42.2			58.5	
Approach LOS		C			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.0	8.9	20.2	11.0	24.0	10.0	19.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	21.0	6.0	16.0	7.0	20.0	6.0	16.0
Max Q Clear Time (g_c+I1), s	8.0	21.4	5.8	13.5	8.6	22.0	7.0	13.1
Green Ext Time (p_c), s	0.0	0.0	0.0	1.6	0.0	0.0	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	45.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	140	399	75	120	17	395	213	33	17	349	124
Future Volume (veh/h)	144	140	399	75	120	17	395	213	33	17	349	124
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.80	0.94		0.97	1.00		0.95	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	171	172	481	83	133	19	470	254	39	18	364	129
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.84	0.84	0.84	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	437	641	735	290	546	78	648	1471	222	51	598	445
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.33	0.19	0.48	0.47	0.03	0.32	0.32
Sat Flow, veh/h	1230	1863	1271	728	1588	227	3442	3060	462	1774	1863	1387
Grp Volume(v), veh/h	171	172	481	83	0	152	470	145	148	18	364	129
Grp Sat Flow(s),veh/h/ln	1230	1863	1271	728	0	1815	1721	1770	1753	1774	1863	1387
Q Serve(g_s), s	9.5	5.5	23.3	7.6	0.0	4.9	10.5	3.8	3.9	0.8	13.5	5.7
Cycle Q Clear(g_c), s	14.4	5.5	23.3	13.1	0.0	4.9	10.5	3.8	3.9	0.8	13.5	5.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	437	641	735	290	0	624	648	851	843	51	598	445
V/C Ratio(X)	0.39	0.27	0.65	0.29	0.00	0.24	0.73	0.17	0.18	0.35	0.61	0.29
Avail Cap(c_a), veh/h	465	683	764	290	0	624	1178	973	964	499	865	644
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	19.4	14.4	24.1	0.0	19.3	31.2	12.0	12.1	39.0	23.4	20.8
Incr Delay (d2), s/veh	0.6	0.2	1.9	0.5	0.0	0.2	1.6	0.1	0.1	4.1	1.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	2.9	8.4	1.6	0.0	2.5	5.1	1.9	1.9	0.5	7.0	2.2
LnGrp Delay(d),s/veh	24.9	19.6	16.3	24.7	0.0	19.5	32.8	12.1	12.2	43.1	24.4	21.2
LnGrp LOS	C	B	B	C		B	C	B	B	D	C	C
Approach Vol, veh/h		824			235			763			511	
Approach Delay, s/veh		18.8			21.3			24.9			24.3	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	30.3		32.1	6.3	43.3		32.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	7.0	37.0		26.0	22.0	44.0		29.0
Max Q Clear Time (g_c+I1), s	12.5	15.5		15.1	2.8	5.9		25.3
Green Ext Time (p_c), s	1.9	5.0		4.9	0.0	5.7		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	22.2
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	36	168	24	99	108	24
Future Vol, veh/h	36	168	24	99	108	24
Conflicting Peds, #/hr	0	144	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	74	74	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	198	32	134	140	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	384	0	484	287
Stage 1	-	-	-	-	285	-
Stage 2	-	-	-	-	199	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1174	-	542	752
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	835	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1172	-	454	648
Mov Cap-2 Maneuver	-	-	-	-	454	-
Stage 1	-	-	-	-	658	-
Stage 2	-	-	-	-	811	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	16.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	480	-	-	1172	-
HCM Lane V/C Ratio	0.357	-	-	0.028	-
HCM Control Delay (s)	16.6	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.6	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	12.6
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	54	8	70	0	7	5	2	0	95	209	8
Future Vol, veh/h	0	54	8	70	0	7	5	2	0	95	209	8
Peak Hour Factor	0.92	0.79	0.79	0.79	0.92	0.70	0.70	0.70	0.92	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	68	10	89	0	10	7	3	0	112	246	9
Number of Lanes	0	0	1	0	0	0	1	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	1
HCM Control Delay	12.3	10.4	10.6
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	41%	50%	5%	0%	0%
Vol Thru, %	0%	100%	90%	6%	36%	95%	100%	0%
Vol Right, %	0%	0%	10%	53%	14%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	95	139	78	132	14	177	338	63
LT Vol	95	0	0	54	7	8	0	0
Through Vol	0	139	70	8	5	169	338	0
RT Vol	0	0	8	70	2	0	0	63
Lane Flow Rate	112	164	91	167	20	197	376	70
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.201	0.272	0.15	0.308	0.041	0.312	0.593	0.097
Departure Headway (Hd)	6.486	5.979	5.906	6.645	7.342	5.709	5.687	4.978
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	553	602	607	541	487	629	635	720
Service Time	4.223	3.716	3.643	4.387	5.096	3.439	3.417	2.708
HCM Lane V/C Ratio	0.203	0.272	0.15	0.309	0.041	0.313	0.592	0.097
HCM Control Delay	10.9	10.9	9.7	12.3	10.4	11	16.4	8.2
HCM Lane LOS	B	B	A	B	B	B	C	A
HCM 95th-tile Q	0.7	1.1	0.5	1.3	0.1	1.3	3.9	0.3

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	8	507	63
Future Vol, veh/h	0	8	507	63
Peak Hour Factor	0.92	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	9	563	70
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	13.9
HCM LOS	B

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	64	39	291	564	13
Future Vol, veh/h	11	64	39	291	564	13
Conflicting Peds, #/hr	0	3	0	0	0	12
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	80	80	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	75	49	364	696	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	995	371	724	0	-	0
Stage 1	716	-	-	-	-	-
Stage 2	279	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	242	626	874	-	-	-
Stage 1	445	-	-	-	-	-
Stage 2	743	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	223	617	872	-	-	-
Mov Cap-2 Maneuver	339	-	-	-	-	-
Stage 1	440	-	-	-	-	-
Stage 2	693	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	1.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	872	-	551	-	-
HCM Lane V/C Ratio	0.056	-	0.16	-	-
HCM Control Delay (s)	9.4	-	12.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	23	37	95	295	16	42	308	304
Future Vol, veh/h	0	0	0	3	23	37	95	295	16	42	308	304
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	17	0	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	66	66	66	95	95	95	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	5	35	56	100	311	17	52	380	375

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	830	1405	181	766	0	0	344	0	0
Stage 1	536	536	-	-	-	-	-	-	-
Stage 2	294	869	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	308	138	831	843	-	-	1212	-	-
Stage 1	551	522	-	-	-	-	-	-	-
Stage 2	730	367	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	256	0	818	843	-	-	1212	-	-
Mov Cap-2 Maneuver	256	0	-	-	-	-	-	-	-
Stage 1	478	0	-	-	-	-	-	-	-
Stage 2	699	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	2.3	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	843	-	-	702	1212	-	-
HCM Lane V/C Ratio	0.119	-	-	0.136	0.043	-	-
HCM Control Delay (s)	9.8	-	-	10.9	8.1	-	-
HCM Lane LOS	A	-	-	B	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.5	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	12	51	1	0	10	0	216	5	8	283	0
Future Volume (veh/h)	137	12	51	1	0	10	0	216	5	8	283	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.95	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	173	15	65	2	0	15	0	237	5	9	322	0
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	1	2	0
Peak Hour Factor	0.79	0.79	0.79	0.46	0.46	0.46	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	270	23	102	3	0	25	0	984	21	537	984	0
Arrive On Green	0.23	0.23	0.23	0.02	0.00	0.02	0.00	0.28	0.28	0.28	0.28	0.00
Sat Flow, veh/h	1175	102	441	189	0	1415	0	3633	74	1118	3632	0
Grp Volume(v), veh/h	253	0	0	17	0	0	0	118	124	9	322	0
Grp Sat Flow(s),veh/h/ln	1718	0	0	1604	0	0	0	1770	1845	1118	1770	0
Q Serve(g_s), s	3.4	0.0	0.0	0.3	0.0	0.0	0.0	1.3	1.3	0.2	1.8	0.0
Cycle Q Clear(g_c), s	3.4	0.0	0.0	0.3	0.0	0.0	0.0	1.3	1.3	1.5	1.8	0.0
Prop In Lane	0.68		0.26	0.12		0.88	0.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h	395	0	0	29	0	0	0	492	513	537	984	0
V/C Ratio(X)	0.64	0.00	0.00	0.60	0.00	0.00	0.00	0.24	0.24	0.02	0.33	0.00
Avail Cap(c_a), veh/h	1086	0	0	1014	0	0	0	1119	1167	933	2238	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.8	0.0	0.0	12.3	0.0	0.0	0.0	7.1	7.1	7.6	7.3	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.0	18.2	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	0.3	0.0	0.0	0.0	0.7	0.7	0.0	0.9	0.0
LnGrp Delay(d),s/veh	10.5	0.0	0.0	30.6	0.0	0.0	0.0	7.3	7.3	7.7	7.4	0.0
LnGrp LOS	B			C				A	A	A	A	
Approach Vol, veh/h		253			17			242			331	
Approach Delay, s/veh		10.5			30.6			7.3			7.5	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		11.0		9.8		11.0		4.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		3.3		5.4		3.8		2.3
Green Ext Time (p_c), s		2.9		1.1		2.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	8.8
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	3	17	1	1	6	9	172	2	21	285	26
Future Vol, veh/h	22	3	17	1	1	6	9	172	2	21	285	26
Conflicting Peds, #/hr	0	0	3	0	0	8	0	0	11	0	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	40	40	40	92	92	92	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	4	21	3	3	15	10	187	2	28	385	35

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	585	683	217	473	700	114	424	0	0	200	0	0
Stage 1	463	463	-	219	219	-	-	-	-	-	-	-
Stage 2	122	220	-	254	481	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	394	370	787	474	362	917	1132	-	-	1370	-	-
Stage 1	548	562	-	763	721	-	-	-	-	-	-	-
Stage 2	869	720	-	728	552	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	371	352	782	439	344	900	1129	-	-	1360	-	-
Mov Cap-2 Maneuver	371	352	-	439	344	-	-	-	-	-	-	-
Stage 1	541	545	-	748	707	-	-	-	-	-	-	-
Stage 2	838	706	-	683	535	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.6	10.4	0.4	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1129	-	-	469	439	731	1360	-	-
HCM Lane V/C Ratio	0.009	-	-	0.111	0.006	0.024	0.021	-	-
HCM Control Delay (s)	8.2	-	-	13.6	13.2	10	7.7	0.1	-
HCM Lane LOS	A	-	-	B	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0.1	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	454	2	2	247	17	2	1	0	95	0	200
Future Volume (veh/h)	169	454	2	2	247	17	2	1	0	95	0	200
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	0.99		1.00	0.95		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	194	522	2	2	260	13	3	1	0	125	0	122
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.87	0.87	0.87	0.95	0.95	0.95	0.75	0.75	0.75	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	683	1072	4	505	676	556	312	81	0	495	0	319
Arrive On Green	0.11	0.58	0.59	0.36	0.36	0.36	0.21	0.21	0.00	0.21	0.00	0.22
Sat Flow, veh/h	1774	1854	7	868	1863	1533	691	386	0	1338	0	1516
Grp Volume(v), veh/h	194	0	524	2	260	13	4	0	0	125	0	122
Grp Sat Flow(s),veh/h/ln	1774	0	1861	868	1863	1533	1077	0	0	1338	0	1516
Q Serve(g_s), s	2.1	0.0	6.2	0.1	3.9	0.2	0.0	0.0	0.0	0.0	0.0	2.6
Cycle Q Clear(g_c), s	2.1	0.0	6.2	0.1	3.9	0.2	2.6	0.0	0.0	2.4	0.0	2.6
Prop In Lane	1.00		0.00	1.00		1.00	0.75		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	683	0	1076	505	676	556	393	0	0	495	0	319
V/C Ratio(X)	0.28	0.00	0.49	0.00	0.38	0.02	0.01	0.00	0.00	0.25	0.00	0.38
Avail Cap(c_a), veh/h	1382	0	2785	1489	2787	2294	1173	0	0	1047	0	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.1	0.0	4.7	7.7	8.9	7.7	11.9	0.0	0.0	12.7	0.0	12.6
Incr Delay (d2), s/veh	0.2	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.0	0.3	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	3.2	0.0	2.0	0.1	0.0	0.0	0.0	1.1	0.0	1.1
LnGrp Delay(d),s/veh	5.3	0.0	5.0	7.7	9.3	7.8	11.9	0.0	0.0	13.0	0.0	13.3
LnGrp LOS	A		A	A	A	A	B			B		B
Approach Vol, veh/h		718			275			4			247	
Approach Delay, s/veh		5.1			9.2			11.9			13.2	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		25.8		11.9	8.1	17.7		11.9
Change Period (Y+Rc), s		3.5		3.5	4.0	3.5		3.5
Max Green Setting (Gmax), s		57.0		24.0	19.0	57.0		30.0
Max Q Clear Time (g_c+I1), s		8.2		4.6	4.1	5.9		4.6
Green Ext Time (p_c), s		6.4		1.2	0.6	6.4		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	7.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	8	27	134	14	42	39	1310	89	28	1260	17
Future Volume (veh/h)	5	8	27	134	14	42	39	1310	89	28	1260	17
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	6	10	5	184	19	54	42	1409	70	32	1432	18
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.77	0.77	0.77	0.73	0.73	0.73	0.93	0.93	0.93	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	90	458	101	6	451	57	1728	86	47	1784	22
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.03	0.50	0.50	0.03	0.50	0.50
Sat Flow, veh/h	0	308	1561	0	19	1537	1774	3428	170	1774	3578	45
Grp Volume(v), veh/h	16	0	5	203	0	54	42	726	753	32	708	742
Grp Sat Flow(s),veh/h/ln	308	0	1561	19	0	1537	1774	1770	1828	1774	1770	1853
Q Serve(g_s), s	0.0	0.0	0.2	0.0	0.0	1.8	1.6	23.5	23.7	1.2	22.8	22.8
Cycle Q Clear(g_c), s	20.0	0.0	0.2	20.0	0.0	1.8	1.6	23.5	23.7	1.2	22.8	22.8
Prop In Lane	0.37		1.00	0.91		1.00	1.00		0.09	1.00		0.02
Lane Grp Cap(c), veh/h	163	0	458	106	0	451	57	892	921	47	882	924
V/C Ratio(X)	0.10	0.00	0.01	1.91	0.00	0.12	0.74	0.81	0.82	0.68	0.80	0.80
Avail Cap(c_a), veh/h	163	0	458	106	0	451	104	892	921	130	882	924
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	0.0	17.1	33.0	0.0	17.7	32.7	14.2	14.3	32.9	14.3	14.3
Incr Delay (d2), s/veh	0.3	0.0	0.0	442.4	0.0	0.1	16.6	8.0	8.0	15.5	7.6	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	15.0	0.0	0.8	1.0	13.3	13.8	0.8	12.9	13.4
LnGrp Delay(d),s/veh	19.5	0.0	17.1	475.5	0.0	17.8	49.3	22.2	22.2	48.4	21.9	21.6
LnGrp LOS	B		B	F		B	D	C	C	D	C	C
Approach Vol, veh/h		21			257			1521			1482	
Approach Delay, s/veh		18.9			379.3			23.0			22.4	
Approach LOS		B			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	38.4		24.0	6.2	38.0		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	33.0		16.0	4.0	34.0		20.0
Max Q Clear Time (g_c+I1), s	3.2	25.7		22.0	3.6	24.8		22.0
Green Ext Time (p_c), s	0.0	6.9		0.0	0.0	8.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	50.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	1	69	29	6	4	84	1376	204	14	777	699
Future Volume (veh/h)	27	1	69	29	6	4	84	1376	204	14	777	699
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.99	0.99		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	32	1	31	48	10	0	102	1678	249	16	873	784
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.61	0.61	0.61	0.82	0.82	0.82	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	19	78	272	43	0	350	2198	317	245	2517	1091
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.00	0.71	0.71	0.71	0.71	0.71	0.71
Sat Flow, veh/h	606	183	741	1146	405	0	299	3090	445	230	3539	1534
Grp Volume(v), veh/h	64	0	0	58	0	0	102	940	987	16	873	784
Grp Sat Flow(s),veh/h/ln	1530	0	0	1551	0	0	299	1770	1766	230	1770	1534
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	0.0	8.6	14.3	16.0	2.1	4.1	13.1
Cycle Q Clear(g_c), s	1.5	0.0	0.0	1.3	0.0	0.0	12.8	14.3	16.0	18.1	4.1	13.1
Prop In Lane	0.50		0.48	0.83		0.00	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	285	0	0	314	0	0	350	1259	1256	245	2517	1091
V/C Ratio(X)	0.22	0.00	0.00	0.18	0.00	0.00	0.29	0.75	0.79	0.07	0.35	0.72
Avail Cap(c_a), veh/h	665	0	0	687	0	0	350	1259	1256	245	2517	1091
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	0.0	18.0	0.0	0.0	4.9	3.9	4.1	10.0	2.4	3.7
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.3	0.0	0.0	2.1	4.1	5.0	0.5	0.4	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.7	0.0	0.0	0.9	7.9	9.2	0.2	2.1	6.5
LnGrp Delay(d),s/veh	18.5	0.0	0.0	18.3	0.0	0.0	7.0	7.9	9.1	10.6	2.8	7.8
LnGrp LOS	B			B			A	A	A	B	A	A
Approach Vol, veh/h		64			58			2029			1673	
Approach Delay, s/veh		18.5			18.3			8.5			5.2	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		8.6		35.0		8.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		16.0		31.0		16.0
Max Q Clear Time (g_c+I1), s		18.0		3.5		20.1		3.3
Green Ext Time (p_c), s		12.8		0.5		10.7		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	7.4
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	9	13	12	4	493	3	1061	50	34	691	145
Future Volume (veh/h)	99	9	13	12	4	493	3	1061	50	34	691	145
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	118	11	15	14	5	590	4	1326	62	37	759	159
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.83	0.83	0.83	0.80	0.80	0.80	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	41	36	548	177	598	8	1155	54	58	1057	221
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.00	0.34	0.34	0.03	0.36	0.36
Sat Flow, veh/h	721	107	96	1100	467	1580	1774	3433	160	1774	2897	607
Grp Volume(v), veh/h	144	0	0	19	0	590	4	682	706	37	464	454
Grp Sat Flow(s),veh/h/ln	925	0	0	1566	0	1580	1774	1770	1824	1774	1770	1735
Q Serve(g_s), s	4.6	0.0	0.0	0.0	0.0	17.6	0.1	16.0	16.0	1.0	10.7	10.7
Cycle Q Clear(g_c), s	5.1	0.0	0.0	0.3	0.0	17.6	0.1	16.0	16.0	1.0	10.7	10.7
Prop In Lane	0.82		0.10	0.74		1.00	1.00		0.09	1.00		0.35
Lane Grp Cap(c), veh/h	488	0	0	724	0	598	8	595	614	58	645	633
V/C Ratio(X)	0.30	0.00	0.00	0.03	0.00	0.99	0.52	1.15	1.15	0.64	0.72	0.72
Avail Cap(c_a), veh/h	488	0	0	724	0	598	149	595	614	149	645	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.6	0.0	0.0	9.3	0.0	14.7	23.6	15.8	15.8	22.7	13.0	13.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.0	33.3	45.5	84.0	85.3	11.3	6.7	6.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	0.2	0.0	13.2	0.1	21.5	22.4	0.7	6.4	6.3
LnGrp Delay(d),s/veh	11.0	0.0	0.0	9.3	0.0	47.9	69.1	99.8	101.0	34.0	19.7	19.9
LnGrp LOS	B			A		D	E	F	F	C	B	B
Approach Vol, veh/h		144			609			1392			955	
Approach Delay, s/veh		11.0			46.7			100.3			20.4	
Approach LOS		B			D			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	20.0		22.0	4.2	21.3		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	16.0		18.0	4.0	16.0		18.0
Max Q Clear Time (g_c+I1), s	3.0	18.0		7.1	2.1	12.7		19.6
Green Ext Time (p_c), s	0.0	0.0		3.5	0.0	3.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay	61.0	
HCM 2010 LOS	E	

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	57	523	108	44	763
Future Vol, veh/h	20	57	523	108	44	763
Conflicting Peds, #/hr	0	0	0	8	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	0	25	-	0	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	91	91	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	71	575	119	50	867

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1542	575	0	-	575	0
Stage 1	575	-	-	-	-	-
Stage 2	967	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	127	518	-	0	998	-
Stage 1	563	-	-	0	-	-
Stage 2	369	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	121	518	-	-	998	-
Mov Cap-2 Maneuver	121	-	-	-	-	-
Stage 1	563	-	-	-	-	-
Stage 2	351	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.7	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	121	518	998	-
HCM Lane V/C Ratio	-	0.207	0.138	0.05	-
HCM Control Delay (s)	-	42.3	13.1	8.8	-
HCM Lane LOS	-	E	B	A	-
HCM 95th %tile Q(veh)	-	0.7	0.5	0.2	-

Intersection	
Int Delay, s/veh	8.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	37	118	533	205	233	528
Future Vol, veh/h	37	118	533	205	233	528
Conflicting Peds, #/hr	0	0	0	5	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	155	586	225	256	580

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1795	410	0	0	816	0
Stage 1	703	-	-	-	-	-
Stage 2	1092	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	80	592	-	-	810	-
Stage 1	453	-	-	-	-	-
Stage 2	321	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	54	589	-	-	810	-
Mov Cap-2 Maneuver	54	-	-	-	-	-
Stage 1	451	-	-	-	-	-
Stage 2	220	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	61.6	0	3.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	54	589	810	-
HCM Lane V/C Ratio	-	-	0.902	0.264	0.316	-
HCM Control Delay (s)	-	-	215.5	13.3	11.5	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	4	1.1	1.4	-

Intersection	
Int Delay, s/veh	4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	75	248	479	48	248	333
Future Vol, veh/h	75	248	479	48	248	333
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	0	0	-	150	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	88	88	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	83	276	544	55	258	347

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1408	-	0	-	544	0
Stage 1	544	-	-	-	-	-
Stage 2	864	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	153	0	-	0	1025	-
Stage 1	582	0	-	0	-	-
Stage 2	413	0	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	114	-	-	-	1025	-
Mov Cap-2 Maneuver	230	-	-	-	-	-
Stage 1	582	-	-	-	-	-
Stage 2	309	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.3	0	4.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	230	-	1025	-
HCM Lane V/C Ratio	-	0.362	-	0.252	-
HCM Control Delay (s)	-	29.3	0	9.7	-
HCM Lane LOS	-	D	A	A	-
HCM 95th %tile Q(veh)	-	1.6	-	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	40	15	17	62	118	12	901	29	30	663	24
Future Volume (veh/h)	47	40	15	17	62	118	12	901	29	30	663	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.98		0.95	1.00		0.95	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	76	65	11	25	91	121	14	1073	29	34	762	28
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.62	0.62	0.62	0.68	0.68	0.68	0.84	0.84	0.84	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	382	389	66	90	177	209	465	2160	58	431	2137	79
Arrive On Green	0.25	0.25	0.24	0.25	0.25	0.24	1.00	1.00	1.00	0.61	0.61	0.60
Sat Flow, veh/h	1149	1544	261	95	701	830	682	3515	95	507	3478	128
Grp Volume(v), veh/h	76	0	76	237	0	0	14	540	562	34	388	402
Grp Sat Flow(s),veh/h/ln	1149	0	1805	1626	0	0	682	1770	1840	507	1770	1836
Q Serve(g_s), s	0.0	0.0	2.0	0.9	0.0	0.0	0.2	0.0	0.0	1.7	6.5	6.5
Cycle Q Clear(g_c), s	4.0	0.0	2.0	7.5	0.0	0.0	6.7	0.0	0.0	1.7	6.5	6.5
Prop In Lane	1.00		0.14	0.11		0.51	1.00		0.05	1.00		0.07
Lane Grp Cap(c), veh/h	382	0	455	476	0	0	465	1088	1131	431	1088	1128
V/C Ratio(X)	0.20	0.00	0.17	0.50	0.00	0.00	0.03	0.50	0.50	0.08	0.36	0.36
Avail Cap(c_a), veh/h	514	0	662	659	0	0	465	1088	1131	431	1088	1128
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.93	0.93	0.93	0.73	0.73	0.73
Uniform Delay (d), s/veh	18.3	0.0	17.6	19.8	0.0	0.0	0.6	0.0	0.0	4.8	5.7	5.7
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.8	0.0	0.0	0.1	1.5	1.4	0.3	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	1.0	3.5	0.0	0.0	0.1	0.5	0.5	0.3	3.3	3.4
LnGrp Delay(d),s/veh	18.5	0.0	17.8	20.6	0.0	0.0	0.7	1.5	1.4	5.0	6.4	6.4
LnGrp LOS	B		B	C			A	A	A	A	A	A
Approach Vol, veh/h		152			237			1116			824	
Approach Delay, s/veh		18.1			20.6			1.5			6.3	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		40.9		19.1		40.9		19.1
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		29.0		21.0		29.0		21.0
Max Q Clear Time (g_c+I1), s		8.7		6.0		8.5		9.5
Green Ext Time (p_c), s		14.0		2.2		14.1		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	6.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	26	54	6	25	35	21	785	21	7	634	49
Future Volume (veh/h)	82	26	54	6	25	35	21	785	21	7	634	49
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.93	0.95		0.98	0.99		0.96	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	111	35	57	10	42	32	25	946	25	8	704	54
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.74	0.74	0.74	0.59	0.59	0.59	0.83	0.83	0.83	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	378	435	343	390	227	173	574	2227	59	406	1658	127
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.22	0.13	1.00	1.00	1.00	1.00	0.97
Sat Flow, veh/h	1298	1863	1469	1232	972	740	1774	3518	93	573	3317	254
Grp Volume(v), veh/h	111	35	57	10	0	74	25	476	495	8	375	383
Grp Sat Flow(s),veh/h/ln	1298	1863	1469	1232	0	1712	1774	1770	1841	573	1770	1802
Q Serve(g_s), s	4.5	0.9	1.9	0.4	0.0	2.1	0.3	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	6.6	0.9	1.9	1.3	0.0	2.1	0.3	0.0	0.0	0.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		0.43	1.00		0.05	1.00		0.14
Lane Grp Cap(c), veh/h	378	435	343	390	0	400	574	1120	1166	406	884	901
V/C Ratio(X)	0.29	0.08	0.17	0.03	0.00	0.18	0.04	0.42	0.42	0.02	0.42	0.43
Avail Cap(c_a), veh/h	486	590	465	492	0	542	574	1120	1166	406	884	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.86	0.86	0.86	0.94	0.94	0.94
Uniform Delay (d), s/veh	21.1	18.0	18.3	18.5	0.0	18.6	4.9	0.0	0.0	0.0	0.0	0.1
Incr Delay (d2), s/veh	0.4	0.1	0.2	0.0	0.0	0.2	0.1	1.0	1.0	0.1	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.5	0.8	0.1	0.0	1.0	0.2	0.3	0.3	0.0	0.3	0.4
LnGrp Delay(d),s/veh	21.5	18.0	18.6	18.5	0.0	18.8	5.1	1.0	1.0	0.1	1.4	1.5
LnGrp LOS	C	B	B	B		B	A	A	A	A	A	A
Approach Vol, veh/h		203			84			996			766	
Approach Delay, s/veh		20.1			18.8			1.1			1.4	
Approach LOS		C			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	8.0	34.0		18.0		42.0		18.0
Change Period (Y+Rc), s	4.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	4.0	24.0		18.0		32.0		18.0
Max Q Clear Time (g_c+I1), s	2.3	2.1		4.1		2.0		8.6
Green Ext Time (p_c), s	0.0	8.8		1.2		9.8		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	3.8
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	61	27	131	141	137	13	670	127	144	506	48
Future Volume (veh/h)	28	61	27	131	141	137	13	670	127	144	506	48
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.90	0.92		0.92	0.98		0.94	0.99		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	34	73	13	144	155	64	15	761	111	155	544	49
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.83	0.83	0.83	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	523	400	424	523	408	496	1391	203	480	1646	148
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.03	0.90	0.87	0.13	1.00	0.98
Sat Flow, veh/h	1107	1863	1424	1208	1863	1454	1774	3074	448	1774	3263	293
Grp Volume(v), veh/h	34	73	13	144	155	64	15	438	434	155	294	299
Grp Sat Flow(s),veh/h/ln	1107	1863	1424	1208	1863	1454	1774	1770	1753	1774	1770	1786
Q Serve(g_s), s	1.5	1.8	0.4	6.1	3.9	2.0	0.3	2.8	3.0	2.8	0.0	0.1
Cycle Q Clear(g_c), s	5.4	1.8	0.4	7.8	3.9	2.0	0.3	2.8	3.0	2.8	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		0.16
Lane Grp Cap(c), veh/h	359	523	400	424	523	408	496	801	793	480	893	901
V/C Ratio(X)	0.09	0.14	0.03	0.34	0.30	0.16	0.03	0.55	0.55	0.32	0.33	0.33
Avail Cap(c_a), veh/h	380	559	427	447	559	436	588	801	793	480	893	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94	0.87	0.87	0.87
Uniform Delay (d), s/veh	19.0	16.1	15.7	19.1	16.9	16.2	9.0	1.7	1.9	7.2	0.0	0.1
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.5	0.3	0.2	0.0	2.5	2.6	0.3	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.9	0.2	2.1	2.1	0.8	0.1	1.5	1.6	1.3	0.2	0.2
LnGrp Delay(d),s/veh	19.2	16.3	15.7	19.6	17.2	16.4	9.0	4.2	4.4	7.5	0.9	0.9
LnGrp LOS	B	B	B	B	B	B	A	A	A	A	A	A
Approach Vol, veh/h		120			363			887			748	
Approach Delay, s/veh		17.0			18.0			4.4			2.3	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.9	34.3		20.9	8.0	31.1		20.9
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	25.0		17.0	4.0	25.0		17.0
Max Q Clear Time (g_c+I1), s	2.3	2.1		9.8	4.8	5.0		7.4
Green Ext Time (p_c), s	0.0	11.3		1.6	0.0	10.5		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	30	150	54	53	801	0	0	370	351
Future Volume (veh/h)	0	0	0	30	150	54	53	801	0	0	370	351
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.89	0.99		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				34	172	17	58	871	0	0	389	263
Adj No. of Lanes				0	3	0	1	2	0	0	1	1
Peak Hour Factor				0.87	0.87	0.87	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				137	740	73	624	2309	0	0	1215	1004
Arrive On Green				0.20	0.18	0.18	0.65	0.65	0.00	0.00	1.00	1.00
Sat Flow, veh/h				759	4092	403	773	3632	0	0	1863	1539
Grp Volume(v), veh/h				82	68	73	58	871	0	0	389	263
Grp Sat Flow(s),veh/h/ln				1825	1695	1735	773	1770	0	0	1863	1539
Q Serve(g_s), s				2.3	2.1	2.2	1.7	6.8	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				2.3	2.1	2.2	1.7	6.8	0.0	0.0	0.0	0.0
Prop In Lane				0.42		0.23	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				330	307	314	624	2309	0	0	1215	1004
V/C Ratio(X)				0.25	0.22	0.23	0.09	0.38	0.00	0.00	0.32	0.26
Avail Cap(c_a), veh/h				669	622	636	624	2309	0	0	1215	1004
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.96	0.96
Uniform Delay (d), s/veh				20.9	21.0	21.0	3.9	4.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.4	0.4	0.4	0.3	0.5	0.0	0.0	0.7	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	1.0	1.1	0.4	3.4	0.0	0.0	0.2	0.2
LnGrp Delay(d),s/veh				21.3	21.3	21.4	4.2	5.3	0.0	0.0	0.7	0.6
LnGrp LOS				C	C	C	A	A			A	A
Approach Vol, veh/h					223			929			652	
Approach Delay, s/veh					21.3			5.2			0.6	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		44.1		15.9		44.1		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		28.0		22.0		28.0		
Max Q Clear Time (g_c+I1), s		0.0		4.3		0.0		
Green Ext Time (p_c), s		0.0		1.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		5.6
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	263	91	116	298	11	118	143	120	19	120	15
Future Volume (veh/h)	15	263	91	116	298	11	118	143	120	19	120	15
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		0.95	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	16	277	88	135	347	7	128	155	104	24	152	14
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.86	0.86	0.86	0.92	0.92	0.92	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	423	598	484	473	727	586	468	309	208	388	499	46
Arrive On Green	0.00	0.32	0.32	0.06	0.39	0.39	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1774	1863	1509	1774	1863	1503	1205	1038	697	1112	1675	154
Grp Volume(v), veh/h	16	277	88	135	347	7	128	0	259	24	0	166
Grp Sat Flow(s),veh/h/ln	1774	1863	1509	1774	1863	1503	1205	0	1735	1112	0	1829
Q Serve(g_s), s	0.1	4.4	1.6	1.9	5.2	0.1	3.4	0.0	4.6	0.7	0.0	2.6
Cycle Q Clear(g_c), s	0.1	4.4	1.6	1.9	5.2	0.1	6.0	0.0	4.6	5.3	0.0	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.40	1.00		0.08
Lane Grp Cap(c), veh/h	423	598	484	473	727	586	468	0	517	388	0	545
V/C Ratio(X)	0.04	0.46	0.18	0.29	0.48	0.01	0.27	0.00	0.50	0.06	0.00	0.30
Avail Cap(c_a), veh/h	1038	1451	1176	988	1451	1171	724	0	886	684	0	1032
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.5	10.1	9.1	8.4	8.5	7.0	12.4	0.0	10.8	13.0	0.0	10.1
Incr Delay (d2), s/veh	0.0	0.6	0.2	0.3	0.5	0.0	0.3	0.0	0.8	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.3	0.7	0.9	2.7	0.0	1.2	0.0	2.3	0.2	0.0	1.3
LnGrp Delay(d),s/veh	10.6	10.6	9.3	8.8	9.0	7.0	12.7	0.0	11.5	13.0	0.0	10.4
LnGrp LOS	B	B	A	A	A	A	B		B	B		B
Approach Vol, veh/h		381			489			387			190	
Approach Delay, s/veh		10.3			8.9			11.9			10.7	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	3.6	18.5		15.1	6.2	15.9		15.1
Change Period (Y+Rc), s	3.0	4.0		4.0	3.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	29.0		19.0	14.0	29.0		21.0
Max Q Clear Time (g_c+I1), s	2.1	7.2		8.0	3.9	6.4		7.3
Green Ext Time (p_c), s	0.0	4.5		2.6	0.3	4.6		2.9

Intersection Summary		
HCM 2010 Ctrl Delay		10.3
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	399	22	172	272	31	30	297	197	25	257	115
Future Volume (veh/h)	85	399	22	172	272	31	30	297	197	25	257	115
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	90	424	17	202	320	36	33	326	183	27	282	104
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.85	0.85	0.85	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	722	582	230	863	705	224	351	197	127	409	151
Arrive On Green	0.05	0.39	0.39	0.13	0.46	0.46	0.32	0.32	0.33	0.32	0.32	0.33
Sat Flow, veh/h	1774	1863	1503	1774	1863	1522	991	1099	617	887	1278	471
Grp Volume(v), veh/h	90	424	17	202	320	36	33	0	509	27	0	386
Grp Sat Flow(s),veh/h/ln	1774	1863	1503	1774	1863	1522	991	0	1716	887	0	1750
Q Serve(g_s), s	3.7	13.3	0.5	8.2	8.2	1.0	2.2	0.0	21.1	2.2	0.0	14.1
Cycle Q Clear(g_c), s	3.7	13.3	0.5	8.2	8.2	1.0	16.4	0.0	21.1	23.3	0.0	14.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.36	1.00		0.27
Lane Grp Cap(c), veh/h	96	722	582	230	863	705	224	0	548	127	0	559
V/C Ratio(X)	0.94	0.59	0.03	0.88	0.37	0.05	0.15	0.00	0.93	0.21	0.00	0.69
Avail Cap(c_a), veh/h	434	722	582	434	863	705	224	0	548	127	0	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.7	17.8	13.9	31.4	12.8	10.9	29.0	0.0	24.1	35.5	0.0	21.8
Incr Delay (d2), s/veh	29.7	3.5	0.1	10.3	1.2	0.1	0.3	0.0	22.3	0.8	0.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.5	0.2	4.7	4.5	0.4	0.6	0.0	13.3	0.6	0.0	7.3
LnGrp Delay(d),s/veh	64.3	21.3	14.0	41.8	14.0	11.0	29.3	0.0	46.4	36.3	0.0	25.4
LnGrp LOS	E	C	B	D	B	B	C		D	D		C
Approach Vol, veh/h		531			558			542			413	
Approach Delay, s/veh		28.4			23.9			45.3			26.1	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.5	32.5		27.5	8.0	38.0		27.5
Change Period (Y+Rc), s	3.0	3.5		3.5	3.0	3.5		3.5
Max Green Setting (Gmax), s	10.0	29.0		24.0	19.0	29.0		24.0
Max Q Clear Time (g_c+I1), s	10.2	15.3		25.3	5.7	10.2		23.1
Green Ext Time (p_c), s	0.5	4.3		0.0	0.2	5.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	31.2
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations			↕				↕				↕				↕	
Traffic Vol, veh/h	0	7	44	7	0	66	111	16	0	13	50	73	0	38	37	52
Future Vol, veh/h	0	7	44	7	0	66	111	16	0	13	50	73	0	38	37	52
Peak Hour Factor	0.92	0.81	0.81	0.81	0.92	0.86	0.86	0.86	0.92	0.90	0.90	0.90	0.92	0.71	0.71	0.71
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	9	54	9	0	77	129	19	0	14	56	81	0	54	52	73
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	9.9	8.7	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	12%	34%	30%
Vol Thru, %	37%	76%	58%	29%
Vol Right, %	54%	12%	8%	41%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	136	58	193	127
LT Vol	13	7	66	38
Through Vol	50	44	111	37
RT Vol	73	7	16	52
Lane Flow Rate	151	72	224	179
Geometry Grp	1	1	1	1
Degree of Util (X)	0.192	0.098	0.299	0.231
Departure Headway (Hd)	4.572	4.936	4.802	4.652
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	781	721	745	767
Service Time	2.625	3.001	2.855	2.703
HCM Lane V/C Ratio	0.193	0.1	0.301	0.233
HCM Control Delay	8.7	8.5	9.9	9.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	0.3	1.3	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	81	518	61	55	175	0	0	133	172
Future Volume (veh/h)	0	0	0	81	518	61	55	175	0	0	133	172
Number				5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.62	0.87		1.00	1.00		0.75
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				84	540	60	67	213	0	0	145	173
Adj No. of Lanes				0	3	0	1	1	0	0	1	1
Peak Hour Factor				0.96	0.96	0.96	0.82	0.82	0.82	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				284	1920	210	409	714	0	0	714	457
Arrive On Green				0.48	0.48	0.47	0.77	0.77	0.00	0.00	0.13	0.13
Sat Flow, veh/h				587	3972	435	923	1863	0	0	1863	1192
Grp Volume(v), veh/h				262	220	202	67	213	0	0	145	173
Grp Sat Flow(s),veh/h/ln				1833	1695	1467	923	1863	0	0	1863	1192
Q Serve(g_s), s				5.2	4.6	5.0	1.9	2.1	0.0	0.0	4.2	8.0
Cycle Q Clear(g_c), s				5.2	4.6	5.0	6.1	2.1	0.0	0.0	4.2	8.0
Prop In Lane				0.32		0.30	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				886	819	709	409	714	0	0	714	457
V/C Ratio(X)				0.30	0.27	0.29	0.16	0.30	0.00	0.00	0.20	0.38
Avail Cap(c_a), veh/h				886	819	709	409	714	0	0	714	457
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				9.3	9.2	9.4	5.9	4.6	0.0	0.0	18.0	19.6
Incr Delay (d2), s/veh				0.9	0.8	1.0	0.9	1.1	0.0	0.0	0.6	2.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.8	2.3	2.2	0.5	1.2	0.0	0.0	2.3	2.9
LnGrp Delay(d),s/veh				10.2	10.0	10.4	6.8	5.6	0.0	0.0	18.6	22.0
LnGrp LOS				B	B	B	A	A			B	C
Approach Vol, veh/h					684			280			318	
Approach Delay, s/veh					10.2			5.9			20.5	
Approach LOS					B			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		28.0		22.0				22.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary		
HCM 2010 Ctrl Delay		11.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	53	540	35	52	61	0	0	40	55
Future Volume (veh/h)	0	0	0	53	540	35	52	61	0	0	40	55
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.45	0.89		1.00	1.00		0.86
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1863
Adj Flow Rate, veh/h				56	574	33	66	77	0	0	45	53
Adj No. of Lanes				0	3	0	0	1	0	0	1	1
Peak Hour Factor				0.94	0.94	0.94	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				135	1451	82	417	457	0	0	993	723
Arrive On Green				0.11	0.11	0.10	0.53	0.53	0.00	0.00	0.53	0.53
Sat Flow, veh/h				406	4354	247	618	857	0	0	1863	1355
Grp Volume(v), veh/h				254	212	196	143	0	0	0	45	53
Grp Sat Flow(s),veh/h/ln				1842	1695	1469	1475	0	0	0	1863	1355
Q Serve(g_s), s				7.7	7.0	7.5	0.0	0.0	0.0	0.0	0.7	1.1
Cycle Q Clear(g_c), s				7.7	7.0	7.5	2.3	0.0	0.0	0.0	0.7	1.1
Prop In Lane				0.22		0.17	0.46		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				614	565	490	874	0	0	0	993	723
V/C Ratio(X)				0.41	0.38	0.40	0.16	0.00	0.00	0.00	0.05	0.07
Avail Cap(c_a), veh/h				614	565	490	874	0	0	0	993	723
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				21.2	20.9	21.1	7.1	0.0	0.0	0.0	6.7	6.8
Incr Delay (d2), s/veh				2.1	1.9	2.4	0.4	0.0	0.0	0.0	0.1	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.3	3.6	3.4	1.3	0.0	0.0	0.0	0.4	0.5
LnGrp Delay(d),s/veh				23.3	22.8	23.6	7.5	0.0	0.0	0.0	6.8	7.0
LnGrp LOS				C	C	C	A				A	A
Approach Vol, veh/h					663			143			98	
Approach Delay, s/veh					23.2			7.5			6.9	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		36.0				36.0		24.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		31.0				31.0		19.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		19.0
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	72	479	32	96	190	0	0	80	56
Future Volume (veh/h)	0	0	0	72	479	32	96	190	0	0	80	56
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.88	0.92		1.00	1.00		0.86
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				75	499	30	110	218	0	0	104	60
Adj No. of Lanes				0	3	0	0	1	0	0	1	0
Peak Hour Factor				0.96	0.96	0.96	0.87	0.87	0.87	0.77	0.77	0.77
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				289	2057	126	250	459	0	0	417	241
Arrive On Green				0.47	0.47	0.45	0.40	0.40	0.00	0.00	0.40	0.38
Sat Flow, veh/h				620	4408	270	425	1148	0	0	1043	601
Grp Volume(v), veh/h				221	185	197	328	0	0	0	0	164
Grp Sat Flow(s),veh/h/ln				1832	1695	1771	1574	0	0	0	0	1644
Q Serve(g_s), s				4.4	3.9	4.0	4.8	0.0	0.0	0.0	0.0	4.0
Cycle Q Clear(g_c), s				4.4	3.9	4.0	8.9	0.0	0.0	0.0	0.0	4.0
Prop In Lane				0.34		0.15	0.34		0.00	0.00		0.37
Lane Grp Cap(c), veh/h				855	791	827	710	0	0	0	0	658
V/C Ratio(X)				0.26	0.23	0.24	0.46	0.00	0.00	0.00	0.00	0.25
Avail Cap(c_a), veh/h				855	791	827	710	0	0	0	0	658
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				9.7	9.6	9.7	13.3	0.0	0.0	0.0	0.0	12.1
Incr Delay (d2), s/veh				0.7	0.7	0.7	2.2	0.0	0.0	0.0	0.0	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.4	2.0	2.1	4.4	0.0	0.0	0.0	0.0	2.0
LnGrp Delay(d),s/veh				10.4	10.3	10.3	15.5	0.0	0.0	0.0	0.0	13.0
LnGrp LOS				B	B	B	B					B
Approach Vol, veh/h					604			328			164	
Approach Delay, s/veh					10.4			15.5			13.0	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.0		32.0		28.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		23.0		27.0		23.0		
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		
Green Ext Time (p_c), s		0.0		0.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		12.3
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	483	282	27	0	0	0	0	273	34	110	309	0
Future Volume (veh/h)	483	282	27	0	0	0	0	273	34	110	309	0
Number	5	2	12				3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95				1.00		0.97	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	562	221	23				0	333	26	124	347	0
Adj No. of Lanes	2	1	0				0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95				0.82	0.82	0.82	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1775	825	86				0	623	49	334	683	0
Arrive On Green	0.50	0.50	0.50				0.00	0.37	0.35	0.37	0.37	0.00
Sat Flow, veh/h	3548	1649	172				0	1701	133	1010	1863	0
Grp Volume(v), veh/h	562	0	244				0	0	359	124	347	0
Grp Sat Flow(s),veh/h/ln	1774	0	1821				0	0	1834	1010	1863	0
Q Serve(g_s), s	5.6	0.0	4.6				0.0	0.0	9.3	6.6	8.7	0.0
Cycle Q Clear(g_c), s	5.6	0.0	4.6				0.0	0.0	9.3	15.9	8.7	0.0
Prop In Lane	1.00		0.09				0.00		0.07	1.00		0.00
Lane Grp Cap(c), veh/h	1775	0	911				0	0	672	334	683	0
V/C Ratio(X)	0.32	0.00	0.27				0.00	0.00	0.53	0.37	0.51	0.00
Avail Cap(c_a), veh/h	1775	0	911				0	0	795	402	807	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.9	0.0	8.7				0.0	0.0	15.0	21.2	14.8	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.7				0.0	0.0	0.7	0.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	2.5				0.0	0.0	4.8	1.9	4.5	0.0
LnGrp Delay(d),s/veh	9.4	0.0	9.4				0.0	0.0	15.7	21.9	15.4	0.0
LnGrp LOS	A		A						B	C	B	
Approach Vol, veh/h		806						359			471	
Approach Delay, s/veh		9.4						15.7			17.1	
Approach LOS		A						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		34.0		26.0				26.0
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		25.0		25.0				25.0
Max Q Clear Time (g_c+I1), s		7.6		17.9				11.3
Green Ext Time (p_c), s		4.3		3.1				4.7

Intersection Summary	
HCM 2010 Ctrl Delay	13.0
HCM 2010 LOS	B

Notes

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Vol, veh/h	0	0	0	0	0	12	179	20	0	11	226	0	0	0	202	173
Future Vol, veh/h	0	0	0	0	0	12	179	20	0	11	226	0	0	0	202	173
Peak Hour Factor	0.92	1.00	1.00	1.00	0.92	0.69	0.69	0.69	0.92	0.88	0.88	0.88	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	17	259	29	0	13	257	0	0	0	240	206
Number of Lanes	0	0	0	0	0	0	2	0	0	0	1	0	0	0	1	1

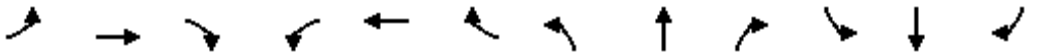
Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	11.4	13.9	11.2
HCM LOS	B	B	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	5%	12%	0%	0%	0%
Vol Thru, %	95%	88%	82%	100%	0%
Vol Right, %	0%	0%	18%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	237	102	110	202	173
LT Vol	11	12	0	0	0
Through Vol	226	90	90	202	0
RT Vol	0	0	20	0	173
Lane Flow Rate	269	147	159	240	206
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.451	0.263	0.275	0.391	0.294
Departure Headway (Hd)	6.027	6.436	6.247	5.855	5.146
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	598	559	576	616	698
Service Time	4.056	4.169	3.98	3.585	2.876
HCM Lane V/C Ratio	0.45	0.263	0.276	0.39	0.295
HCM Control Delay	13.9	11.5	11.3	12.3	10
HCM Lane LOS	B	B	B	B	A
HCM 95th-tile Q	2.3	1	1.1	1.9	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	62	5	123	31	6	6	351	180	35	334	8
Future Volume (veh/h)	10	62	5	123	31	6	6	351	180	35	334	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.99		0.93	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	11	70	1	138	35	4	7	418	183	41	388	9
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.84	0.84	0.84	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	311	4	314	61	6	715	870	381	553	1296	30
Arrive On Green	0.18	0.18	0.16	0.18	0.18	0.16	0.69	0.69	0.67	0.69	0.69	0.67
Sat Flow, veh/h	127	1739	23	1161	343	35	980	1264	554	813	1884	44
Grp Volume(v), veh/h	82	0	0	177	0	0	7	0	601	41	0	397
Grp Sat Flow(s),veh/h/ln	1889	0	0	1539	0	0	980	0	1818	813	0	1928
Q Serve(g_s), s	0.0	0.0	0.0	3.9	0.0	0.0	0.2	0.0	9.4	1.5	0.0	4.9
Cycle Q Clear(g_c), s	2.2	0.0	0.0	6.1	0.0	0.0	5.0	0.0	9.4	10.9	0.0	4.9
Prop In Lane	0.13		0.01	0.78		0.02	1.00		0.30	1.00		0.02
Lane Grp Cap(c), veh/h	406	0	0	382	0	0	715	0	1251	553	0	1326
V/C Ratio(X)	0.20	0.00	0.00	0.46	0.00	0.00	0.01	0.00	0.48	0.07	0.00	0.30
Avail Cap(c_a), veh/h	781	0	0	680	0	0	715	0	1251	553	0	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.1	0.0	0.0	22.6	0.0	0.0	4.7	0.0	4.5	6.9	0.0	3.7
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.9	0.0	0.0	0.0	0.0	1.3	0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	2.8	0.0	0.0	0.0	0.0	5.0	0.4	0.0	2.8
LnGrp Delay(d),s/veh	21.4	0.0	0.0	23.5	0.0	0.0	4.7	0.0	5.8	7.2	0.0	4.3
LnGrp LOS	C			C			A		A	A		A
Approach Vol, veh/h		82			177			608			438	
Approach Delay, s/veh		21.4			23.5			5.8			4.5	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		45.3		14.7		45.3		14.7
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		28.0		22.0		22.0		22.0
Max Q Clear Time (g_c+I1), s		11.4		4.2		12.9		8.1
Green Ext Time (p_c), s		7.1		1.0		4.8		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	8.7
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	500	188	0	0	0	248	0	316	0	269	523
Future Volume (vph)	0	500	188	0	0	0	248	0	316	0	269	523
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.5	3.5				4.0		4.0		4.0	3.5
Lane Util. Factor		0.95	1.00				1.00		1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.97				1.00		1.00		1.00	0.99
Flpb, ped/bikes		1.00	1.00				1.00		1.00		1.00	1.00
Frt		1.00	0.85				1.00		0.85		1.00	0.85
Flt Protected		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (prot)		3539	1537				1770		1583		1863	1562
Flt Permitted		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (perm)		3539	1537				1770		1583		1863	1562
Peak-hour factor, PHF	0.94	0.94	0.94	1.00	1.00	1.00	0.83	0.83	0.83	0.89	0.89	0.89
Adj. Flow (vph)	0	532	200	0	0	0	299	0	381	0	302	588
RTOR Reduction (vph)	0	0	77	0	0	0	0	0	276	0	0	149
Lane Group Flow (vph)	0	532	123	0	0	0	299	0	105	0	302	439
Confl. Peds. (#/hr)			5			5			1			9
Confl. Bikes (#/hr)												12
Turn Type		NA	Perm				Prot		Prot		NA	custom
Protected Phases		2					3		4		4	2
Permitted Phases			2									4
Actuated Green, G (s)		15.8	15.8				15.7		16.5		16.5	32.3
Effective Green, g (s)		16.3	16.3				15.9		16.7		16.7	33.3
Actuated g/C Ratio		0.27	0.27				0.26		0.28		0.28	0.55
Clearance Time (s)		4.0	4.0				4.2		4.2		4.2	4.0
Vehicle Extension (s)		3.0	3.0				3.0		3.0		3.0	3.0
Lane Grp Cap (vph)		955	414				465		437		515	861
v/s Ratio Prot		c0.15					c0.17		0.07		c0.16	0.14
v/s Ratio Perm			0.08									0.14
v/c Ratio		0.56	0.30				0.64		0.24		0.59	0.51
Uniform Delay, d1		18.9	17.5				19.7		16.9		18.9	8.5
Progression Factor		1.00	1.00				1.00		1.00		1.00	1.00
Incremental Delay, d2		0.7	0.4				3.0		0.3		1.7	0.5
Delay (s)		19.7	17.9				22.8		17.2		20.6	8.9
Level of Service		B	B				C		B		C	A
Approach Delay (s)		19.2			0.0			19.7			12.9	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	60.4	Sum of lost time (s)	11.5
Intersection Capacity Utilization	55.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	3	11	57	3	6	7	624	18	3	487	13
Future Volume (veh/h)	19	3	11	57	3	6	7	624	18	3	487	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	23	4	13	79	4	8	8	717	21	4	580	15
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.72	0.72	0.72	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	322	73	133	515	23	407	443	1016	30	348	1020	26
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	757	271	495	1371	84	1513	818	1799	53	716	1806	47
Grp Volume(v), veh/h	40	0	0	83	0	8	8	0	738	4	0	595
Grp Sat Flow(s),veh/h/ln	1524	0	0	1455	0	1513	818	0	1852	716	0	1853
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	13.9	0.2	0.0	9.9
Cycle Q Clear(g_c), s	1.7	0.0	0.0	1.7	0.0	0.2	10.2	0.0	13.9	14.1	0.0	9.9
Prop In Lane	0.57		0.32	0.95		1.00	1.00		0.03	1.00		0.03
Lane Grp Cap(c), veh/h	528	0	0	537	0	407	443	0	1046	348	0	1046
V/C Ratio(X)	0.08	0.00	0.00	0.15	0.00	0.02	0.02	0.00	0.71	0.01	0.00	0.57
Avail Cap(c_a), veh/h	689	0	0	716	0	599	663	0	1542	540	0	1543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.1	0.0	0.0	13.5	0.0	12.9	10.0	0.0	7.6	12.7	0.0	6.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.8	0.0	0.1	0.1	0.0	7.2	0.0	0.0	5.1
LnGrp Delay(d),s/veh	13.2	0.0	0.0	13.6	0.0	12.9	10.0	0.0	8.5	12.7	0.0	7.2
LnGrp LOS	B			B		B	A		A	B		A
Approach Vol, veh/h		40			91			746			599	
Approach Delay, s/veh		13.2			13.5			8.5			7.2	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.1		16.9		31.1		16.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		18.0		40.0		19.0
Max Q Clear Time (g_c+I1), s		15.9		3.7		16.1		3.7
Green Ext Time (p_c), s		11.1		0.5		11.1		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	8.4
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	232	323	402	156	17	457	600	451	24	473	55
Future Volume (veh/h)	54	232	323	402	156	17	457	600	451	24	473	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	58	249	215	344	384	16	525	690	349	29	563	52
Adj No. of Lanes	1	1	1	1	1	0	2	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.83	0.83	0.83	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	310	326	557	381	381	16	634	1331	911	35	691	64
Arrive On Green	0.17	0.17	0.17	0.21	0.21	0.21	0.18	0.38	0.38	0.02	0.21	0.21
Sat Flow, veh/h	1774	1863	1518	1774	1773	74	3442	3539	1519	1774	3270	301
Grp Volume(v), veh/h	58	249	215	344	0	400	525	690	349	29	304	311
Grp Sat Flow(s),veh/h/ln	1774	1863	1518	1774	0	1847	1721	1770	1519	1774	1770	1802
Q Serve(g_s), s	2.1	9.5	7.9	14.1	0.0	16.0	10.9	11.3	9.1	1.2	12.2	12.3
Cycle Q Clear(g_c), s	2.1	9.5	7.9	14.1	0.0	16.0	10.9	11.3	9.1	1.2	12.2	12.3
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	310	326	557	381	0	397	634	1331	911	35	374	380
V/C Ratio(X)	0.19	0.76	0.39	0.90	0.00	1.01	0.83	0.52	0.38	0.84	0.81	0.82
Avail Cap(c_a), veh/h	381	400	618	381	0	397	739	1331	911	95	380	387
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	29.3	17.8	28.5	0.0	29.2	29.2	18.0	8.1	36.4	28.0	28.0
Incr Delay (d2), s/veh	0.3	6.9	0.4	24.0	0.0	47.2	6.8	1.4	1.2	38.4	12.6	12.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	5.5	3.3	9.4	0.0	13.2	5.8	5.7	6.1	1.0	7.2	7.4
LnGrp Delay(d),s/veh	26.5	36.1	18.3	52.5	0.0	76.5	36.1	19.5	9.3	74.7	40.5	40.7
LnGrp LOS	C	D	B	D		F	D	B	A	E	D	D
Approach Vol, veh/h		522			744			1564			644	
Approach Delay, s/veh		27.7			65.4			22.8			42.1	
Approach LOS		C			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	32.0		17.0	17.7	19.7		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	28.0		16.0	16.0	16.0		16.0
Max Q Clear Time (g_c+I1), s	3.2	13.3		11.5	12.9	14.3		18.0
Green Ext Time (p_c), s	0.0	8.9		1.1	0.8	1.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	1097	129	175	886	15	651	23	208	17	12	16
Future Volume (veh/h)	35	1097	129	175	886	15	651	23	208	17	12	16
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	37	1167	122	188	953	16	804	0	212	22	24	10
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.93	0.93	0.93	0.83	0.83	0.83	0.66	0.66	0.66
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	47	1303	136	210	1912	32	916	0	596	305	320	271
Arrive On Green	0.03	0.28	0.28	0.12	0.37	0.37	0.26	0.00	0.26	0.17	0.17	0.17
Sat Flow, veh/h	1774	4659	487	1774	5148	86	3548	0	1583	1774	1863	1578
Grp Volume(v), veh/h	37	849	440	188	627	342	804	0	212	22	24	10
Grp Sat Flow(s),veh/h/ln	1774	1695	1756	1774	1695	1844	1774	0	1583	1774	1863	1578
Q Serve(g_s), s	1.9	22.4	22.4	9.7	13.3	13.3	20.2	0.0	9.0	1.0	1.0	0.5
Cycle Q Clear(g_c), s	1.9	22.4	22.4	9.7	13.3	13.3	20.2	0.0	9.0	1.0	1.0	0.5
Prop In Lane	1.00		0.28	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	47	948	491	210	1259	685	916	0	596	305	320	271
V/C Ratio(X)	0.79	0.90	0.90	0.90	0.50	0.50	0.88	0.00	0.36	0.07	0.07	0.04
Avail Cap(c_a), veh/h	114	948	491	210	1259	685	916	0	596	305	320	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	32.2	32.2	40.4	22.5	22.6	33.1	0.0	20.9	32.3	32.3	32.1
Incr Delay (d2), s/veh	24.5	12.8	21.7	35.3	1.4	2.6	11.7	0.0	1.7	0.5	0.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	12.2	13.8	6.8	6.4	7.2	11.3	0.0	4.2	0.5	0.6	0.2
LnGrp Delay(d),s/veh	69.5	45.0	53.9	75.7	24.0	25.1	44.8	0.0	22.5	32.7	32.7	32.3
LnGrp LOS	E	D	D	E	C	C	D		C	C	C	C
Approach Vol, veh/h		1326			1157			1016			56	
Approach Delay, s/veh		48.6			32.7			40.1			32.7	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.0	30.0		20.0	6.5	38.5		28.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	11.0	26.0		16.0	6.0	31.0		24.0
Max Q Clear Time (g_c+I1), s	11.7	24.4		3.0	3.9	15.3		22.2
Green Ext Time (p_c), s	0.0	1.5		0.1	0.0	12.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.8
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	558	756	0	0	889	176	202	1	133	0	0	0
Future Volume (veh/h)	558	756	0	0	889	176	202	1	133	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900			
Adj Flow Rate, veh/h	575	779	0	0	1022	139	222	1	72			
Adj No. of Lanes	2	2	0	0	2	0	1	1	0			
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.91	0.91	0.91			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	929	2706	0	0	1411	192	265	3	230			
Arrive On Green	0.27	0.76	0.00	0.00	0.45	0.45	0.15	0.15	0.15			
Sat Flow, veh/h	3442	3632	0	0	3218	425	1774	21	1541			
Grp Volume(v), veh/h	575	779	0	0	578	583	222	0	73			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1779	1774	0	1562			
Q Serve(g_s), s	13.6	6.2	0.0	0.0	24.8	24.8	11.3	0.0	3.9			
Cycle Q Clear(g_c), s	13.6	6.2	0.0	0.0	24.8	24.8	11.3	0.0	3.9			
Prop In Lane	1.00		0.00	0.00		0.24	1.00		0.99			
Lane Grp Cap(c), veh/h	929	2706	0	0	799	804	265	0	233			
V/C Ratio(X)	0.62	0.29	0.00	0.00	0.72	0.72	0.84	0.00	0.31			
Avail Cap(c_a), veh/h	929	2706	0	0	799	804	343	0	302			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.75	0.75	1.00	0.00	1.00			
Uniform Delay (d), s/veh	29.8	3.3	0.0	0.0	20.8	20.8	38.5	0.0	35.3			
Incr Delay (d2), s/veh	1.3	0.3	0.0	0.0	4.3	4.3	13.2	0.0	0.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.6	3.0	0.0	0.0	13.0	13.1	6.5	0.0	1.7			
LnGrp Delay(d),s/veh	31.0	3.6	0.0	0.0	25.0	25.0	51.7	0.0	36.0			
LnGrp LOS	C	A			C	C	D		D			
Approach Vol, veh/h		1354			1161			295				
Approach Delay, s/veh		15.2			25.0			47.8				
Approach LOS		B			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		75.1			29.1	46.0		17.9
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		67.0			21.0	42.0		18.0
Max Q Clear Time (g_c+I1), s		8.2			15.6	26.8		13.3
Green Ext Time (p_c), s		10.7			3.4	6.7		0.6

Intersection Summary		
HCM 2010 Ctrl Delay		22.7
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	191	0	331	51	1171	0	0	725	617
Future Volume (veh/h)	0	0	0	191	0	331	51	1171	0	0	725	617
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				227	0	281	61	1394	0	0	780	663
Adj No. of Lanes				0	1	1	1	2	0	0	2	1
Peak Hour Factor				0.84	0.84	0.84	0.84	0.84	0.84	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				695	0	620	1064	3598	0	0	1277	555
Arrive On Green				0.39	0.00	0.39	0.60	1.00	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	3632	1538
Grp Volume(v), veh/h				227	0	281	61	1394	0	0	780	663
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1770	1538
Q Serve(g_s), s				8.7	0.0	12.7	1.4	0.0	0.0	0.0	17.5	35.0
Cycle Q Clear(g_c), s				8.7	0.0	12.7	1.4	0.0	0.0	0.0	17.5	35.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				695	0	620	1064	3598	0	0	1277	555
V/C Ratio(X)				0.33	0.00	0.45	0.06	0.39	0.00	0.00	0.61	1.19
Avail Cap(c_a), veh/h				695	0	620	1064	3598	0	0	1277	555
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.82	0.82	0.00	0.00	0.84	0.84
Uniform Delay (d), s/veh				20.6	0.0	21.8	8.0	0.0	0.0	0.0	25.4	31.0
Incr Delay (d2), s/veh				1.3	0.0	2.4	0.1	0.3	0.0	0.0	1.8	101.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.5	0.0	6.0	0.7	0.1	0.0	0.0	8.9	30.5
LnGrp Delay(d),s/veh				21.8	0.0	24.2	8.1	0.3	0.0	0.0	27.3	132.9
LnGrp LOS				C		C	A	A			C	F
Approach Vol, veh/h					508			1455			1443	
Approach Delay, s/veh					23.1			0.6			75.8	
Approach LOS					C			A			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	15.0	39.0				104.0		42.0
Change Period (Y+Rc), s	4.9	* 4.9				4.9		4.2
Max Green Setting (Gmax), s	12.5	* 34				50.1		37.8
Max Q Clear Time (g_c+I1), s	3.4	37.0				2.0		14.7
Green Ext Time (p_c), s	6.3	0.0				16.2		2.8

Intersection Summary	
HCM 2010 Ctrl Delay	35.8
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	14	24	314	14	371	32	1037	232	354	882	5
Future Volume (veh/h)	33	14	24	314	14	371	32	1037	232	354	882	5
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	49	21	35	400	0	458	38	1220	273	381	948	5
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	2	2	0
Peak Hour Factor	0.68	0.68	0.68	0.81	0.81	0.81	0.85	0.85	0.85	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	28	82	897	0	586	58	1357	990	442	1699	9
Arrive On Green	0.05	0.05	0.05	0.25	0.00	0.25	0.03	0.38	0.38	0.13	0.47	0.47
Sat Flow, veh/h	1260	540	1574	3548	0	1515	1774	3539	1537	3442	3609	19
Grp Volume(v), veh/h	70	0	35	400	0	458	38	1220	273	381	465	488
Grp Sat Flow(s),veh/h/ln	1800	0	1574	1774	0	1515	1774	1770	1537	1721	1770	1859
Q Serve(g_s), s	4.4	0.0	2.5	10.9	0.0	29.0	2.4	37.2	9.0	12.4	21.6	21.6
Cycle Q Clear(g_c), s	4.4	0.0	2.5	10.9	0.0	29.0	2.4	37.2	9.0	12.4	21.6	21.6
Prop In Lane	0.70		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	94	0	82	897	0	586	58	1357	990	442	833	875
V/C Ratio(X)	0.74	0.00	0.43	0.45	0.00	0.78	0.66	0.90	0.28	0.86	0.56	0.56
Avail Cap(c_a), veh/h	94	0	82	897	0	586	93	1357	990	480	833	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	0.0	52.7	36.1	0.0	31.5	54.9	33.3	9.2	49.0	21.8	21.8
Incr Delay (d2), s/veh	26.9	0.0	3.4	0.3	0.0	6.7	11.9	9.7	0.7	14.0	2.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	1.2	5.4	0.0	13.9	1.4	20.0	6.6	6.8	11.2	11.7
LnGrp Delay(d),s/veh	80.6	0.0	56.2	36.5	0.0	38.2	66.8	43.0	9.9	63.0	24.5	24.4
LnGrp LOS	F		E	D		D	E	D	A	E	C	C
Approach Vol, veh/h		105			858			1531			1334	
Approach Delay, s/veh		72.4			37.4			37.7			35.5	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.7	60.0		34.0	19.7	50.0		11.0
Change Period (Y+Rc), s	6.0	* 6		5.0	5.0	6.0		5.0
Max Green Setting (Gmax), s	6.0	* 54		29.0	16.0	44.0		6.0
Max Q Clear Time (g_c+I1), s	4.4	23.6		31.0	14.4	39.2		6.4
Green Ext Time (p_c), s	1.0	7.1		0.0	0.3	3.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.8
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	20	49	1223	1153	13
Future Vol, veh/h	9	20	49	1223	1153	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	180	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	88	88	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	30	56	1390	1406	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2220	711	1422	0	-	0
Stage 1	1414	-	-	-	-	-
Stage 2	806	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	37	375	475	-	-	-
Stage 1	190	-	-	-	-	-
Stage 2	400	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	33	375	475	-	-	-
Mov Cap-2 Maneuver	33	-	-	-	-	-
Stage 1	190	-	-	-	-	-
Stage 2	353	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	79.7	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	475	-	89	-	-
HCM Lane V/C Ratio	0.117	-	0.494	-	-
HCM Control Delay (s)	13.6	-	79.7	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.4	-	2.1	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	105	1256	26	67	1181
Future Vol, veh/h	14	105	1256	26	67	1181
Conflicting Peds, #/hr	0	0	0	12	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	93	93	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	148	1351	28	75	1327

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2191	701	0	0	1390	0
Stage 1	1377	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Critical Hdwy	7.54	6.94	-	-	4.14	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	25	381	-	-	488	-
Stage 1	153	-	-	-	-	-
Stage 2	338	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	22	377	-	-	488	-
Mov Cap-2 Maneuver	100	-	-	-	-	-
Stage 1	153	-	-	-	-	-
Stage 2	286	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	100	377	488	-
HCM Lane V/C Ratio	-	-	0.197	0.392	0.154	-
HCM Control Delay (s)	-	-	49.6	20.6	13.7	-
HCM Lane LOS	-	-	E	C	B	-
HCM 95th %tile Q(veh)	-	-	0.7	1.8	0.5	-

Appendix C.2

Intersection Bicycle LOS Worksheets for Existing (2017) Conditions

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	71	5	9	6
Total Flow Rate (veh/h)	632	132	1866	1310
Effct. Green for Bike (s)	24.5	10.8	65.2	71.0
Cross Street Width (ft)	82.0	73.9	69.4	52.1
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	306	135	815	888
Bicycle Delay (s/bike)	59.5	69.7	28.2	24.8
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.34	1.84	4.16	3.44
Bicycle LOS	C	A	D	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	58	7	13	0
Total Flow Rate (veh/h)	1088	661	1519	1293
Effct. Green for Bike (s)	17.8	13.5	21.1	20.1
Cross Street Width (ft)	87.8	85.7	63.1	61.6
Through Lanes Number	1	2	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	548	415	649	618
Bicycle Delay (s/bike)	17.6	20.5	14.9	15.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.63	2.34	3.78	2.50
Bicycle LOS	D	B	D	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	18	4	41	1
Total Flow Rate (veh/h)	1084	144	1144	172
Effct. Green for Bike (s)	29.1	10.6	37.9	15.1
Cross Street Width (ft)	60.2	71.4	36.3	60.7
Through Lanes Number	1	1	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	413	150	538	214
Bicycle Delay (s/bike)	44.8	60.4	38.5	56.2
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	4.27	2.89	3.06	2.77
Bicycle LOS	E	C	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	20	5
Total Flow Rate (veh/h)	649	28	437	180
Effct. Green for Bike (s)	16.4	5.6	9.9	9.9
Cross Street Width (ft)	58.5	61.2	24.0	12.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	547	187	330	330
Bicycle Delay (s/bike)	15.8	24.7	21.1	21.0
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.53	2.54	1.00	0.61
Bicycle LOS	D	B	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	5	0
Total Flow Rate (veh/h)	529	528	8	206
Effct. Green for Bike (s)	38.2	18.6	7.3	7.3
Cross Street Width (ft)	55.3	62.1	49.9	36.3
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	653	318	125	125
Bicycle Delay (s/bike)	26.5	41.4	51.6	51.4
Bicycle Compliance	Fair	Poor	Poor	Poor
Bicycle LOS Score	3.28	2.31	2.34	2.45
Bicycle LOS	C	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	0	17	2
Total Flow Rate (veh/h)	61	116	1597	1329
Effct. Green for Bike (s)	9.2	9.4	41.4	43.5
Cross Street Width (ft)	72.8	72.5	38.1	38.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	204	209	920	967
Bicycle Delay (s/bike)	36.4	36.1	13.2	12.0
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.77	2.86	2.17	1.95
Bicycle LOS	C	C	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	19	5
Total Flow Rate (veh/h)	258	77	1708	1410
Effct. Green for Bike (s)	10.1	10.1	33.9	33.9
Cross Street Width (ft)	59.9	72.0	23.9	26.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	367	367	1233	1233
Bicycle Delay (s/bike)	18.3	18.3	4.1	4.1
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.90	2.79	2.26	2.06
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	15	5
Total Flow Rate (veh/h)	186	749	796	1160
Effct. Green for Bike (s)	18.1	18.1	16.1	17.6
Cross Street Width (ft)	59.9	61.1	35.9	23.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	724	724	644	704
Bicycle Delay (s/bike)	10.2	10.2	11.6	10.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.78	3.73	1.69	1.81
Bicycle LOS	C	D	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	12	1	16	4
Total Flow Rate (veh/h)	71	200	744	1121
Effct. Green for Bike (s)	9.4	9.4	40.6	40.6
Cross Street Width (ft)	60.1	59.9	32.9	35.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	313	313	1353	1353
Bicycle Delay (s/bike)	21.5	21.3	3.2	3.1
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.60	2.81	1.60	1.96
Bicycle LOS	B	C	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	17	5
Total Flow Rate (veh/h)	193	96	640	1018
Effct. Green for Bike (s)	9.9	9.9	43.2	24.0
Cross Street Width (ft)	61.3	60.1	36.1	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	330	330	1440	800
Bicycle Delay (s/bike)	20.9	20.9	2.4	10.8
Bicycle Compliance	Fair	Fair	Good	Fair
Bicycle LOS Score	2.82	2.64	1.57	2.06
Bicycle LOS	C	B	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	2	5	1
Total Flow Rate (veh/h)	124	386	604	1007
Effct. Green for Bike (s)	13.8	13.8	27.6	34.6
Cross Street Width (ft)	61.2	60.9	48.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	460	460	920	1153
Bicycle Delay (s/bike)	17.8	17.8	8.8	5.4
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.70	3.13	1.72	2.05
Bicycle LOS	B	C	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	3	17	5
Total Flow Rate (veh/h)	0	250	578	839
Effct. Green for Bike (s)	0.0	7.8	42.2	42.2
Cross Street Width (ft)	48.1	60.0	36.0	38.1
Through Lanes Number	0	3	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	260	1407	1407
Bicycle Delay (s/bike)	0.0	22.7	2.7	2.6
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.62	1.52	2.45
Bicycle LOS		B	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	7	31	1	3
Total Flow Rate (veh/h)	317	581	613	258
Effct. Green for Bike (s)	10.9	23.7	16.9	16.9
Cross Street Width (ft)	35.9	38.6	60.1	47.9
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	291	632	451	451
Bicycle Delay (s/bike)	27.5	17.8	22.5	22.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.63	3.11	2.42	2.72
Bicycle LOS	B	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	1	20	8
Total Flow Rate (veh/h)	495	602	543	307
Effct. Green for Bike (s)	29.1	33.0	23.5	23.5
Cross Street Width (ft)	38.0	38.8	48.2	48.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	710	805	573	573
Bicycle Delay (s/bike)	17.1	14.6	21.1	21.0
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.96	3.15	1.91	1.52
Bicycle LOS	C	C	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	6	1	9
Total Flow Rate (veh/h)	0	411	175	282
Effct. Green for Bike (s)	0.0	28.0	22.0	22.0
Cross Street Width (ft)	35.9	48.1	36.1	37.4
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	933	733	733
Bicycle Delay (s/bike)	0.0	8.6	12.0	12.1
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.52	2.40	2.60
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	7	6	4
Total Flow Rate (veh/h)	0	428	96	64
Effct. Green for Bike (s)	0.0	19.0	31.0	31.0
Cross Street Width (ft)	24.0	36.0	36.0	38.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	633	1033	1033
Bicycle Delay (s/bike)	0.0	14.1	7.0	7.0
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.35	2.27	2.25
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	5	2	3
Total Flow Rate (veh/h)	0	452	157	131
Effct. Green for Bike (s)	0.0	27.0	23.0	23.0
Cross Street Width (ft)	23.9	24.1	36.0	36.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	900	767	767
Bicycle Delay (s/bike)	0.0	9.1	11.4	11.4
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.18	2.37	2.33
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	12	0	4	0
Total Flow Rate (veh/h)	858	0	229	569
Effct. Green for Bike (s)	31.0	0.0	19.0	19.0
Cross Street Width (ft)	34.7	48.2	38.5	35.9
Through Lanes Number	2	0	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1033	0	633	633
Bicycle Delay (s/bike)	7.1	0.0	14.0	14.0
Bicycle Compliance	Good		Fair	Fair
Bicycle LOS Score	1.51	0.00	1.45	1.98
Bicycle LOS	A		A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	0	3	5
Total Flow Rate (veh/h)	79	242	607	348
Effct. Green for Bike (s)	16.0	16.0	16.0	16.0
Cross Street Width (ft)	38.0	38.0	26.0	26.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	14.0	14.0	14.0	14.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	800	800	800	800
Bicycle Delay (s/bike)	7.2	7.2	7.2	7.2
Bicycle Compliance	Good	Good	Good	Good
Bicycle LOS Score	1.84	2.11	2.53	2.10
Bicycle LOS	A	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	975	0	441	470
Effct. Green for Bike (s)	23.8	0.0	0.0	13.9
Cross Street Width (ft)	37.6	25.0	24.1	52.2
Through Lanes Number	2	0	0	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	441	0	0	257
Bicycle Delay (s/bike)	32.8	0.0	0.0	41.0
Bicycle Compliance	Poor			Poor
Bicycle LOS Score	2.94	0.00	0.00	3.13
Bicycle LOS	C			C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	7	2	7	6
Total Flow Rate (veh/h)	56	60	679	612
Effct. Green for Bike (s)	9.2	16.2	33.2	33.2
Cross Street Width (ft)	39.5	37.8	36.2	30.8
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	16.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	275	484	991	991
Bicycle Delay (s/bike)	25.0	19.3	8.6	8.6
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.40	1.16	2.16	3.04
Bicycle LOS	A	A	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	12	4	5	3
Total Flow Rate (veh/h)	705	537	1076	647
Effct. Green for Bike (s)	27.2	25.5	51.3	34.9
Cross Street Width (ft)	87.2	73.8	37.1	62.5
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	400	375	754	513
Bicycle Delay (s/bike)	43.8	45.0	26.4	37.6
Bicycle Compliance	Poor	Poor	Fair	Poor
Bicycle LOS Score	4.06	3.57	1.94	1.98
Bicycle LOS	D	D	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	10	2	1	0
Total Flow Rate (veh/h)	1229	634	1092	40
Effct. Green for Bike (s)	31.2	45.4	16.0	16.0
Cross Street Width (ft)	48.7	48.2	84.8	86.6
Through Lanes Number	3	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	671	976	344	344
Bicycle Delay (s/bike)	20.6	12.2	31.9	31.9
Bicycle Compliance	Fair	Fair	Poor	Poor
Bicycle LOS Score	1.91	1.57	4.66	2.95
Bicycle LOS	A	A	E	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	9	5	0	0
Total Flow Rate (veh/h)	1938	656	317	0
Effct. Green for Bike (s)	71.6	39.6	13.4	0.0
Cross Street Width (ft)	38.7	35.1	92.8	91.2
Through Lanes Number	2	2	1	0
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1540	852	288	0
Bicycle Delay (s/bike)	2.5	15.4	34.1	0.0
Bicycle Compliance	Good	Fair	Poor	
Bicycle LOS Score	2.68	1.57	3.50	0.00
Bicycle LOS	B	A	D	

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	1	4
Total Flow Rate (veh/h)	0	716	888	1027
Effct. Green for Bike (s)	0.0	31.4	56.5	51.7
Cross Street Width (ft)	60.2	73.8	24.0	14.8
Through Lanes Number	0	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	647	1165	1066
Bicycle Delay (s/bike)	0.0	22.2	8.5	10.6
Bicycle Compliance		Fair	Good	Fair
Bicycle LOS Score	0.00	3.87	1.80	1.78
Bicycle LOS		D	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	1	14
Total Flow Rate (veh/h)	21	645	1110	1436
Effct. Green for Bike (s)	4.1	14.9	43.4	60.5
Cross Street Width (ft)	81.6	80.9	63.0	56.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	69	253	736	1025
Bicycle Delay (s/bike)	55.0	45.0	23.6	14.1
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.84	2.79	2.37	2.54
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	12	51	1	1
Total Flow Rate (veh/h)	370	590	1368	1533
Effct. Green for Bike (s)	13.6	21.4	70.3	63.7
Cross Street Width (ft)	82.0	73.9	69.4	52.1
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	170	268	879	796
Bicycle Delay (s/bike)	67.4	61.6	25.2	29.0
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.12	2.59	3.75	3.62
Bicycle LOS	C	B	D	D

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	16	54	0	2
Total Flow Rate (veh/h)	739	765	1544	1621
Effct. Green for Bike (s)	16.9	14.7	21.0	20.0
Cross Street Width (ft)	87.8	85.7	63.1	61.5
Through Lanes Number	1	2	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	520	452	646	615
Bicycle Delay (s/bike)	17.9	20.0	14.9	15.6
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.05	2.43	3.80	2.77
Bicycle LOS	C	B	D	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	4	23	9	47
Total Flow Rate (veh/h)	823	235	763	511
Effct. Green for Bike (s)	18.2	18.2	42.1	22.5
Cross Street Width (ft)	60.2	71.1	36.3	60.8
Through Lanes Number	1	1	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	331	331	765	409
Bicycle Delay (s/bike)	38.4	38.8	21.1	35.6
Bicycle Compliance	Poor	Poor	Fair	Poor
Bicycle LOS Score	3.84	3.04	2.74	3.33
Bicycle LOS	D	C	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	8	5
Total Flow Rate (veh/h)	253	24	242	331
Effct. Green for Bike (s)	9.8	5.8	11.8	11.8
Cross Street Width (ft)	58.1	61.2	24.0	12.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	327	193	393	393
Bicycle Delay (s/bike)	21.0	24.5	19.4	19.4
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.87	2.54	0.84	0.73
Bicycle LOS	C	B	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	1	2	7
Total Flow Rate (veh/h)	718	280	4	388
Effct. Green for Bike (s)	25.9	11.5	9.3	9.3
Cross Street Width (ft)	54.0	62.1	49.8	36.3
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	443	197	159	159
Bicycle Delay (s/bike)	35.5	47.6	49.6	49.7
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	3.57	1.90	2.33	2.76
Bicycle LOS	D	A	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	8	2	6
Total Flow Rate (veh/h)	51	261	1547	1483
Effct. Green for Bike (s)	7.0	15.4	39.4	38.2
Cross Street Width (ft)	72.9	72.6	38.1	38.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	156	342	876	849
Bicycle Delay (s/bike)	38.3	31.0	14.2	15.0
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.76	3.10	2.13	2.08
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	7	9
Total Flow Rate (veh/h)	115	65	2029	1674
Effct. Green for Bike (s)	7.6	7.6	37.9	37.9
Cross Street Width (ft)	60.0	72.0	23.9	26.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	276	276	1378	1378
Bicycle Delay (s/bike)	20.4	20.4	2.7	2.7
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.67	2.77	2.53	2.28
Bicycle LOS	B	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	6	7
Total Flow Rate (veh/h)	144	613	1392	955
Effct. Green for Bike (s)	15.8	15.8	16.4	17.7
Cross Street Width (ft)	59.9	61.1	35.9	23.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	632	632	656	708
Bicycle Delay (s/bike)	11.7	11.7	11.3	10.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.71	3.51	2.19	1.64
Bicycle LOS	B	D	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	10	5	5
Total Flow Rate (veh/h)	165	290	1122	824
Effct. Green for Bike (s)	15.3	15.3	36.7	36.7
Cross Street Width (ft)	60.1	59.9	32.5	36.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	510	510	1223	1223
Bicycle Delay (s/bike)	16.7	16.7	4.5	4.5
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.75	2.95	1.91	1.72
Bicycle LOS	C	C	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	5	5
Total Flow Rate (veh/h)	219	111	996	766
Effct. Green for Bike (s)	11.6	11.5	43.4	25.0
Cross Street Width (ft)	61.3	60.1	36.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	387	383	1447	833
Bicycle Delay (s/bike)	19.5	19.6	2.3	10.2
Bicycle Compliance	Fair	Fair	Good	Fair
Bicycle LOS Score	2.86	2.66	1.86	1.85
Bicycle LOS	C	B	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	5	1	3
Total Flow Rate (veh/h)	140	450	920	751
Effct. Green for Bike (s)	15.3	15.3	28.7	35.1
Cross Street Width (ft)	61.2	60.8	48.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	510	510	957	1170
Bicycle Delay (s/bike)	16.7	16.7	8.2	5.2
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.73	3.23	1.98	1.84
Bicycle LOS	B	C	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	3	3	7
Total Flow Rate (veh/h)	0	268	929	758
Effct. Green for Bike (s)	0.0	8.0	42.0	42.0
Cross Street Width (ft)	48.0	60.0	36.0	38.2
Through Lanes Number	0	3	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	267	1400	1400
Bicycle Delay (s/bike)	0.0	22.6	2.7	2.7
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.62	1.80	2.32
Bicycle LOS		B	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	5	4	14
Total Flow Rate (veh/h)	389	495	413	195
Effct. Green for Bike (s)	12.8	20.1	11.9	11.9
Cross Street Width (ft)	35.9	38.6	60.1	48.0
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	341	536	317	317
Bicycle Delay (s/bike)	25.8	20.1	26.6	26.7
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.75	2.97	2.09	2.62
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	5	4	14
Total Flow Rate (veh/h)	537	558	575	435
Effct. Green for Bike (s)	28.6	34.9	23.6	23.6
Cross Street Width (ft)	38.1	38.7	48.1	48.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	698	851	576	576
Bicycle Delay (s/bike)	17.4	13.6	20.8	20.9
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.03	3.07	1.96	1.73
Bicycle LOS	C	C	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	14	3	10
Total Flow Rate (veh/h)	0	688	280	332
Effct. Green for Bike (s)	0.0	29.0	23.0	23.0
Cross Street Width (ft)	36.0	48.1	36.1	37.4
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	967	767	767
Bicycle Delay (s/bike)	0.0	8.1	11.4	11.5
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.67	2.57	2.68
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	11	8	8
Total Flow Rate (veh/h)	0	667	143	107
Effct. Green for Bike (s)	0.0	20.0	32.0	32.0
Cross Street Width (ft)	24.0	36.0	36.0	38.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	667	1067	1067
Bicycle Delay (s/bike)	0.0	13.4	6.6	6.6
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.48	2.35	2.32
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	7	8	1
Total Flow Rate (veh/h)	0	607	328	177
Effct. Green for Bike (s)	0.0	28.0	24.0	24.0
Cross Street Width (ft)	23.9	24.0	36.0	36.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	933	800	800
Bicycle Delay (s/bike)	0.0	8.6	10.8	10.8
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.26	2.65	2.40
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	0	4	5
Total Flow Rate (veh/h)	833	0	374	471
Effct. Green for Bike (s)	33.4	0.0	18.6	18.6
Cross Street Width (ft)	34.2	48.2	38.5	36.0
Through Lanes Number	2	0	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1113	0	620	620
Bicycle Delay (s/bike)	5.9	0.0	14.3	14.3
Bicycle Compliance	Good		Fair	Fair
Bicycle LOS Score	1.48	0.00	1.69	1.82
Bicycle LOS	A		A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	6	1	6
Total Flow Rate (veh/h)	87	180	639	438
Effct. Green for Bike (s)	13.6	13.6	38.4	38.4
Cross Street Width (ft)	38.0	37.9	26.0	26.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	14.0	14.0	14.0	14.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	453	453	1280	1280
Bicycle Delay (s/bike)	18.0	18.0	3.9	3.9
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.86	2.01	2.58	2.25
Bicycle LOS	A	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	732	0	680	890
Effct. Green for Bike (s)	16.3	0.0	0.0	16.7
Cross Street Width (ft)	37.6	25.1	24.2	52.2
Through Lanes Number	2	0	0	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	366	0	0	375
Bicycle Delay (s/bike)	29.7	0.0	0.0	29.4
Bicycle Compliance	Fair			Fair
Bicycle LOS Score	2.74	0.00	0.00	3.83
Bicycle LOS	B			D

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	5	6	4	11
Total Flow Rate (veh/h)	40	91	746	599
Effct. Green for Bike (s)	10.7	16.5	33.5	33.5
Cross Street Width (ft)	39.5	37.8	36.2	30.8
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	16.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	319	493	1000	1000
Bicycle Delay (s/bike)	23.7	19.1	8.4	8.4
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.37	1.22	2.27	3.02
Bicycle LOS	A	A	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	12	12	2
Total Flow Rate (veh/h)	654	692	1733	657
Effct. Green for Bike (s)	14.1	16.1	31.8	15.7
Cross Street Width (ft)	87.1	73.6	37.1	62.5
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	352	402	795	392
Bicycle Delay (s/bike)	27.2	25.7	14.6	25.9
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.97	3.83	2.48	1.99
Bicycle LOS	D	D	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	9	0	0
Total Flow Rate (veh/h)	1341	1157	1063	68
Effct. Green for Bike (s)	26.0	35.0	24.0	16.0
Cross Street Width (ft)	48.7	48.2	84.9	86.6
Through Lanes Number	3	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	559	753	516	344
Bicycle Delay (s/bike)	24.2	18.2	25.6	31.9
Bicycle Compliance	Fair	Fair	Fair	Poor
Bicycle LOS Score	1.97	1.86	4.61	3.00
Bicycle LOS	A	A	E	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	8	1	0
Total Flow Rate (veh/h)	1354	1224	369	0
Effct. Green for Bike (s)	69.4	44.4	15.6	0.0
Cross Street Width (ft)	38.8	35.1	92.6	91.2
Through Lanes Number	2	2	1	0
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	6.0	0.0
Curb Is Present?	Yes	Yes	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1492	955	335	0
Bicycle Delay (s/bike)	3.0	12.7	32.2	0.0
Bicycle Compliance	Good	Fair	Poor	
Bicycle LOS Score	2.20	2.03	2.30	0.00
Bicycle LOS	B	B	B	

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	7	7
Total Flow Rate (veh/h)	0	621	1455	1443
Effct. Green for Bike (s)	0.0	38.0	51.0	31.9
Cross Street Width (ft)	60.2	73.7	24.0	14.8
Through Lanes Number	0	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	784	1052	658
Bicycle Delay (s/bike)	0.0	17.9	10.9	21.9
Bicycle Compliance		Fair	Fair	Fair
Bicycle LOS Score	0.00	3.71	2.27	2.12
Bicycle LOS		D	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	1	0	3
Total Flow Rate (veh/h)	105	863	1531	1334
Effct. Green for Bike (s)	6.1	19.0	44.6	58.7
Cross Street Width (ft)	81.6	80.9	62.9	56.1
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	105	328	769	1012
Bicycle Delay (s/bike)	52.1	40.6	22.0	14.2
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.98	3.15	2.71	2.45
Bicycle LOS	C	C	B	B

Appendix C.3

Intersection Pedestrian LOS Worksheets for Existing (2017) Conditions

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	25708300
Level of Service	F

Crosswalk	
Length (ft)	80
Lanes Crossed	4
Veh Vol Crossed	2314
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	25.86
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	25708300.00
Avg Ped Delay (s)	25708300.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	2837840
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2314
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	2837840.00
Avg Ped Delay (s)	2837840.00

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.1	69.4	82.0	73.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	0.0	8.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	4	0
Ped. Right-Left Flow Rate (p/h)	8	0	39	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	106	29	177	44
Veh. RTOR Flow in Walk (v/h)	16	3	8	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	1408.7	0.0	1613.5	9112.5
Right Corner Quality of Service	A	-	A	A
Ped. Circulation Area (sq.ft)	796.5	0.0	89.2	0.0
Crosswalk Circulation Code	A	-	A	-
Pedestrian Delay (s/p)	69.4	80.0	72.2	80.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.38	2.50	3.01	2.98
Pedestrian Crosswalk LOS	B	B	C	C

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	23.5
Level of Service	D

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	554
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.85
Prob of Blocked Lane	0.61
Delay for adq Gap	27.75
Avg Ped Delay (s)	23.46

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	25.1
Level of Service	D

Crosswalk	
Length (ft)	33
Lanes Crossed	2
Veh Vol Crossed	554
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.43
Prob of Delayed X-ing	0.85
Prob of Blocked Lane	0.62
Delay for adq Gap	29.42
Avg Ped Delay (s)	25.07

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	61.6	63.1	87.8	85.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	7	7
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	24	7	18
Ped. Right-Left Flow Rate (p/h)	3	2	5	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	263	324	53	46
Veh. RTOR Flow in Walk (v/h)	62	13	0	3
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	4270.5	1506.2	1846.8	2693.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2603.3	448.0	1654.4	903.5
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	24.1	24.1	24.1	24.1
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.69	2.60	2.98	3.00
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.7	36.3	60.2	71.4
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	18	0	93	0
Ped. Right-Left Flow Rate (p/h)	88	20	6	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	3	12
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	288	14	25	37
Veh. RTOR Flow in Walk (v/h)	29	4	4	7
85th percentile speed (mph)	30	25	35	25
Right Corner Area per Ped (sq.ft)	287.4	3567.8	593.7	606.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	14.5	375.3	82.0	0.0
Crosswalk Circulation Code	E	A	A	-
Pedestrian Delay (s/p)	61.8	61.8	61.8	70.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.71	2.11	2.71	2.52
Pedestrian Crosswalk LOS	B	B	B	B

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	2.1
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	94
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.27
Prob of Blocked Lane	0.15
Delay for adq Gap	7.90
Avg Ped Delay (s)	2.15

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	2.1
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	94
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.27
Prob of Blocked Lane	0.15
Delay for adq Gap	7.90
Avg Ped Delay (s)	2.15

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	2125.1
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1031
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.80
Delay for adq Gap	2128.57
Avg Ped Delay (s)	2125.12

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	2125.1
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1031
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.80
Delay for adq Gap	2128.57
Avg Ped Delay (s)	2125.12

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	501.6
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	756
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.69
Delay for adq Gap	506.19
Avg Ped Delay (s)	501.63

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	501.6
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	756
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.69
Delay for adq Gap	506.19
Avg Ped Delay (s)	501.63

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	24.0	58.5	61.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	4	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	3	3	0
Ped. Right-Left Flow Rate (p/h)	11	4	9	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	1
Veh. Perm. R. Flow in Walk (v/h)	75	9	6	0
Veh. RTOR Flow in Walk (v/h)	0	1	0	0
85th percentile speed (mph)	30	25	35	35
Right Corner Area per Ped (sq.ft)	2900.8	10398.8	3819.7	5603.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	515.6	2344.9	1756.4	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	21.7	21.7	21.7	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.04	1.72	2.32	2.56
Pedestrian Crosswalk LOS	B	A	B	B

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	10.8	
Level of Service	C	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	339	131
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.65	0.33
Prob of Blocked Lane	0.40	0.18
Delay for adq Gap	12.87	7.66
Avg Ped Delay (s)	8.30	2.53

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	118.3
Level of Service	F

Crosswalk	
Length (ft)	69
Lanes Crossed	4
Veh Vol Crossed	470
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.71
Prob of Delayed X-ing	0.95
Prob of Blocked Lane	0.52
Delay for adq Gap	124.68
Avg Ped Delay (s)	118.25

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	110.7	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	466	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	0.95	
Prob of Blocked Lane	0.52	
Delay for adq Gap	117.13	
Avg Ped Delay (s)	110.71	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	10.3	
Level of Service	C	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	165	301
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.40	0.60
Prob of Blocked Lane	0.22	0.37
Delay for adq Gap	8.34	11.71
Avg Ped Delay (s)	3.30	7.04

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.3	49.9	55.3	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	7	1
Ped. Right-Left Flow Rate (p/h)	6	1	4	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	185	0	2	32
Veh. Perm. R. Flow in Walk (v/h)	5	56	0	143
Veh. RTOR Flow in Walk (v/h)	0	7	0	67
85th percentile speed (mph)	30	30	25	35
Right Corner Area per Ped (sq.ft)	4239.7	36386.5	6053.8	10414.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	216.9	7685.1	865.1	5308.3
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	50.8	50.8	50.8	50.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.60	2.34	1.74	2.32
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	38.1	72.8	72.5
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	1	0	1
Ped. Right-Left Flow Rate (p/h)	3	4	0	5
Ped. R. Sidewalk Flow Rate (p/h)	0	4	0	0
Veh. Perm. L. Flow in Walk (v/h)	13	55	0	0
Veh. Perm. R. Flow in Walk (v/h)	22	29	153	12
Veh. RTOR Flow in Walk (v/h)	15	6	33	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	24254.4	4844.8	14570.9	8074.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3870.5	1950.6	0.0	2400.3
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	36.5	36.5	45.0	36.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.02	2.14	2.93	2.84
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.9	23.9	59.9	72.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	6	0	2
Ped. Right-Left Flow Rate (p/h)	1	4	0	3
Ped. R. Sidewalk Flow Rate (p/h)	2	1	0	0
Veh. Perm. L. Flow in Walk (v/h)	30	30	30	1
Veh. Perm. R. Flow in Walk (v/h)	158	7	73	479
Veh. RTOR Flow in Walk (v/h)	97	2	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18219.0	4547.2	7275.6	10400.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	5032.2	1645.2	0.0	2627.1
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	19.2	19.2	19.2	19.2
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.27	1.82	2.88	2.93
Pedestrian Crosswalk LOS	B	A	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	23.9	35.9	59.9	61.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	3	0	1
Ped. Right-Left Flow Rate (p/h)	1	6	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	92	13	0	0
Veh. Perm. R. Flow in Walk (v/h)	20	615	25	64
Veh. RTOR Flow in Walk (v/h)	0	21	2	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	36439.5	7275.3	8093.0	14575.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	7196.2	0.1	0.0	24050.4
Crosswalk Circulation Code	A	F	-	A
Pedestrian Delay (s/p)	16.8	16.8	16.8	16.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.95	2.22	2.64	2.82
Pedestrian Crosswalk LOS	A	B	B	C

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	18.8	
Level of Service	C	

Crosswalk		
Length (ft)	16	16
Lanes Crossed	1	1
Veh Vol Crossed	907	345
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	7.57	7.57
Prob of Delayed X-ing	0.85	0.52
Prob of Blocked Lane	0.85	0.52
Delay for adq Gap	17.85	6.88
Avg Ped Delay (s)	15.20	3.55

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	57	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	1	2
Veh Vol Crossed	345	907
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.65	0.94
Prob of Blocked Lane	0.65	0.75
Delay for adq Gap	13.06	51.70
Avg Ped Delay (s)	8.51	48.46

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	28.9	
Level of Service	D	

Crosswalk		
Length (ft)	28	16
Lanes Crossed	2	1
Veh Vol Crossed	685	259
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	7.57
Prob of Delayed X-ing	0.88	0.42
Prob of Blocked Lane	0.65	0.42
Delay for adq Gap	30.07	5.94
Avg Ped Delay (s)	26.36	2.49

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	533.2
Level of Service	F

Crosswalk	
Length (ft)	56
Lanes Crossed	3
Veh Vol Crossed	944
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	19.00
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.81
Delay for adq Gap	536.88
Avg Ped Delay (s)	533.20

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	79.7
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	681
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.95
Prob of Blocked Lane	0.77
Delay for adq Gap	84.12
Avg Ped Delay (s)	79.70

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	79.7
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	681
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.95
Prob of Blocked Lane	0.77
Delay for adq Gap	84.12
Avg Ped Delay (s)	79.70

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	35.9	32.9	60.1	59.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	10.0	10.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	5	22	16	7
Ped. Right-Left Flow Rate (p/h)	2	1	1	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	11	22	17	58
Veh. Perm. R. Flow in Walk (v/h)	12	87	19	50
Veh. RTOR Flow in Walk (v/h)	4	38	1	4
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	3018.1	2138.0	1808.1	4037.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3203.3	788.0	1337.4	1896.0
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	20.8	20.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.00	1.91	2.59	2.68
Pedestrian Crosswalk LOS	A	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	36.1	61.3	60.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	7.0	7.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	4	58	11
Ped. Right-Left Flow Rate (p/h)	15	9	7	1
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	6
Veh. Perm. L. Flow in Walk (v/h)	66	4	4	28
Veh. Perm. R. Flow in Walk (v/h)	37	22	9	62
Veh. RTOR Flow in Walk (v/h)	7	4	0	2
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	863.8	2894.1	918.9	2080.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1275.4	1717.3	249.1	1185.3
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	23.4	23.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.28	1.98	2.55	2.61
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	48.0	61.2	60.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	17	14	5	10
Ped. Right-Left Flow Rate (p/h)	12	3	45	38
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	22	97	1	88
Veh. Perm. R. Flow in Walk (v/h)	14	149	81	44
Veh. RTOR Flow in Walk (v/h)	8	85	23	12
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	917.3	1116.2	1064.6	927.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	820.3	1011.8	383.5	372.5
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	21.7	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.21	2.52	2.56	2.70
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.1	36.0	48.1	60.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Pretimed	Pretimed
Corresponding Signal Phase	2	6	0	4
Effective Walk Time (s)	13.0	13.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	17	10	7	33
Ped. Right-Left Flow Rate (p/h)	4	2	3	1
Ped. R. Sidewalk Flow Rate (p/h)	3	4	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	14	39	0
Veh. Perm. R. Flow in Walk (v/h)	0	39	0	282
Veh. RTOR Flow in Walk (v/h)	0	27	0	41
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	2133.7	1440.6	3298.1	1294.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1330.1	2123.4	0.0	546.2
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	18.4	18.4	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.18	2.09	2.41	2.46
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	60.1	35.9	38.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	8	4	6	2
Effective Walk Time (s)	8.0	8.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	5	4	2
Ped. Right-Left Flow Rate (p/h)	2	9	10	5
Ped. R. Sidewalk Flow Rate (p/h)	2	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	115	13
Veh. Perm. R. Flow in Walk (v/h)	89	10	134	12
Veh. RTOR Flow in Walk (v/h)	25	7	31	6
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	3303.6	3451.9	2583.9	5582.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1953.2	1064.7	389.6	2088.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	29.9	29.9	29.0	29.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.36	2.50	2.52	2.13
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.1	48.2	38.0	38.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	7	6	3
Ped. Right-Left Flow Rate (p/h)	0	2	7	1
Ped. R. Sidewalk Flow Rate (p/h)	1	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	33	7
Veh. Perm. R. Flow in Walk (v/h)	12	20	145	64
Veh. RTOR Flow in Walk (v/h)	2	0	27	10
85th percentile speed (mph)	30	30	25	25
Right Corner Area per Ped (sq.ft)	4540.6	5591.6	3287.1	10396.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	6464.5	1407.7	451.5	2506.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	33.4	33.4	33.4	33.4
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.38	2.41	2.28	2.17
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	37.4	36.1	35.9	48.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	4	8	0	2
Effective Walk Time (s)	11.0	11.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	29	20	14	31
Ped. Right-Left Flow Rate (p/h)	12	21	20	35
Ped. R. Sidewalk Flow Rate (p/h)	1	12	2	15
Veh. Perm. L. Flow in Walk (v/h)	0	29	18	0
Veh. Perm. R. Flow in Walk (v/h)	0	22	0	107
Veh. RTOR Flow in Walk (v/h)	0	3	0	36
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	948.4	601.7	930.5	584.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	572.3	518.9	0.0	325.8
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	20.0	20.0	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.16	2.16	2.06	2.09
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.0	36.0	24.0	36.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	22	14	22	57
Ped. Right-Left Flow Rate (p/h)	30	37	29	34
Ped. R. Sidewalk Flow Rate (p/h)	14	9	8	14
Veh. Perm. L. Flow in Walk (v/h)	0	35	25	0
Veh. Perm. R. Flow in Walk (v/h)	0	20	0	21
Veh. RTOR Flow in Walk (v/h)	0	1	0	4
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	609.1	465.9	649.4	454.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	370.4	329.9	0.0	198.5
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	21.7	21.7	30.0	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.13	2.18	1.81	1.97
Pedestrian Crosswalk LOS	B	B	A	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.0	23.9	24.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	4
Effective Walk Time (s)	12.0	12.0	0.0	17.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	12	8	10	31
Ped. Right-Left Flow Rate (p/h)	17	7	12	14
Ped. R. Sidewalk Flow Rate (p/h)	3	2	0	14
Veh. Perm. L. Flow in Walk (v/h)	0	76	52	0
Veh. Perm. R. Flow in Walk (v/h)	0	20	0	39
Veh. RTOR Flow in Walk (v/h)	0	3	0	9
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	1335.5	1163.5	1952.9	822.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	875.9	1445.2	0.0	660.5
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	19.2	19.2	30.0	15.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.13	2.25	1.92	1.80
Pedestrian Crosswalk LOS	B	B	A	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	35.9	38.5	34.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	0
Effective Walk Time (s)	11.0	11.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	1	6	0
Ped. Right-Left Flow Rate (p/h)	13	6	5	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	303	0	0	141
Veh. Perm. R. Flow in Walk (v/h)	28	0	22	0
Veh. RTOR Flow in Walk (v/h)	5	0	9	0
85th percentile speed (mph)	25	30	25	25
Right Corner Area per Ped (sq.ft)	2586.6	10392.8	4041.7	3831.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	604.4	3392.2	2020.2	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	20.0	20.0	20.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.59	2.12	1.97	2.56
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.1	26.0	38.0	38.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	10	7	2
Ped. Right-Left Flow Rate (p/h)	4	5	1	4
Ped. R. Sidewalk Flow Rate (p/h)	2	1	1	0
Veh. Perm. L. Flow in Walk (v/h)	8	133	1	7
Veh. Perm. R. Flow in Walk (v/h)	17	4	160	2
Veh. RTOR Flow in Walk (v/h)	8	2	24	0
85th percentile speed (mph)	25	25	25	30
Right Corner Area per Ped (sq.ft)	4545.9	3308.9	3030.6	6067.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	4139.4	1282.8	2872.1	4788.1
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	12.0	12.0	12.0	12.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.74	2.06	2.25	2.16
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.2	24.1	37.6	25.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	2	3	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	4	0	2	0
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	30	30	30	45
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	54.0	54.0	54.0	54.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.49	2.19	2.27	2.08
Pedestrian Crosswalk LOS	B	B	B	B

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	4658620
Level of Service	F

Crosswalk	
Length (ft)	80
Lanes Crossed	4
Veh Vol Crossed	2060
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	25.86
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	4658620.00
Avg Ped Delay (s)	4658620.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	654963
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2060
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.96
Delay for adq Gap	654965.00
Avg Ped Delay (s)	654963.00

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.1	69.4	82.0	73.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	0.0	8.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	3	0	26	1
Ped. Right-Left Flow Rate (p/h)	6	0	6	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	89	113	111	38
Veh. RTOR Flow in Walk (v/h)	25	15	0	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	1708.1	72800.0	2192.7	7264.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	764.9	0.0	161.8	0.1
Crosswalk Circulation Code	A	-	A	F
Pedestrian Delay (s/p)	69.4	80.0	72.2	80.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.36	2.53	3.00	2.97
Pedestrian Crosswalk LOS	B	B	C	C

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	21.5
Level of Service	D

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	528
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.83
Prob of Blocked Lane	0.59
Delay for adq Gap	25.87
Avg Ped Delay (s)	21.51

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	23
Level of Service	D

Crosswalk	
Length (ft)	33
Lanes Crossed	2
Veh Vol Crossed	528
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.43
Prob of Delayed X-ing	0.84
Prob of Blocked Lane	0.60
Delay for adq Gap	27.38
Avg Ped Delay (s)	22.95

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	61.5	63.1	87.8	85.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	7	7
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	10	15	13
Ped. Right-Left Flow Rate (p/h)	4	26	10	23
Ped. R. Sidewalk Flow Rate (p/h)	0	0	2	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	197	230	78	146
Veh. RTOR Flow in Walk (v/h)	88	50	1	66
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	2410.9	996.2	1147.6	1760.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2940.8	389.4	774.3	497.8
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	24.1	24.1	24.1	24.1
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.74	2.66	3.00	3.11
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.8	36.3	60.2	71.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	71	10	46	0
Ped. Right-Left Flow Rate (p/h)	21	12	76	0
Ped. R. Sidewalk Flow Rate (p/h)	1	0	7	11
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	30	25	35	25
Right Corner Area per Ped (sq.ft)	317.6	3276.1	443.6	660.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	F	F	F	-
Pedestrian Delay (s/p)	55.0	55.0	55.0	55.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.62	2.08	2.70	2.47
Pedestrian Crosswalk LOS	B	B	B	B

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	3.2
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	135
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.37
Prob of Blocked Lane	0.20
Delay for adq Gap	8.85
Avg Ped Delay (s)	3.24

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	3.2
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	135
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.37
Prob of Blocked Lane	0.20
Delay for adq Gap	8.85
Avg Ped Delay (s)	3.24

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	839.8
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	855
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.74
Delay for adq Gap	843.89
Avg Ped Delay (s)	839.79

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	839.8
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	855
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.74
Delay for adq Gap	843.89
Avg Ped Delay (s)	839.79

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	227.2
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	603
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.98
Prob of Blocked Lane	0.61
Delay for adq Gap	232.62
Avg Ped Delay (s)	227.19

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	227.2
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	603
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.98
Prob of Blocked Lane	0.61
Delay for adq Gap	232.62
Avg Ped Delay (s)	227.19

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	24.0	58.1	61.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	4	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	3	3	4	0
Ped. Right-Left Flow Rate (p/h)	1	9	8	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	8
Veh. Perm. R. Flow in Walk (v/h)	51	10	5	0
Veh. RTOR Flow in Walk (v/h)	0	3	0	0
85th percentile speed (mph)	30	25	35	35
Right Corner Area per Ped (sq.ft)	4547.8	6054.7	3025.1	18204.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2145.6	1361.7	1756.7	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	21.7	21.7	21.7	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.65	1.72	2.29	2.48
Pedestrian Crosswalk LOS	A	A	B	B

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	11.7	
Level of Service	C	

Crosswalk		
Length (ft)	29	29
Lanes Crossed	2	2
Veh Vol Crossed	216	283
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	11.29
Prob of Delayed X-ing	0.49	0.59
Prob of Blocked Lane	0.29	0.36
Delay for adq Gap	9.86	11.70
Avg Ped Delay (s)	4.85	6.88

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	138.2
Level of Service	F

Crosswalk	
Length (ft)	69
Lanes Crossed	4
Veh Vol Crossed	499
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.71
Prob of Delayed X-ing	0.96
Prob of Blocked Lane	0.54
Delay for adq Gap	144.36
Avg Ped Delay (s)	138.17

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	105.5	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	457	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	0.94	
Prob of Blocked Lane	0.51	
Delay for adq Gap	111.99	
Avg Ped Delay (s)	105.50	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	10.4	
Level of Service	C	

Crosswalk		
Length (ft)	29	28
Lanes Crossed	2	2
Veh Vol Crossed	285	172
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	11.00
Prob of Delayed X-ing	0.59	0.41
Prob of Blocked Lane	0.36	0.23
Delay for adq Gap	11.76	8.49
Avg Ped Delay (s)	6.95	3.47

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.3	49.8	54.0	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	25	9	5
Ped. Right-Left Flow Rate (p/h)	1	1	3	3
Ped. R. Sidewalk Flow Rate (p/h)	1	1	2	2
Veh. Perm. L. Flow in Walk (v/h)	110	2	2	95
Veh. Perm. R. Flow in Walk (v/h)	2	17	0	200
Veh. RTOR Flow in Walk (v/h)	0	5	0	107
85th percentile speed (mph)	30	30	25	35
Right Corner Area per Ped (sq.ft)	4014.7	2072.0	1778.1	4830.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	869.5	335.6	788.7	278.8
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	50.8	50.8	50.8	50.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.52	2.38	1.74	2.47
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	38.1	72.9	72.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	3	0	0	8
Ped. Right-Left Flow Rate (p/h)	1	2	0	3
Ped. R. Sidewalk Flow Rate (p/h)	0	4	4	0
Veh. Perm. L. Flow in Walk (v/h)	5	134	0	0
Veh. Perm. R. Flow in Walk (v/h)	27	42	89	17
Veh. RTOR Flow in Walk (v/h)	23	3	24	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18213.6	4261.4	12150.0	4841.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2931.7	3145.3	0.0	1298.7
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	36.5	36.5	45.0	36.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.02	2.27	2.97	2.88
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.7	23.9	60.0	72.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	6	7	1	10
Ped. Right-Left Flow Rate (p/h)	3	8	3	6
Ped. R. Sidewalk Flow Rate (p/h)	4	5	0	0
Veh. Perm. L. Flow in Walk (v/h)	27	29	84	14
Veh. Perm. R. Flow in Walk (v/h)	69	4	204	699
Veh. RTOR Flow in Walk (v/h)	43	4	0	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	4282.6	2013.0	3824.2	2904.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1602.9	1109.9	3925.7	491.0
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	19.2	19.2	19.2	19.2
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.28	1.90	2.99	3.00
Pedestrian Crosswalk LOS	B	A	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	23.9	35.9	59.9	61.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	5	1	0
Ped. Right-Left Flow Rate (p/h)	1	13	0	3
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	9
Veh. Perm. L. Flow in Walk (v/h)	99	12	0	0
Veh. Perm. R. Flow in Walk (v/h)	13	493	50	145
Veh. RTOR Flow in Walk (v/h)	0	3	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	36429.0	3458.4	3831.3	5602.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	14392.3	167.4	24303.7	7313.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	16.8	16.8	16.8	16.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.98	2.17	2.70	2.85
Pedestrian Crosswalk LOS	A	B	B	C

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	19.2	
Level of Service	C	

Crosswalk		
Length (ft)	17	17
Lanes Crossed	1	1
Veh Vol Crossed	523	763
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	7.86	7.86
Prob of Delayed X-ing	0.68	0.81
Prob of Blocked Lane	0.68	0.81
Delay for adq Gap	10.01	15.26
Avg Ped Delay (s)	6.81	12.37

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	42.4	
Level of Service	E	

Crosswalk		
Length (ft)	29	17
Lanes Crossed	1	2
Veh Vol Crossed	763	523
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	7.86
Prob of Delayed X-ing	0.91	0.68
Prob of Blocked Lane	0.91	0.43
Delay for adq Gap	39.17	10.01
Avg Ped Delay (s)	35.59	6.81

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	24.8	
Level of Service	D	

Crosswalk		
Length (ft)	29	17
Lanes Crossed	2	1
Veh Vol Crossed	533	528
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	7.86
Prob of Delayed X-ing	0.81	0.68
Prob of Blocked Lane	0.57	0.68
Delay for adq Gap	22.01	10.10
Avg Ped Delay (s)	17.87	6.91

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	894.9
Level of Service	F

Crosswalk	
Length (ft)	56
Lanes Crossed	3
Veh Vol Crossed	1061
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	19.00
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.85
Delay for adq Gap	898.24
Avg Ped Delay (s)	894.91

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	128.6
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	812
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.83
Delay for adq Gap	132.57
Avg Ped Delay (s)	128.62

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	128.6
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	812
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.83
Delay for adq Gap	132.57
Avg Ped Delay (s)	128.62

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	32.5	60.1	59.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	10.0	10.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	6	14	3	10
Ped. Right-Left Flow Rate (p/h)	1	17	15	11
Ped. R. Sidewalk Flow Rate (p/h)	4	13	3	1
Veh. Perm. L. Flow in Walk (v/h)	47	17	12	30
Veh. Perm. R. Flow in Walk (v/h)	15	118	29	24
Veh. RTOR Flow in Walk (v/h)	8	36	5	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	2510.2	1111.0	1387.7	2498.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2986.2	546.3	1256.3	1060.1
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	20.8	20.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.08	1.94	2.62	2.67
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	36.0	61.3	60.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	7.0	7.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	10	12	6	8
Ped. Right-Left Flow Rate (p/h)	16	14	41	8
Ped. R. Sidewalk Flow Rate (p/h)	0	0	2	0
Veh. Perm. L. Flow in Walk (v/h)	82	6	17	0
Veh. Perm. R. Flow in Walk (v/h)	54	35	21	49
Veh. RTOR Flow in Walk (v/h)	12	16	0	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	990.7	1721.8	952.0	1724.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	793.9	834.1	331.7	956.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	23.4	23.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.31	2.00	2.60	2.59
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	48.0	61.2	60.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	17	18	44	35
Ped. Right-Left Flow Rate (p/h)	28	13	40	28
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	28	131	7	130
Veh. Perm. R. Flow in Walk (v/h)	27	137	127	48
Veh. RTOR Flow in Walk (v/h)	17	79	29	3
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	550.4	762.0	620.6	664.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	514.4	532.1	212.3	264.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	21.7	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.25	2.57	2.60	2.75
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	36.0	48.0	60.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Pretimed	Pretimed
Corresponding Signal Phase	2	6	0	4
Effective Walk Time (s)	13.0	13.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	10	13	19	16
Ped. Right-Left Flow Rate (p/h)	20	9	29	41
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	3
Veh. Perm. L. Flow in Walk (v/h)	0	30	53	0
Veh. Perm. R. Flow in Walk (v/h)	0	54	0	351
Veh. RTOR Flow in Walk (v/h)	0	39	0	101
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	919.6	915.1	1007.2	796.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	931.2	1102.2	0.0	294.0
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	18.4	18.4	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.21	2.14	2.47	2.60
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.0	60.1	35.9	38.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	8	4	6	2
Effective Walk Time (s)	8.0	8.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	3	5	5
Ped. Right-Left Flow Rate (p/h)	3	3	11	12
Ped. R. Sidewalk Flow Rate (p/h)	3	0	1	2
Veh. Perm. L. Flow in Walk (v/h)	15	116	118	19
Veh. Perm. R. Flow in Walk (v/h)	91	11	120	15
Veh. RTOR Flow in Walk (v/h)	8	5	24	4
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	2792.5	3156.8	3147.3	2781.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1599.0	1973.8	367.8	838.6
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	29.9	29.9	29.0	29.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.37	2.65	2.39	2.09
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.1	48.1	38.1	38.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	6	6	20	9
Ped. Right-Left Flow Rate (p/h)	4	11	3	5
Ped. R. Sidewalk Flow Rate (p/h)	6	0	2	4
Veh. Perm. L. Flow in Walk (v/h)	0	0	30	25
Veh. Perm. R. Flow in Walk (v/h)	22	31	197	115
Veh. RTOR Flow in Walk (v/h)	6	0	30	20
85th percentile speed (mph)	30	30	25	25
Right Corner Area per Ped (sq.ft)	1843.5	2324.7	1726.8	2587.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1260.2	723.7	175.2	530.6
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	33.4	33.4	33.4	33.4
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.39	2.43	2.32	2.24
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	37.4	36.1	36.0	48.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	4	8	0	2
Effective Walk Time (s)	11.0	11.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	103	83	153	173
Ped. Right-Left Flow Rate (p/h)	69	84	178	167
Ped. R. Sidewalk Flow Rate (p/h)	1	29	17	0
Veh. Perm. L. Flow in Walk (v/h)	0	81	55	0
Veh. Perm. R. Flow in Walk (v/h)	0	61	0	172
Veh. RTOR Flow in Walk (v/h)	0	4	0	13
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	129.8	124.0	124.6	129.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	134.3	104.5	0.0	55.7
Crosswalk Circulation Code	A	A	F	B
Pedestrian Delay (s/p)	20.0	20.0	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.30	2.37	2.15	2.10
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.0	36.0	24.0	36.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	120	66	81	254
Ped. Right-Left Flow Rate (p/h)	115	115	149	162
Ped. R. Sidewalk Flow Rate (p/h)	3	17	15	9
Veh. Perm. L. Flow in Walk (v/h)	0	53	52	0
Veh. Perm. R. Flow in Walk (v/h)	0	35	0	55
Veh. RTOR Flow in Walk (v/h)	0	4	0	8
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	142.6	102.4	153.8	98.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	80.1	84.4	0.0	38.6
Crosswalk Circulation Code	A	A	F	C
Pedestrian Delay (s/p)	21.7	21.7	30.0	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.26	2.33	1.88	1.99
Pedestrian Crosswalk LOS	B	B	A	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.0	23.9	24.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	4
Effective Walk Time (s)	12.0	12.0	0.0	17.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	50	37	76	32
Ped. Right-Left Flow Rate (p/h)	41	32	91	56
Ped. R. Sidewalk Flow Rate (p/h)	5	4	0	3
Veh. Perm. L. Flow in Walk (v/h)	0	72	96	0
Veh. Perm. R. Flow in Walk (v/h)	0	32	0	56
Veh. RTOR Flow in Walk (v/h)	0	3	0	10
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	262.6	444.2	290.7	388.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	277.0	307.6	0.0	325.2
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	19.2	19.2	30.0	15.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.25	2.32	2.05	1.87
Pedestrian Crosswalk LOS	B	B	B	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	38.5	34.2	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	0
Effective Walk Time (s)	11.0	11.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	21	13	16	0
Ped. Right-Left Flow Rate (p/h)	2	8	15	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	483	0	0	110
Veh. Perm. R. Flow in Walk (v/h)	27	0	34	0
Veh. RTOR Flow in Walk (v/h)	5	0	12	0
85th percentile speed (mph)	25	30	25	25
Right Corner Area per Ped (sq.ft)	1341.7	3461.9	1388.5	2895.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	143.0	1129.2	696.0	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	20.0	20.0	20.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.84	2.07	2.01	2.55
Pedestrian Crosswalk LOS	C	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.1	26.0	38.0	37.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	9	9	2	2
Ped. Right-Left Flow Rate (p/h)	3	7	1	10
Ped. R. Sidewalk Flow Rate (p/h)	1	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	10	123	6	35
Veh. Perm. R. Flow in Walk (v/h)	5	6	180	8
Veh. RTOR Flow in Walk (v/h)	4	3	26	0
85th percentile speed (mph)	25	25	25	30
Right Corner Area per Ped (sq.ft)	4547.4	2594.5	3822.0	2894.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1223.5	564.4	3400.1	1296.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	22.5	22.5	22.5	22.5
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.77	2.08	2.29	2.26
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.2	24.2	37.6	25.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	2	3	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	4	0	2	0
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	30	30	30	45
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	44.5	44.5	44.5	44.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.54	2.17	2.33	2.38
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	30.8	36.2	39.5	37.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	3	5	1	5
Ped. Right-Left Flow Rate (p/h)	2	4	0	6
Ped. R. Sidewalk Flow Rate (p/h)	0	2	0	1
Veh. Perm. L. Flow in Walk (v/h)	19	57	7	3
Veh. Perm. R. Flow in Walk (v/h)	11	6	18	13
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	12134.8	3300.9	7275.4	4271.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3740.9	2051.8	14661.2	1343.9
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	23.4	23.4	26.0	26.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.76	2.04	2.40	2.37
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	62.5	37.1	87.1	73.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	7	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	4.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	6	9	0
Ped. Right-Left Flow Rate (p/h)	5	1	4	3
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	323	17	451	55
Veh. RTOR Flow in Walk (v/h)	123	3	147	11
85th percentile speed (mph)	40	30	35	30
Right Corner Area per Ped (sq.ft)	4019.4	7286.1	3625.3	7276.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1578.1	1967.6	636.2	2044.6
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	31.5	31.5	31.5	36.1
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.84	2.42	3.31	2.59
Pedestrian Crosswalk LOS	C	B	C	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	86.6	84.9	48.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	7	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	9.0	0.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	0	1	0
Ped. Right-Left Flow Rate (p/h)	1	0	3	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	3
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	129	15	208	16
Veh. RTOR Flow in Walk (v/h)	14	0	32	9
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	12134.2	0.0	18189.4	14570.5
Right Corner Quality of Service	A	-	A	A
Ped. Circulation Area (sq.ft)	6037.4	0.0	1685.7	0.0
Crosswalk Circulation Code	A	-	A	-
Pedestrian Delay (s/p)	37.9	46.5	37.9	37.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.19	3.09	2.52	2.18
Pedestrian Crosswalk LOS	C	C	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	91.2	92.6	38.8	35.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	6	4	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	Actuated	Actuated	None
Corresponding Signal Phase	0	8	2	6
Effective Walk Time (s)	0.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	2	0
Ped. Right-Left Flow Rate (p/h)	0	1	1	1
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	176	133	0
Veh. RTOR Flow in Walk (v/h)	0	55	67	0
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	24268.4	36426.3	18213.1	72841.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	11483.4	2540.1	0.3
Crosswalk Circulation Code	-	A	A	F
Pedestrian Delay (s/p)	46.5	37.9	37.9	46.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.03	2.91	1.99	2.11
Pedestrian Crosswalk LOS	C	C	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	14.8	24.0	60.2	73.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	Actuated	Actuated
Corresponding Signal Phase	2	6	0	8
Effective Walk Time (s)	0.0	0.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	2	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	331	0	617
Veh. RTOR Flow in Walk (v/h)	0	95	0	0
85th percentile speed (mph)	30	30	35	35
Right Corner Area per Ped (sq.ft)	72900.0	36389.4	36450.0	72839.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.5	0.2	0.0	0.0
Crosswalk Circulation Code	F	F	-	-
Pedestrian Delay (s/p)	48.5	48.5	48.5	39.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.14	2.17	2.87	3.04
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	56.1	62.9	81.6	80.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	5	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	9	0	12
Ped. Right-Left Flow Rate (p/h)	2	4	1	14
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	30	40	45	35
Right Corner Area per Ped (sq.ft)	14551.0	1839.5	5155.4	2314.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	0.0	0.1	0.0
Crosswalk Circulation Code	F	F	F	F
Pedestrian Delay (s/p)	58.0	58.0	58.0	58.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.01	2.72	3.17	3.05
Pedestrian Crosswalk LOS	B	B	C	C

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	4066880	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	2376	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	1.00	
Prob of Blocked Lane	0.98	
Delay for adq Gap	4066880.00	
Avg Ped Delay (s)	4066880.00	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	201.3	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	1153	1223
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.97	0.98
Prob of Blocked Lane	0.83	0.85
Delay for adq Gap	94.47	112.27
Avg Ped Delay (s)	91.69	109.60

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	5798320
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2437
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	5798320.00
Avg Ped Delay (s)	5798320.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	5798320
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2437
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	5798320.00
Avg Ped Delay (s)	5798320.00

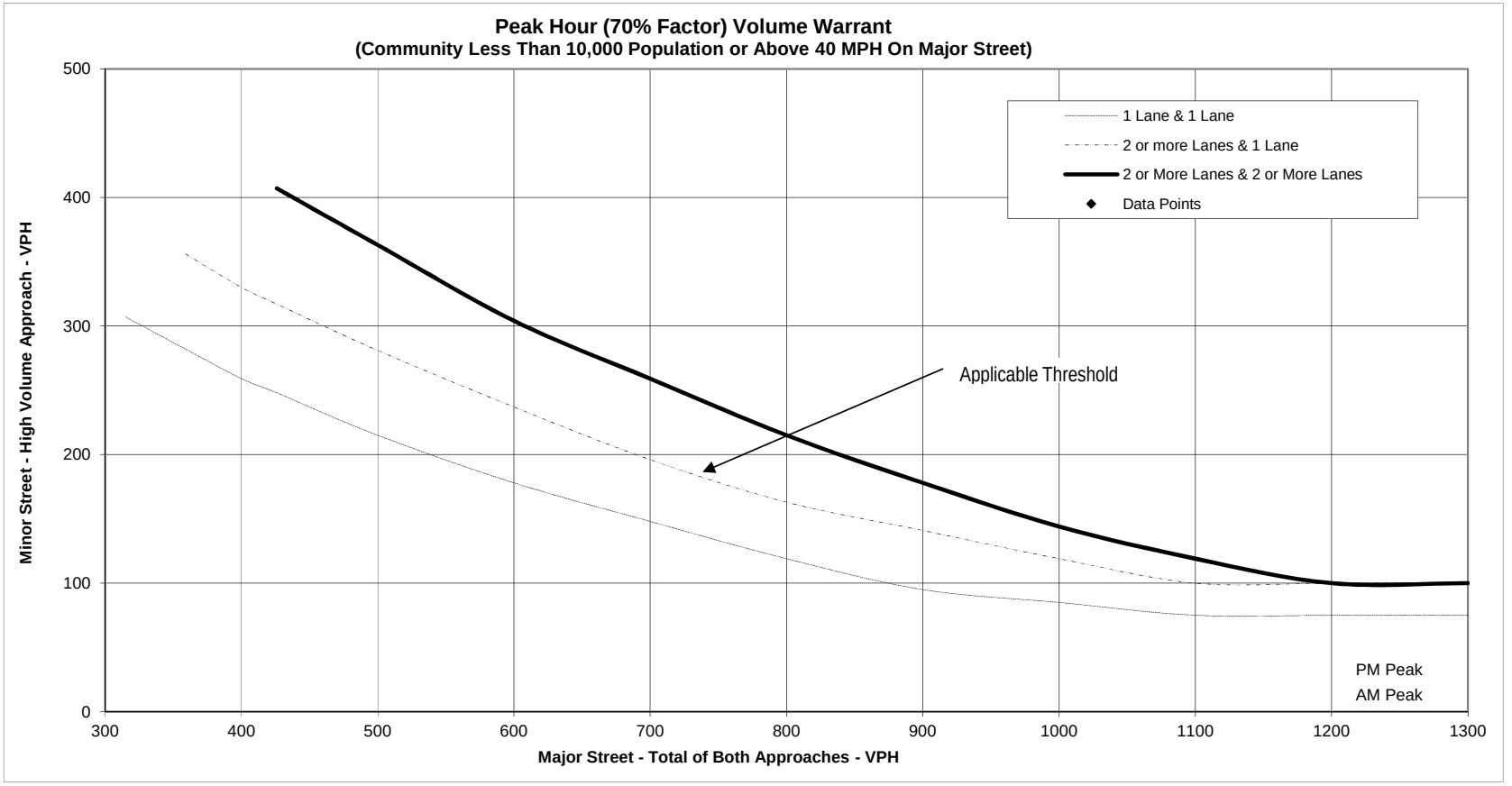
Appendix C.4

Intersection Peak Hour Signal Warrant Worksheets for Existing (2017) Conditions

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: Existing
Intersection: Hwy 1/Stenner Creek Rd
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Hwy 1
Major Street (Orientation): North-South
Minor Street (Name): Stenner Creek Rd.
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	8	8	1339	994	2,333	No
PM Peak	0	27	27	1153	914	2,067	No

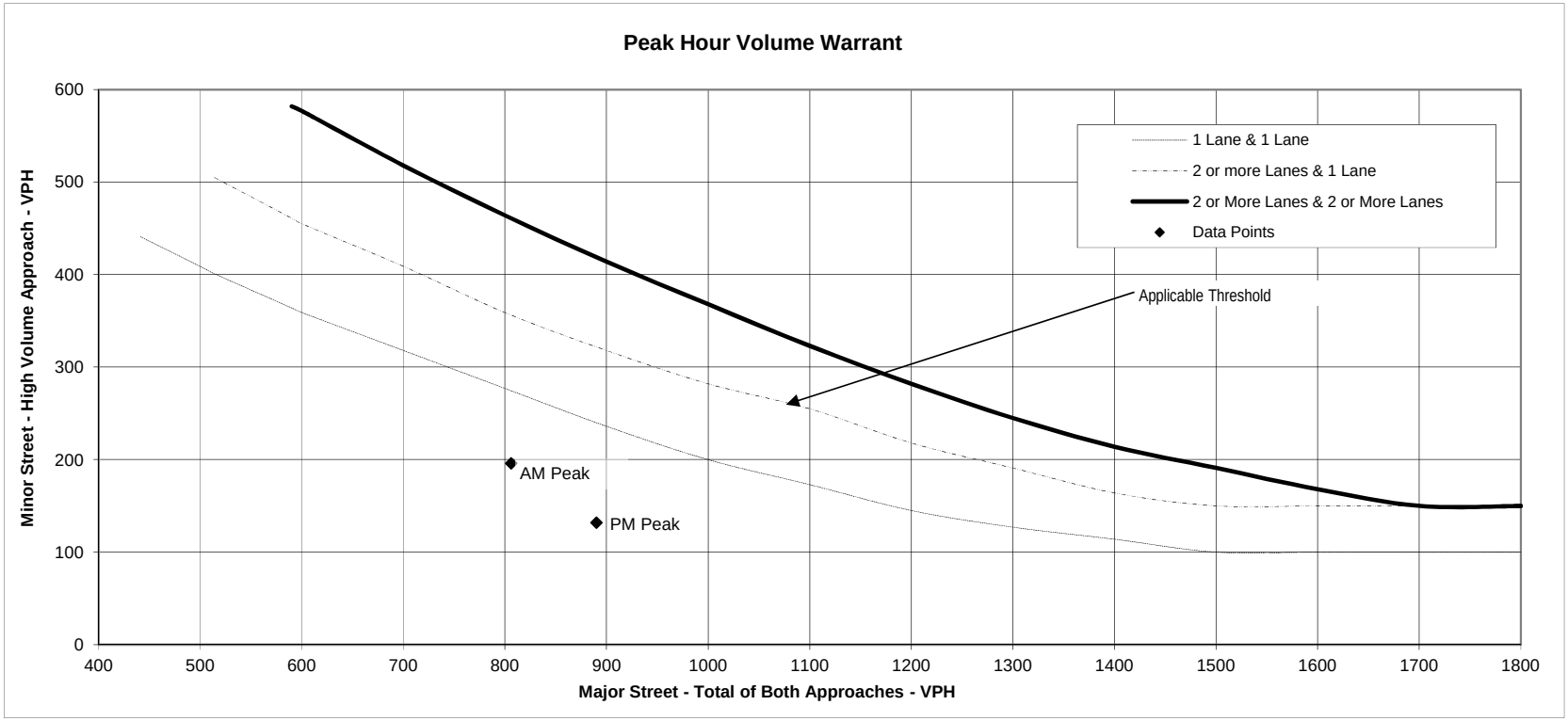


Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

PEAK HOUR VOLUME SIGNAL WARRANT ANALYSIS

Scenario: Existing
Intersection: Grand Ave/Slack St
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Grand Ave
Major Street (Orientation): North-South
Minor Street (Name): Slack St
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	196	16	196	703	103	806	No
PM Peak	132	14	132	312	578	890	No

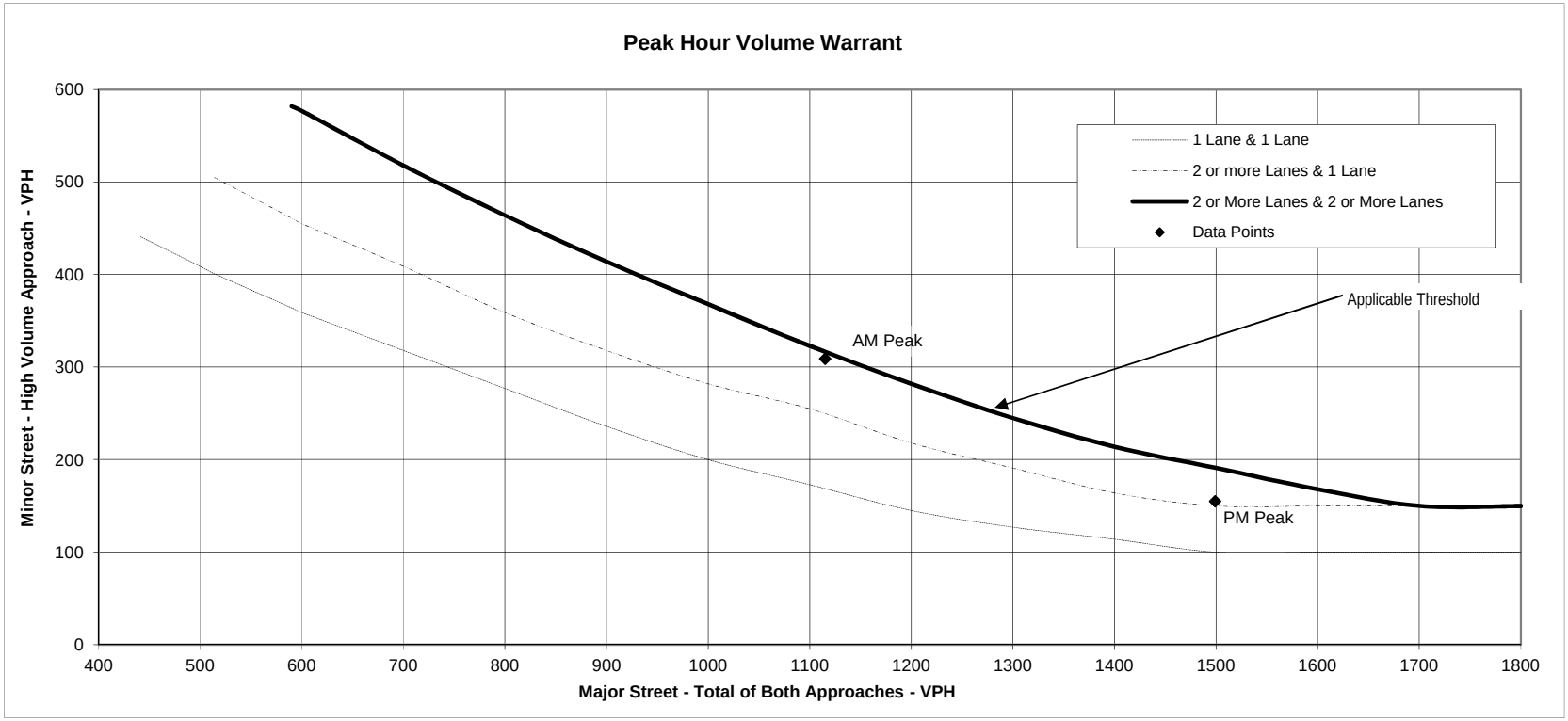


Note: 150 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 100 VPH as the threshold for a minor street approach with one lane

PEAK HOUR VOLUME SIGNAL WARRANT ANALYSIS

Scenario: Existing
Intersection: California Blvd/Taft St
Approach Type: 2 or More Lanes & 2 or More Lanes
Major Street (Name): California Blvd
Major Street (Orientation): North-South
Minor Street (Name): Taft St
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	309	309	791	324	1,115	No
PM Peak	0	155	155	738	761	1,499	No

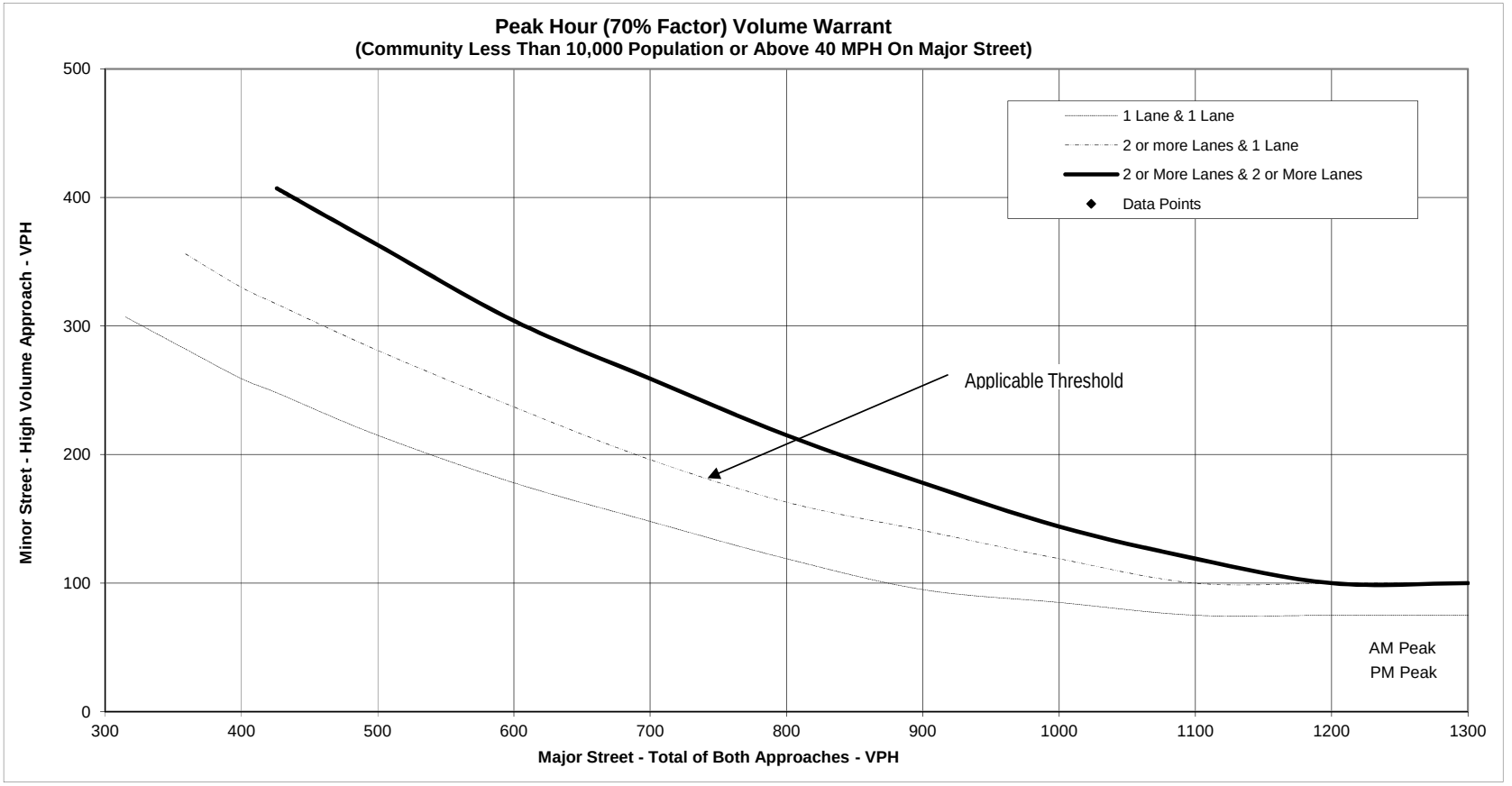


Note: 150 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 100 VPH as the threshold for a minor street approach with one lane

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: Existing
Intersection: Broad St/Rockview Pl
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Broad St
Major Street (Orientation): North-South
Minor Street (Name): Rockview Pl
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	42	0	42	973	1243	2,216	No
PM Peak	29	0	29	1272	1166	2,438	No

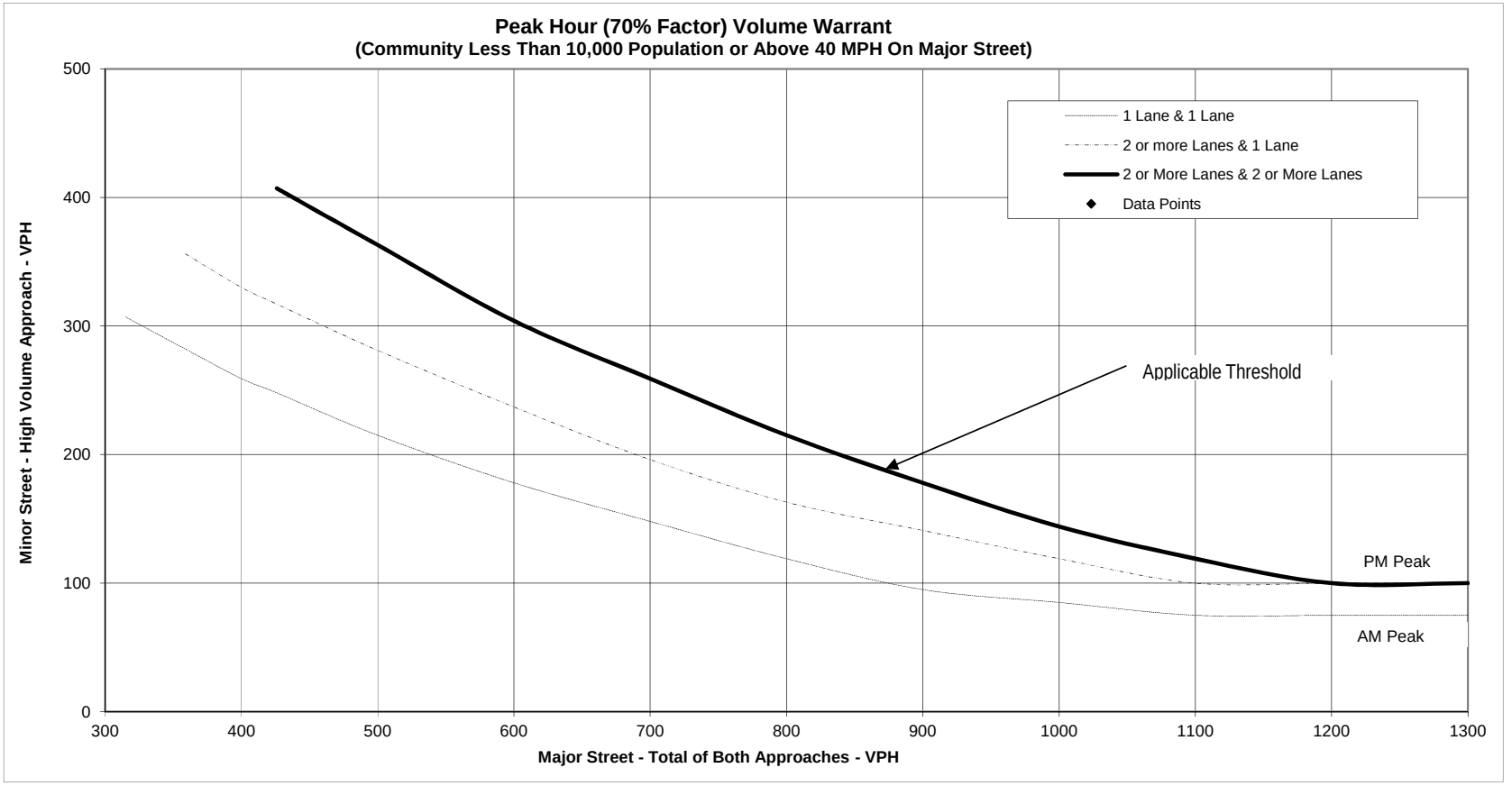


Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: Existing
Intersection: Broad St/Capitolio Wy
Approach Type: 2 or More Lanes & 2 or More Lanes
Major Street (Name): Broad St
Major Street (Orientation): North-South
Minor Street (Name): Capitolio Wy
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	61	61	952	1282	2,234	No
PM Peak	0	119	119	1282	1248	2,530	Yes



Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

Appendix C.5

Freeway LOS Worksheets for Existing (2017) Conditions

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 1_2016_AM_Peak_US-101_NB_Marsh_St_to_Broad_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Direction:	US-101 NB
From/To:	Marsh St to Broad St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	2942	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	774	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1618	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1618	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	64.3	mi/h
Number of lanes, N	2	
Density, D	25.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 1_2016_PM_Peak_US-101_NB_Marsh_St_to_Broad_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Direction:	US-101 NB
From/To:	Marsh St to Broad St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	3545	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	933	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1950	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1950	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	60.7	mi/h
Number of lanes, N	2	
Density, D	32.1	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 10_2016_AM_Peak_US-101_SB_Broad_St_to_Marsh_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Direction:	US-101 SB
From/To:	Broad St to Marsh St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	2522	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	664	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1387	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1387	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	65.0	mi/h
Number of lanes, N	2	
Density, D	21.3	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 10_2016_PM_Peak_US-101_SB_Broad_St_to_Marsh_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Direction:	US-101 SB
From/To:	Broad St to Marsh St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	3294	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	867	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1812	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1812	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	62.6	mi/h
Number of lanes, N	2	
Density, D	28.9	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.3

File Name: 2_2016_AM_Peak_US-101_NB_Broad_St_to_Osos_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Broad St to Osos St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	640	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1910	186	653	21	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	503	49	172	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2101	198	694	22	pc/h

Volume ratio, VR 0.296

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	892	lc/h
Weaving lane changes, LCW	1035	lc/h
Non-weaving vehicle index, INW	231	
Non-weaving lane change, LCNW	206	lc/h
Total lane changes, LCALL	1241	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.381	
Average weaving speed, SW	51.2	mi/h
Average non-weaving speed, SNW	53.8	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	53.0	mi/h
Weaving segment density, D	19.0	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.514	
Weaving segment flow rate, v	3015	pc/h
Weaving segment capacity, cW	5670	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5539	640	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1975	c
		Maximum	Analyzed	
v/c ratio		1.00	0.514	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 2_2016_PM_Peak_US-101_NB_Broad_St_to_Osos_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Broad St to Osos St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	640	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2683	203	545	23	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	706	53	143	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2951	216	579	24	pc/h

Volume ratio, VR 0.211

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	795	lc/h
Weaving lane changes, LCW	938	lc/h
Non-weaving vehicle index, INW	324	
Non-weaving lane change, LCNW	382	lc/h
Total lane changes, LCALL	1320	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.400	
Average weaving speed, SW	50.7	mi/h
Average non-weaving speed, SNW	53.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.7	mi/h
Weaving segment density, D	23.9	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.620	
Weaving segment flow rate, v	3770	pc/h
Weaving segment capacity, cW	5865	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4648	640	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2043	c
		Maximum	Analyzed	
v/c ratio		1.00	0.620	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 3_2016_AM_Peak_US-101_NB_Osos_St_to_Toro_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Osos St to Toro St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	510	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1588	96	508	11	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	418	25	134	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1747	102	540	12	pc/h

Volume ratio, VR 0.267

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	642	lc/h
Weaving lane changes, LCW	755	lc/h
Non-weaving vehicle index, INW	153	
Non-weaving lane change, LCNW	61	lc/h
Total lane changes, LCALL	816	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.327	
Average weaving speed, SW	52.7	mi/h
Average non-weaving speed, SNW	56.5	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	55.4	mi/h
Weaving segment density, D	14.4	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.406	
Weaving segment flow rate, v	2401	pc/h
Weaving segment capacity, cW	5707	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5237	510	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1989	c
		Maximum	Analyzed	
v/c ratio		1.00	0.406	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 3_2016_PM_Peak_US-101_NB_Osos_St_to_Toro_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Osos St to Toro St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	510	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2466	171	420	19	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	649	45	111	5	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2713	182	447	20	pc/h

Volume ratio, VR 0.187

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	629	lc/h
Weaving lane changes, LCW	742	lc/h
Non-weaving vehicle index, INW	237	
Non-weaving lane change, LCNW	262	lc/h
Total lane changes, LCALL	1004	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.386	
Average weaving speed, SW	51.1	mi/h
Average non-weaving speed, SNW	55.1	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.3	mi/h
Weaving segment density, D	20.6	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.550	
Weaving segment flow rate, v	3362	pc/h
Weaving segment capacity, cW	5891	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4405	510	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2052	c
		Maximum	Analyzed	
v/c ratio		1.00	0.550	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 4_2016_AM_Peak_US-101_NB_Toro_St_to_California_Blvd.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Toro St to California Blvd
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	740	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1216	273	468	30	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	320	72	123	8	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1338	290	498	32	pc/h

Volume ratio, VR 0.365

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	788	lc/h
Weaving lane changes, LCW	951	lc/h
Non-weaving vehicle index, INW	172	
Non-weaving lane change, LCNW	105	lc/h
Total lane changes, LCALL	1056	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.299	
Average weaving speed, SW	53.5	mi/h
Average non-weaving speed, SNW	55.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	55.0	mi/h
Weaving segment density, D	13.1	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.378	
Weaving segment flow rate, v	2158	pc/h
Weaving segment capacity, cW	5526	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6293	740	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1925	c
		Maximum	Analyzed	
v/c ratio		1.00	0.378	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 4_2016_PM_Peak_US-101_NB_Toro_St_to_California_Blvd.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Toro St to California Blvd
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	740	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2325	94	312	11	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	612	25	82	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2558	100	332	12	pc/h

Volume ratio, VR 0.144

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	432	lc/h
Weaving lane changes, LCW	595	lc/h
Non-weaving vehicle index, INW	323	
Non-weaving lane change, LCNW	353	lc/h
Total lane changes, LCALL	948	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.275	
Average weaving speed, SW	54.2	mi/h
Average non-weaving speed, SNW	57.1	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	56.7	mi/h
Weaving segment density, D	17.7	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.478	
Weaving segment flow rate, v	3002	pc/h
Weaving segment capacity, cW	6037	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	3971	740	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2103	c
		Maximum	Analyzed	
v/c ratio		1.00	0.478	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 5_2016_AM_Peak_US-101_NB_California_Blvd_to_Grand_Ave.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	California Blvd to Grand Ave
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	530	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1006	87	483	10	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	265	23	127	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1107	92	514	11	pc/h

Volume ratio, VR 0.352

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	606	lc/h
Weaving lane changes, LCW	706	lc/h
Non-weaving vehicle index, INW	71	
Non-weaving lane change, LCNW	0	lc/h
Total lane changes, LCALL	706	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.283	
Average weaving speed, SW	54.0	mi/h
Average non-weaving speed, SNW	57.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	56.4	mi/h
Weaving segment density, D	10.2	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.303	
Weaving segment flow rate, v	1724	pc/h
Weaving segment capacity, cW	5515	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6143	530	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1920	c
		Maximum	Analyzed	
v/c ratio		1.00	0.303	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 5_2016_PM_Peak_US-101_NB_California_Blvd_to_Grand_Ave.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	California Blvd to Grand Ave
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	530	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2239	276	180	20	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	589	73	47	5	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2463	293	191	21	pc/h

Volume ratio, VR 0.163

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	484	lc/h
Weaving lane changes, LCW	584	lc/h
Non-weaving vehicle index, INW	158	
Non-weaving lane change, LCNW	221	lc/h
Total lane changes, LCALL	805	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.314	
Average weaving speed, SW	53.0	mi/h
Average non-weaving speed, SNW	56.8	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	56.1	mi/h
Weaving segment density, D	17.6	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.480	
Weaving segment flow rate, v	2968	pc/h
Weaving segment capacity, cW	5948	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4162	530	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2072	c
		Maximum	Analyzed	
v/c ratio		1.00	0.480	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 6_2016_AM_Peak_US-101_SB_Grand_Ave_to_Taft_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Grand Ave to Taft St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	670	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1664	238	347	26	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	438	63	91	7	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1830	253	369	28	pc/h

Volume ratio, VR 0.251

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	622	lc/h
Weaving lane changes, LCW	749	lc/h
Non-weaving vehicle index, INW	149	
Non-weaving lane change, LCNW	168	lc/h
Total lane changes, LCALL	917	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.289	
Average weaving speed, SW	53.8	mi/h
Average non-weaving speed, SNW	56.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	55.8	mi/h
Weaving segment density, D	14.8	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.414	
Weaving segment flow rate, v	2480	pc/h
Weaving segment capacity, cW	5782	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5062	670	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2014	c
		Maximum	Analyzed	
v/c ratio		1.00	0.414	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 6_2016_PM_Peak_US-101_SB_Grand_Ave_to_Taft_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Grand Ave to Taft St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	670	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	861	404	157	18	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	227	106	41	5	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	947	430	167	19	pc/h

Volume ratio, VR 0.382

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	597	lc/h
Weaving lane changes, LCW	724	lc/h
Non-weaving vehicle index, INW	78	
Non-weaving lane change, LCNW	0	lc/h
Total lane changes, LCALL	724	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.240	
Average weaving speed, SW	55.3	mi/h
Average non-weaving speed, SNW	58.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	57.1	mi/h
Weaving segment density, D	9.1	pc/mi/ln
Level of service, LOS	A	
Weaving segment v/c ratio	0.277	
Weaving segment flow rate, v	1563	pc/h
Weaving segment capacity, cW	5472	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6480	670	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1906	c
		Maximum	Analyzed	
v/c ratio		1.00	0.277	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 7_2016_AM_Peak_US-101_SB_Taft_St_to_Montalban_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Taft St to Montalban St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	390	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1759	190	143	16	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	463	50	38	4	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1935	202	152	17	pc/h

Volume ratio, VR 0.154

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	354	lc/h
Weaving lane changes, LCW	428	lc/h
Non-weaving vehicle index, INW	129	
Non-weaving lane change, LCNW	36	lc/h
Total lane changes, LCALL	464	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.259	
Average weaving speed, SW	54.7	mi/h
Average non-weaving speed, SNW	58.8	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	58.1	mi/h
Weaving segment density, D	13.2	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.374	
Weaving segment flow rate, v	2306	pc/h
Weaving segment capacity, cW	5940	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4066	390	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2068	c
		Maximum	Analyzed	
v/c ratio		1.00	0.374	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 7_2016_PM_Peak_US-101_SB_Taft_St_to_Montalban_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Taft St to Montalban St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	390	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1180	833	85	9	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	311	219	22	2	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1298	886	90	10	pc/h

Volume ratio, VR 0.427

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	976	lc/h
Weaving lane changes, LCW	1050	lc/h
Non-weaving vehicle index, INW	87	
Non-weaving lane change, LCNW	0	lc/h
Total lane changes, LCALL	1050	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.494	
Average weaving speed, SW	48.5	mi/h
Average non-weaving speed, SNW	54.3	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	51.7	mi/h
Weaving segment density, D	14.7	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.419	
Weaving segment flow rate, v	2284	pc/h
Weaving segment capacity, cW	5297	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6989	390	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1845	c
		Maximum	Analyzed	
v/c ratio		1.00	0.419	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 8_2016_AM_Peak_US-101_SB_Lemon_St_to_Olive_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Lemon St to Olive St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	360	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1802	270	147	16	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	474	71	39	4	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1982	287	156	17	pc/h

Volume ratio, VR 0.181

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	443	lc/h
Weaving lane changes, LCW	503	lc/h
Non-weaving vehicle index, INW	122	
Non-weaving lane change, LCNW	29	lc/h
Total lane changes, LCALL	532	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.308	
Average weaving speed, SW	53.2	mi/h
Average non-weaving speed, SNW	57.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	57.0	mi/h
Weaving segment density, D	14.3	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.401	
Weaving segment flow rate, v	2442	pc/h
Weaving segment capacity, cW	5871	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4347	360	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2045	c
		Maximum	Analyzed	
v/c ratio		1.00	0.401	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 8_2016_PM_Peak_US-101_SB_Lemon_St_to_Olive_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Lemon St to Olive St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	360	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1928	648	85	10	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	507	171	22	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2121	689	90	11	pc/h

Volume ratio, VR 0.268

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	779	lc/h
Weaving lane changes, LCW	839	lc/h
Non-weaving vehicle index, INW	130	
Non-weaving lane change, LCNW	57	lc/h
Total lane changes, LCALL	896	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.464	
Average weaving speed, SW	49.2	mi/h
Average non-weaving speed, SNW	54.7	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	53.1	mi/h
Weaving segment density, D	18.3	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.495	
Weaving segment flow rate, v	2911	pc/h
Weaving segment capacity, cW	5676	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5239	360	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1976	c
		Maximum	Analyzed	
v/c ratio		1.00	0.495	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 9_2016_AM_Peak_US-101_SB_Olive_St_to_Broad_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Olive St to Broad St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	540	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1859	394	213	24	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.95	
Peak 15-min volume, v15	494	105	57	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2067	423	229	26	pc/h

Volume ratio, VR 0.238

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	652	lc/h
Weaving lane changes, LCW	807	lc/h
Non-weaving vehicle index, INW	305	
Non-weaving lane change, LCNW	146	lc/h
Total lane changes, LCALL	953	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.354	
Average weaving speed, SW	51.9	mi/h
Average non-weaving speed, SNW	55.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.9	mi/h
Weaving segment density, D	16.7	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.458	
Weaving segment flow rate, v	2745	pc/h
Weaving segment capacity, cW	5785	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4923	540	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2014	c
		Maximum	Analyzed	
v/c ratio		1.00	0.458	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 9_2016_PM_Peak_US-101_SB_Olive_St_to_Broad_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Olive St to Broad St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	540	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2419	597	157	18	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.95	
Peak 15-min volume, v15	643	159	42	5	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2689	641	169	19	pc/h

Volume ratio, VR 0.230

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	810	lc/h
Weaving lane changes, LCW	965	lc/h
Non-weaving vehicle index, INW	395	
Non-weaving lane change, LCNW	273	lc/h
Total lane changes, LCALL	1238	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.435	
Average weaving speed, SW	49.8	mi/h
Average non-weaving speed, SNW	53.5	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.6	mi/h
Weaving segment density, D	22.3	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.585	
Weaving segment flow rate, v	3518	pc/h
Weaving segment capacity, cW	5799	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4848	540	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2021	c
		Maximum	Analyzed	
v/c ratio		1.00	0.585	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Appendix D

Analysis Worksheets for 2021 Near-Term No Project Conditions

Appendix D.1

Intersection Auto LOS Worksheets for 2021 Near-Term No Project Conditions

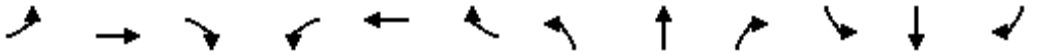
Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	5	1350	10	10	1160
Future Vol, veh/h	10	5	1350	10	10	1160
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	67	67	90	90	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	7	1500	11	11	1318

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2183	751	0	0	1501	0
Stage 1	1501	-	-	-	-	-
Stage 2	682	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	39	353	-	-	442	-
Stage 1	171	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	38	353	-	-	442	-
Mov Cap-2 Maneuver	127	-	-	-	-	-
Stage 1	171	-	-	-	-	-
Stage 2	452	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30.9	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	161	442	-
HCM Lane V/C Ratio	-	-	0.139	0.026	-
HCM Control Delay (s)	-	-	30.9	13.4	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	250	90	30	30	30	60	1280	180	130	1120	50
Future Volume (veh/h)	110	250	90	30	30	30	60	1280	180	130	1120	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1976	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	139	316	96	39	39	35	75	1600	215	151	1302	58
Adj No. of Lanes	1	2	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.79	0.79	0.79	0.76	0.76	0.76	0.80	0.80	0.80	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	357	533	156	133	140	116	96	1735	764	177	1897	821
Arrive On Green	0.20	0.20	0.20	0.08	0.08	0.08	0.05	0.49	0.49	0.10	0.54	0.54
Sat Flow, veh/h	1774	2650	775	1774	1863	1541	1774	3539	1558	1774	3539	1532
Grp Volume(v), veh/h	139	218	194	39	39	35	75	1600	215	151	1302	58
Grp Sat Flow(s),veh/h/ln	1774	1863	1562	1774	1863	1541	1774	1770	1558	1774	1770	1532
Q Serve(g_s), s	8.9	13.9	14.8	2.7	2.6	2.8	5.5	55.0	10.7	11.0	35.3	2.4
Cycle Q Clear(g_c), s	8.9	13.9	14.8	2.7	2.6	2.8	5.5	55.0	10.7	11.0	35.3	2.4
Prop In Lane	1.00		0.50	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	357	375	314	133	140	116	96	1735	764	177	1897	821
V/C Ratio(X)	0.39	0.58	0.62	0.29	0.28	0.30	0.78	0.92	0.28	0.85	0.69	0.07
Avail Cap(c_a), veh/h	434	456	382	285	299	247	271	1894	834	244	1897	821
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	47.3	47.6	57.2	57.1	57.2	61.1	31.0	19.7	58.0	22.3	14.6
Incr Delay (d2), s/veh	0.3	0.5	0.8	0.4	0.4	0.5	5.2	7.3	0.1	14.6	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	7.2	6.5	1.3	1.3	1.2	2.8	28.4	4.6	6.1	17.4	1.0
LnGrp Delay(d),s/veh	45.5	47.8	48.5	57.6	57.5	57.8	66.3	38.3	19.8	72.5	23.2	14.7
LnGrp LOS	D	D	D	E	E	E	E	D	B	E	C	B
Approach Vol, veh/h		551			113			1890			1511	
Approach Delay, s/veh		47.5			57.6			37.3			27.8	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.5	70.1		30.3	10.6	76.1		13.8
Change Period (Y+Rc), s	3.5	6.0		4.0	3.5	6.0		4.0
Max Green Setting (Gmax), s	18.0	70.0		32.0	20.0	70.0		21.0
Max Q Clear Time (g_c+I1), s	13.0	57.0		16.8	7.5	37.3		4.8
Green Ext Time (p_c), s	0.1	7.1		1.9	0.1	10.4		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	35.7
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	480	70	70	40	10
Future Vol, veh/h	50	480	70	70	40	10
Conflicting Peds, #/hr	0	0	0	16	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	68	68	69	69	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	74	706	101	101	50	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	219	0	-	0	1021	169
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	853	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1350	-	-	-	262	875
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	418	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1349	-	-	-	231	861
Mov Cap-2 Maneuver	-	-	-	-	231	-
Stage 1	-	-	-	-	849	-
Stage 2	-	-	-	-	375	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	21.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1349	-	-	-	231	861
HCM Lane V/C Ratio	0.055	-	-	-	0.216	0.015
HCM Control Delay (s)	7.8	0	-	-	24.8	9.2
HCM Lane LOS	A	A	-	-	C	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.8	0

Intersection	
Intersection Delay, s/veh	15.3
Intersection LOS	C

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Lane Configurations									
Traffic Vol, veh/h	0	430	130	0	50	80	0	50	270
Future Vol, veh/h	0	430	130	0	50	80	0	50	270
Peak Hour Factor	0.92	0.80	0.80	0.92	0.64	0.64	0.92	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	538	163	0	78	125	0	60	325
Number of Lanes	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay	16.5	11.4	15.1
HCM LOS	C	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	52%	0%	100%
Vol Right, %	0%	100%	0%	48%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	50	270	287	273	50	80
LT Vol	50	0	0	0	50	0
Through Vol	0	0	287	143	0	80
RT Vol	0	270	0	130	0	0
Lane Flow Rate	60	325	358	342	78	125
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.122	0.547	0.606	0.545	0.157	0.233
Departure Headway (Hd)	7.273	6.058	6.085	5.747	7.217	6.707
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	492	595	591	625	495	534
Service Time	5.028	3.812	3.834	3.496	4.984	4.473
HCM Lane V/C Ratio	0.122	0.546	0.606	0.547	0.158	0.234
HCM Control Delay	11	15.9	17.8	15.2	11.3	11.5
HCM Lane LOS	B	C	C	C	B	B
HCM 95th-tile Q	0.4	3.3	4	3.3	0.6	0.9

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	20	30	0	340	280	0	30	110
Future Vol, veh/h	0	20	30	0	340	280	0	30	110
Peak Hour Factor	0.92	0.88	0.88	0.92	0.90	0.90	0.92	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	23	34	0	378	311	0	35	129
Number of Lanes	0	1	0	0	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	8.8	10.9	9.2
HCM LOS	A	B	A

Lane	NBLn1	NBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	40%	21%
Vol Thru, %	100%	0%	0%	79%
Vol Right, %	0%	100%	60%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	340	280	50	140
LT Vol	0	0	20	30
Through Vol	340	0	0	110
RT Vol	0	280	30	0
Lane Flow Rate	378	311	57	165
Geometry Grp	7	7	2	5
Degree of Util (X)	0.507	0.357	0.083	0.22
Departure Headway (Hd)	4.83	4.128	5.261	4.803
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	752	877	681	748
Service Time	2.53	1.828	3.297	2.827
HCM Lane V/C Ratio	0.503	0.355	0.084	0.221
HCM Control Delay	12.4	9.1	8.8	9.2
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2.9	1.6	0.3	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	490	260	50	220	300	250	1060	50	220	1060	50
Future Volume (veh/h)	140	490	260	50	220	300	250	1060	50	220	1060	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.95	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	167	583	237	56	244	320	291	1233	58	237	1140	51
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	547	432	70	425	362	374	1152	492	320	1098	489
Arrive On Green	0.09	0.29	0.29	0.04	0.24	0.24	0.11	0.33	0.33	0.09	0.31	0.31
Sat Flow, veh/h	1774	1863	1472	1774	1770	1508	3442	3539	1510	3442	3539	1576
Grp Volume(v), veh/h	167	583	237	56	244	320	291	1233	58	237	1140	51
Grp Sat Flow(s),veh/h/ln	1774	1863	1472	1774	1770	1508	1721	1770	1510	1721	1770	1576
Q Serve(g_s), s	6.0	18.9	8.7	2.0	7.8	13.2	5.3	21.0	1.7	4.3	20.0	1.5
Cycle Q Clear(g_c), s	6.0	18.9	8.7	2.0	7.8	13.2	5.3	21.0	1.7	4.3	20.0	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	547	432	70	425	362	374	1152	492	320	1098	489
V/C Ratio(X)	1.01	1.07	0.55	0.80	0.57	0.88	0.78	1.07	0.12	0.74	1.04	0.10
Avail Cap(c_a), veh/h	165	547	432	165	439	374	374	1152	492	320	1098	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	22.8	19.2	30.7	21.6	23.6	28.0	21.7	15.3	28.5	22.2	15.9
Incr Delay (d2), s/veh	73.2	57.2	1.5	18.0	1.7	20.8	10.1	47.4	0.5	8.8	37.7	0.4
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	18.3	3.7	1.3	4.0	7.5	3.0	17.7	0.8	2.4	15.4	0.7
LnGrp Delay(d),s/veh	102.5	80.0	20.6	48.7	23.3	44.4	38.1	69.1	15.7	37.3	60.0	16.3
LnGrp LOS	F	F	C	D	C	D	D	F	B	D	F	B
Approach Vol, veh/h		987			620			1582			1428	
Approach Delay, s/veh		69.6			36.5			61.4			54.7	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.0	6.6	22.9	11.0	24.0	10.0	19.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	21.0	6.0	16.0	7.0	20.0	6.0	16.0
Max Q Clear Time (g_c+I1), s	8.0	23.0	4.0	20.9	7.3	22.0	8.0	15.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	57.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	230	290	40	70	10	440	490	30	10	70	40
Future Volume (veh/h)	250	230	290	40	70	10	440	490	30	10	70	40
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.77	1.00		0.98	1.00		0.92	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	328	334	357	44	78	8	530	590	30	15	108	51
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	1	1
Peak Hour Factor	0.73	0.73	0.73	0.90	0.90	0.90	0.83	0.83	0.83	0.65	0.65	0.65
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	485	510	632	125	117	12	650	1475	75	24	479	782
Arrive On Green	0.27	0.27	0.27	0.07	0.07	0.07	0.19	0.43	0.43	0.01	0.26	0.26
Sat Flow, veh/h	1774	1863	1218	1774	1658	170	3442	3411	173	1774	1863	1357
Grp Volume(v), veh/h	328	334	357	44	0	86	530	306	314	15	108	51
Grp Sat Flow(s),veh/h/ln	1774	1863	1218	1774	0	1828	1721	1770	1815	1774	1863	1357
Q Serve(g_s), s	15.7	15.1	21.2	2.3	0.0	4.4	14.1	11.3	11.3	0.8	4.4	1.7
Cycle Q Clear(g_c), s	15.7	15.1	21.2	2.3	0.0	4.4	14.1	11.3	11.3	0.8	4.4	1.7
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	485	510	632	125	0	129	650	765	785	24	479	782
V/C Ratio(X)	0.68	0.66	0.56	0.35	0.00	0.67	0.82	0.40	0.40	0.61	0.23	0.07
Avail Cap(c_a), veh/h	540	567	670	484	0	498	975	817	838	409	723	960
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	30.7	19.5	42.2	0.0	43.2	37.1	18.6	18.6	46.8	27.9	10.9
Incr Delay (d2), s/veh	2.9	2.4	1.0	1.7	0.0	5.8	3.3	0.3	0.3	22.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	8.1	7.2	1.2	0.0	2.4	7.0	5.6	5.7	0.5	2.3	1.0
LnGrp Delay(d),s/veh	33.8	33.0	20.5	43.9	0.0	49.0	40.4	18.9	18.9	69.3	28.2	10.9
LnGrp LOS	C	C	C	D		D	D	B	B	E	C	B
Approach Vol, veh/h		1019			130			1150			174	
Approach Delay, s/veh		28.9			47.3			28.8			26.6	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.0	29.5		11.7	6.3	46.2		31.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	27.0	37.0		26.0	22.0	44.0		29.0
Max Q Clear Time (g_c+I1), s	16.1	6.4		6.4	2.8	13.3		23.2
Green Ext Time (p_c), s	1.9	5.3		0.6	0.0	5.3		2.8

Intersection Summary	
HCM 2010 Ctrl Delay	29.7
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	4.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	40	210	20	50	70	40
Future Vol, veh/h	40	210	20	50	70	40
Conflicting Peds, #/hr	0	129	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	82	82	71	71
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	269	24	61	99	56

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	450	0	425	315
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	110	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1110	-	586	725
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	915	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1110	-	503	636
Mov Cap-2 Maneuver	-	-	-	-	503	-
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	895	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	544	-	-	1110	-
HCM Lane V/C Ratio	0.285	-	-	0.022	-
HCM Control Delay (s)	14.2	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.2	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	35.2
Intersection LOS	E

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	110	5	80	0	10	5	10	0	80	620	5
Future Vol, veh/h	0	110	5	80	0	10	5	10	0	80	620	5
Peak Hour Factor	0.92	0.86	0.86	0.86	0.92	0.50	0.50	0.50	0.92	0.66	0.66	0.66
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	128	6	93	0	20	10	20	0	121	939	8
Number of Lanes	0	0	1	0	0	0	1	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	1
HCM Control Delay	16	11.3	44
HCM LOS	C	B	E

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	56%	40%	25%	0%	0%
Vol Thru, %	0%	100%	98%	3%	20%	75%	100%	0%
Vol Right, %	0%	0%	2%	41%	40%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	80	413	212	195	25	40	60	20
LT Vol	80	0	0	110	10	10	0	0
Through Vol	0	413	207	5	5	30	60	0
RT Vol	0	0	5	80	10	0	0	20
Lane Flow Rate	121	626	321	227	50	53	79	26
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.215	1.02	0.521	0.456	0.106	0.104	0.154	0.046
Departure Headway (Hd)	6.374	5.866	5.849	7.24	7.62	7.134	7.006	6.289
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	562	620	616	497	469	500	509	566
Service Time	4.123	3.615	3.598	4.999	5.397	4.911	4.783	4.065
HCM Lane V/C Ratio	0.215	1.01	0.521	0.457	0.107	0.106	0.155	0.046
HCM Control Delay	10.9	65.4	14.8	16	11.3	10.7	11.1	9.4
HCM Lane LOS	B	F	B	C	B	B	B	A
HCM 95th-tile Q	0.8	16	3	2.4	0.4	0.3	0.5	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	10	90	20
Future Vol, veh/h	0	10	90	20
Peak Hour Factor	0.92	0.76	0.76	0.76
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	13	118	26
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	10.7
HCM LOS	B

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	30	40	770	270	10
Future Vol, veh/h	10	30	40	770	270	10
Conflicting Peds, #/hr	0	1	0	0	0	12
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	80	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	33	50	963	365	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	965	202	390	0	-	0
Stage 1	384	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	253	805	1165	-	-	-
Stage 1	658	-	-	-	-	-
Stage 2	522	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	237	795	1164	-	-	-
Mov Cap-2 Maneuver	361	-	-	-	-	-
Stage 1	650	-	-	-	-	-
Stage 2	494	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.4	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1164	-	611	-	-
HCM Lane V/C Ratio	0.043	-	0.073	-	-
HCM Control Delay (s)	8.2	-	11.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

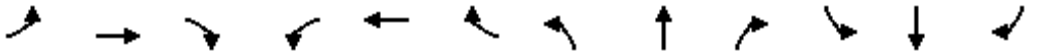
Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	5	40	150	70	610	10	20	150	160
Future Vol, veh/h	0	0	0	5	40	150	70	610	10	20	150	160
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	0	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	93	93	93	74	74	74	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	5	43	161	95	824	14	31	231	246

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	1200	1571	422	487	0	0	841	0	0
Stage 1	1023	1023	-	-	-	-	-	-	-
Stage 2	177	548	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	178	109	580	1072	-	-	790	-	-
Stage 1	308	311	-	-	-	-	-	-	-
Stage 2	836	515	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	155	0	578	1072	-	-	790	-	-
Mov Cap-2 Maneuver	155	0	-	-	-	-	-	-	-
Stage 1	280	0	-	-	-	-	-	-	-
Stage 2	803	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.1	0.9	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1072	-	-	531	790	-	-
HCM Lane V/C Ratio	0.088	-	-	0.395	0.039	-	-
HCM Control Delay (s)	8.7	-	-	16.1	9.7	-	-
HCM Lane LOS	A	-	-	C	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	1.9	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	410	10	80	5	0	10	0	340	10	5	150	0
Future Volume (veh/h)	410	10	80	5	0	10	0	340	10	5	150	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.93	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	539	13	105	13	0	21	0	430	13	7	205	0
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	1	2	0
Peak Hour Factor	0.76	0.76	0.76	0.39	0.39	0.39	0.79	0.79	0.79	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	588	14	115	20	0	32	0	857	26	317	866	0
Arrive On Green	0.41	0.41	0.41	0.03	0.00	0.03	0.00	0.24	0.24	0.24	0.24	0.00
Sat Flow, veh/h	1427	34	278	631	0	1020	0	3592	106	936	3632	0
Grp Volume(v), veh/h	657	0	0	34	0	0	0	217	226	7	205	0
Grp Sat Flow(s),veh/h/ln	1739	0	0	1651	0	0	0	1770	1835	936	1770	0
Q Serve(g_s), s	13.8	0.0	0.0	0.8	0.0	0.0	0.0	4.1	4.1	0.2	1.8	0.0
Cycle Q Clear(g_c), s	13.8	0.0	0.0	0.8	0.0	0.0	0.0	4.1	4.1	4.3	1.8	0.0
Prop In Lane	0.82		0.16	0.38		0.62	0.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h	717	0	0	52	0	0	0	433	449	317	866	0
V/C Ratio(X)	0.92	0.00	0.00	0.65	0.00	0.00	0.00	0.50	0.50	0.02	0.24	0.00
Avail Cap(c_a), veh/h	722	0	0	686	0	0	0	735	762	476	1470	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.7	0.0	0.0	18.4	0.0	0.0	0.0	12.5	12.5	14.4	11.7	0.0
Incr Delay (d2), s/veh	16.5	0.0	0.0	12.8	0.0	0.0	0.0	0.9	0.9	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	0.0	0.0	0.5	0.0	0.0	0.0	2.1	2.2	0.1	0.9	0.0
LnGrp Delay(d),s/veh	27.2	0.0	0.0	31.2	0.0	0.0	0.0	13.4	13.4	14.4	11.8	0.0
LnGrp LOS	C			C				B	B	B	B	
Approach Vol, veh/h		657			34			443			212	
Approach Delay, s/veh		27.2			31.2			13.4			11.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		13.4		19.9		13.4		5.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		6.1		15.8		6.3		2.8
Green Ext Time (p_c), s		2.8		0.1		2.8		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.3
HCM 2010 LOS	C

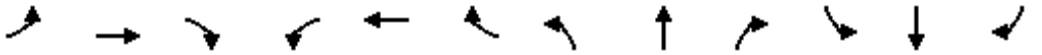
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	0	20	0	5	5	20	300	0	5	180	30
Future Vol, veh/h	30	0	20	0	5	5	20	300	0	5	180	30
Conflicting Peds, #/hr	0	0	14	0	0	3	0	0	0	0	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	50	50	50	75	75	75	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	0	25	0	10	10	27	400	0	6	212	35

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	512	704	148	585	722	203	257	0	0	400	0	0
Stage 1	251	251	-	453	453	-	-	-	-	-	-	-
Stage 2	261	453	-	132	269	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	445	360	872	394	351	804	1305	-	-	1155	-	-
Stage 1	731	698	-	556	568	-	-	-	-	-	-	-
Stage 2	721	568	-	858	685	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	416	347	852	370	338	802	1288	-	-	1152	-	-
Mov Cap-2 Maneuver	416	347	-	370	338	-	-	-	-	-	-	-
Stage 1	709	687	-	544	556	-	-	-	-	-	-	-
Stage 2	683	556	-	817	674	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.8	12.9	0.5	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1288	-	-	523	-	476	1152	-	-
HCM Lane V/C Ratio	0.021	-	-	0.12	-	0.042	0.005	-	-
HCM Control Delay (s)	7.9	-	-	12.8	0	12.9	8.1	0	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	-	0.1	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	180	10	0	450	60	5	5	0	40	5	150
Future Volume (veh/h)	260	180	10	0	450	60	5	5	0	40	5	150
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.98		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	321	222	12	0	489	56	13	13	0	47	6	81
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.81	0.81	0.81	0.92	0.92	0.92	0.38	0.38	0.38	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	661	1212	66	186	809	687	197	136	0	382	14	184
Arrive On Green	0.15	0.69	0.69	0.00	0.43	0.43	0.13	0.13	0.00	0.13	0.13	0.13
Sat Flow, veh/h	1774	1750	95	1142	1863	1582	451	1073	0	1391	108	1456
Grp Volume(v), veh/h	321	0	234	0	489	56	26	0	0	47	0	87
Grp Sat Flow(s),veh/h/ln	1774	0	1845	1142	1863	1582	1523	0	0	1391	0	1564
Q Serve(g_s), s	3.1	0.0	1.7	0.0	7.8	0.8	0.0	0.0	0.0	0.0	0.0	2.0
Cycle Q Clear(g_c), s	3.1	0.0	1.7	0.0	7.8	0.8	2.0	0.0	0.0	0.9	0.0	2.0
Prop In Lane	1.00		0.05	1.00		1.00	0.50		0.00	1.00		0.93
Lane Grp Cap(c), veh/h	661	0	1278	186	809	687	332	0	0	382	0	198
V/C Ratio(X)	0.49	0.00	0.18	0.00	0.60	0.08	0.08	0.00	0.00	0.12	0.00	0.44
Avail Cap(c_a), veh/h	1258	0	2720	1374	2746	2332	1319	0	0	1069	0	971
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.0	0.0	2.1	0.0	8.4	6.4	15.0	0.0	0.0	15.2	0.0	15.6
Incr Delay (d2), s/veh	0.6	0.0	0.1	0.0	0.7	0.1	0.1	0.0	0.0	0.1	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.9	0.0	4.1	0.4	0.3	0.0	0.0	0.5	0.0	0.9
LnGrp Delay(d),s/veh	5.6	0.0	2.2	0.0	9.1	6.5	15.1	0.0	0.0	15.3	0.0	17.2
LnGrp LOS	A		A		A	A	B			B		B
Approach Vol, veh/h		555			545			26			134	
Approach Delay, s/veh		4.1			8.8			15.1			16.5	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		30.3		8.4	10.0	20.3		8.4
Change Period (Y+Rc), s		3.5		3.5	4.0	3.5		3.5
Max Green Setting (Gmax), s		57.0		24.0	19.0	57.0		30.0
Max Q Clear Time (g_c+I1), s		3.7		4.0	5.1	9.8		4.0
Green Ext Time (p_c), s		6.0		0.7	1.1	6.0		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	7.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	20	60	10	30	30	1350	150	40	1320	10
Future Volume (veh/h)	10	20	20	60	10	30	30	1350	150	40	1320	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	12	24	7	75	12	29	33	1467	127	42	1389	11
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.83	0.83	0.83	0.80	0.80	0.80	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	109	459	100	9	464	48	1631	140	57	1804	14
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.03	0.50	0.50	0.03	0.50	0.50
Sat Flow, veh/h	2	370	1557	5	31	1574	1774	3287	282	1774	3598	28
Grp Volume(v), veh/h	36	0	7	87	0	29	33	785	809	42	683	717
Grp Sat Flow(s),veh/h/ln	372	0	1557	35	0	1574	1774	1770	1800	1774	1770	1857
Q Serve(g_s), s	0.1	0.0	0.2	0.1	0.0	0.9	1.3	27.2	27.9	1.6	21.3	21.3
Cycle Q Clear(g_c), s	20.0	0.0	0.2	20.0	0.0	0.9	1.3	27.2	27.9	1.6	21.3	21.3
Prop In Lane	0.33		1.00	0.86		1.00	1.00		0.16	1.00		0.02
Lane Grp Cap(c), veh/h	180	0	459	109	0	464	48	878	893	57	887	931
V/C Ratio(X)	0.20	0.00	0.02	0.80	0.00	0.06	0.68	0.89	0.91	0.74	0.77	0.77
Avail Cap(c_a), veh/h	180	0	459	110	0	464	105	878	893	131	887	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	0.0	17.0	31.9	0.0	17.2	32.7	15.5	15.6	32.5	13.7	13.7
Incr Delay (d2), s/veh	0.5	0.0	0.0	32.2	0.0	0.1	15.6	13.4	14.5	16.6	6.4	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.1	2.6	0.0	0.4	0.8	16.4	17.3	1.0	11.8	12.3
LnGrp Delay(d),s/veh	19.6	0.0	17.0	64.1	0.0	17.3	48.3	28.9	30.1	49.1	20.1	19.9
LnGrp LOS	B		B	E		B	D	C	C	D	C	B
Approach Vol, veh/h		43			116			1627			1442	
Approach Delay, s/veh		19.2			52.4			29.9			20.8	
Approach LOS		B			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	37.7		24.0	5.9	38.0		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	33.0		16.0	4.0	34.0		20.0
Max Q Clear Time (g_c+I1), s	3.6	29.9		22.0	3.3	23.3		22.0
Green Ext Time (p_c), s	0.0	3.0		0.0	0.0	10.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	26.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	5	210	30	10	10	40	1320	60	5	870	490
Future Volume (veh/h)	30	5	210	30	10	10	40	1320	60	5	870	490
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	41	7	110	55	18	13	49	1610	73	5	935	527
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.74	0.74	0.74	0.55	0.55	0.55	0.82	0.82	0.82	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	30	171	265	81	39	355	2307	104	266	2372	1035
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.67	0.67	0.67	0.67	0.67	0.67
Sat Flow, veh/h	283	193	1090	875	519	248	361	3442	155	292	3539	1545
Grp Volume(v), veh/h	158	0	0	86	0	0	49	824	859	5	935	527
Grp Sat Flow(s),veh/h/ln	1566	0	0	1642	0	0	361	1770	1828	292	1770	1545
Q Serve(g_s), s	2.2	0.0	0.0	0.0	0.0	0.0	3.3	13.3	13.5	0.5	5.5	7.9
Cycle Q Clear(g_c), s	4.3	0.0	0.0	1.9	0.0	0.0	8.7	13.3	13.5	14.0	5.5	7.9
Prop In Lane	0.26		0.70	0.64		0.15	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	344	0	0	385	0	0	355	1186	1225	266	2372	1035
V/C Ratio(X)	0.46	0.00	0.00	0.22	0.00	0.00	0.14	0.69	0.70	0.02	0.39	0.51
Avail Cap(c_a), veh/h	633	0	0	651	0	0	355	1186	1225	266	2372	1035
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	0.0	17.3	0.0	0.0	5.4	4.7	4.7	9.1	3.4	3.8
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.3	0.0	0.0	0.8	3.4	3.4	0.1	0.5	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	1.0	0.0	0.0	0.4	7.3	7.6	0.0	2.8	3.7
LnGrp Delay(d),s/veh	19.2	0.0	0.0	17.5	0.0	0.0	6.2	8.1	8.1	9.2	3.9	5.6
LnGrp LOS	B			B			A	A	A	A	A	A
Approach Vol, veh/h		158			86			1732			1467	
Approach Delay, s/veh		19.2			17.5			8.0			4.5	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		11.3		35.0		11.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		16.0		31.0		16.0
Max Q Clear Time (g_c+I1), s		15.5		6.3		16.0		3.9
Green Ext Time (p_c), s		14.6		1.0		14.1		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	5	20	10	5	650	10	660	20	20	1000	90
Future Volume (veh/h)	90	5	20	10	5	650	10	660	20	20	1000	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	148	8	33	12	6	510	11	742	20	23	1149	103
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.61	0.61	0.61	0.84	0.84	0.84	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	412	33	64	490	220	579	20	1228	33	39	1181	106
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.01	0.35	0.35	0.02	0.36	0.36
Sat Flow, veh/h	741	89	176	980	601	1582	1774	3515	95	1774	3277	293
Grp Volume(v), veh/h	189	0	0	18	0	510	11	373	389	23	620	632
Grp Sat Flow(s),veh/h/ln	1006	0	0	1582	0	1582	1774	1770	1840	1774	1770	1801
Q Serve(g_s), s	5.8	0.0	0.0	0.0	0.0	13.8	0.3	8.0	8.0	0.6	15.8	15.8
Cycle Q Clear(g_c), s	6.4	0.0	0.0	0.3	0.0	13.8	0.3	8.0	8.0	0.6	15.8	15.8
Prop In Lane	0.78		0.17	0.67		1.00	1.00		0.05	1.00		0.16
Lane Grp Cap(c), veh/h	509	0	0	710	0	579	20	618	643	39	638	649
V/C Ratio(X)	0.37	0.00	0.00	0.03	0.00	0.88	0.54	0.60	0.60	0.59	0.97	0.97
Avail Cap(c_a), veh/h	535	0	0	751	0	622	155	618	643	155	638	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.1	0.0	0.0	9.3	0.0	13.6	22.5	12.3	12.3	22.2	14.4	14.4
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	13.2	20.8	4.3	4.2	13.0	29.4	29.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.0	0.1	0.0	8.1	0.3	4.6	4.7	0.4	12.8	13.1
LnGrp Delay(d),s/veh	11.5	0.0	0.0	9.3	0.0	26.7	43.3	16.6	16.5	35.2	43.8	44.1
LnGrp LOS	B			A		C	D	B	B	D	D	D
Approach Vol, veh/h		189			528			773			1275	
Approach Delay, s/veh		11.5			26.1			16.9			43.8	
Approach LOS		B			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	20.0		20.8	4.5	20.5		20.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	16.0		18.0	4.0	16.0		18.0
Max Q Clear Time (g_c+I1), s	2.6	10.0		8.4	2.3	17.8		15.8
Green Ext Time (p_c), s	0.0	5.1		3.1	0.0	0.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.7
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	30	910	80	50	360
Future Vol, veh/h	10	30	910	80	50	360
Conflicting Peds, #/hr	0	0	0	2	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	0	25	-	0	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	86	86	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	56	1058	93	52	375

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1537	1058	0	-	1058	0
Stage 1	1058	-	-	-	-	-
Stage 2	479	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	128	273	-	0	658	-
Stage 1	334	-	-	0	-	-
Stage 2	623	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	118	273	-	-	658	-
Mov Cap-2 Maneuver	118	-	-	-	-	-
Stage 1	334	-	-	-	-	-
Stage 2	574	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.4	0	1.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	118	273	658	-
HCM Lane V/C Ratio	-	0.157	0.204	0.079	-
HCM Control Delay (s)	-	41.1	21.5	10.9	-
HCM Lane LOS	-	E	C	B	-
HCM 95th %tile Q(veh)	-	0.5	0.7	0.3	-

Intersection	
Int Delay, s/veh	7.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	290	670	110	60	280
Future Vol, veh/h	70	290	670	110	60	280
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	80	80	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	80	333	838	138	65	304

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1341	488	0	0	975	0
Stage 1	906	-	-	-	-	-
Stage 2	435	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	155	526	-	-	705	-
Stage 1	356	-	-	-	-	-
Stage 2	652	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	141	526	-	-	705	-
Mov Cap-2 Maneuver	141	-	-	-	-	-
Stage 1	356	-	-	-	-	-
Stage 2	592	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30.1	0	1.9
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	141	526	705	-
HCM Lane V/C Ratio	-	-	0.571	0.634	0.093	-
HCM Control Delay (s)	-	-	60	22.9	10.6	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	2.9	4.4	0.3	-

Intersection	
Int Delay, s/veh	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	120	370	430	10	80	290
Future Vol, veh/h	120	370	430	10	80	290
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	0	0	-	150	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	83	83	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	148	457	518	12	95	345

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1054	-	0	-	518	0
Stage 1	518	-	-	-	-	-
Stage 2	536	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	250	0	-	0	1048	-
Stage 1	598	0	-	0	-	-
Stage 2	587	0	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	227	-	-	-	1048	-
Mov Cap-2 Maneuver	361	-	-	-	-	-
Stage 1	598	-	-	-	-	-
Stage 2	534	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.7	0	1.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	361	-	1048	-
HCM Lane V/C Ratio	-	0.41	-	0.091	-
HCM Control Delay (s)	-	21.7	0	8.8	-
HCM Lane LOS	-	C	A	A	-
HCM 95th %tile Q(veh)	-	1.9	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	40	10	20	60	90	20	600	20	60	910	60
Future Volume (veh/h)	10	40	10	20	60	90	20	600	20	60	910	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	0.97		0.97	1.00		0.95	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	45	6	24	73	61	23	698	21	71	1071	65
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82	0.86	0.86	0.86	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	354	288	38	94	159	116	362	2286	69	593	2209	134
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	1.00	1.00	1.00	0.65	0.65	0.65
Sat Flow, veh/h	1235	1597	213	140	882	643	493	3502	105	725	3384	205
Grp Volume(v), veh/h	11	0	51	158	0	0	23	353	366	71	560	576
Grp Sat Flow(s),veh/h/ln	1235	0	1810	1665	0	0	493	1770	1838	725	1770	1819
Q Serve(g_s), s	0.0	0.0	1.4	0.3	0.0	0.0	0.7	0.0	0.0	2.3	9.6	9.7
Cycle Q Clear(g_c), s	0.4	0.0	1.4	5.0	0.0	0.0	10.4	0.0	0.0	2.3	9.6	9.7
Prop In Lane	1.00		0.12	0.15		0.39	1.00		0.06	1.00		0.11
Lane Grp Cap(c), veh/h	354	0	327	370	0	0	362	1155	1200	593	1155	1188
V/C Ratio(X)	0.03	0.00	0.16	0.43	0.00	0.00	0.06	0.31	0.31	0.12	0.48	0.48
Avail Cap(c_a), veh/h	563	0	634	645	0	0	362	1155	1200	593	1155	1188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.98	0.98	0.98	0.18	0.18	0.18
Uniform Delay (d), s/veh	20.3	0.0	20.7	22.2	0.0	0.0	1.3	0.0	0.0	4.0	5.3	5.3
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.8	0.0	0.0	0.3	0.7	0.6	0.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.7	2.5	0.0	0.0	0.1	0.2	0.2	0.5	4.7	4.9
LnGrp Delay(d),s/veh	20.3	0.0	21.0	23.0	0.0	0.0	1.6	0.7	0.6	4.1	5.5	5.5
LnGrp LOS	C		C	C			A	A	A	A	A	A
Approach Vol, veh/h		62			158			742			1207	
Approach Delay, s/veh		20.8			23.0			0.7			5.5	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.2		15.8		44.2		15.8
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		29.0		21.0		29.0		21.0
Max Q Clear Time (g_c+I1), s		12.4		3.4		11.7		7.0
Green Ext Time (p_c), s		12.1		1.2		12.6		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	30	40	5	30	20	20	550	10	30	830	70
Future Volume (veh/h)	60	30	40	5	30	20	20	550	10	30	830	70
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.90	0.92		0.98	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	87	43	46	10	58	30	22	598	11	35	976	78
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.69	0.69	0.69	0.52	0.52	0.52	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	357	420	319	368	259	134	471	2160	40	501	1570	125
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.09	0.81	0.81	0.95	0.95	0.95
Sat Flow, veh/h	1286	1863	1418	1200	1150	595	1774	3552	65	804	3308	264
Grp Volume(v), veh/h	87	43	46	10	0	88	22	298	311	35	522	532
Grp Sat Flow(s),veh/h/ln	1286	1863	1418	1200	0	1745	1774	1770	1848	804	1770	1802
Q Serve(g_s), s	3.6	1.1	1.6	0.4	0.0	2.5	0.3	2.5	2.5	0.1	2.2	2.2
Cycle Q Clear(g_c), s	6.0	1.1	1.6	1.5	0.0	2.5	0.3	2.5	2.5	0.1	2.2	2.2
Prop In Lane	1.00		1.00	1.00		0.34	1.00		0.04	1.00		0.15
Lane Grp Cap(c), veh/h	357	420	319	368	0	393	471	1076	1124	501	840	856
V/C Ratio(X)	0.24	0.10	0.14	0.03	0.00	0.22	0.05	0.28	0.28	0.07	0.62	0.62
Avail Cap(c_a), veh/h	453	559	426	458	0	524	471	1076	1124	501	840	856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.96	0.96	0.96	0.87	0.87	0.87
Uniform Delay (d), s/veh	21.4	18.4	18.6	19.0	0.0	19.0	5.5	2.5	2.5	0.8	0.9	0.9
Incr Delay (d2), s/veh	0.4	0.1	0.2	0.0	0.0	0.3	0.2	0.6	0.6	0.2	3.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.6	0.6	0.1	0.0	1.2	0.2	1.3	1.3	0.1	1.3	1.3
LnGrp Delay(d),s/veh	21.8	18.5	18.8	19.1	0.0	19.2	5.7	3.1	3.1	1.0	3.9	3.8
LnGrp LOS	C	B	B	B		B	A	A	A	A	A	A
Approach Vol, veh/h		176			98			631			1089	
Approach Delay, s/veh		20.2			19.2			3.2			3.7	
Approach LOS		C			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	8.0	33.5		18.5		41.5		18.5
Change Period (Y+Rc), s	4.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	4.0	24.0		18.0		32.0		18.0
Max Q Clear Time (g_c+I1), s	2.3	4.2		4.5		4.5		8.0
Green Ext Time (p_c), s	0.0	8.3		1.2		9.4		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	5.8
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	60	20	100	100	140	10	420	80	130	680	50
Future Volume (veh/h)	20	60	20	100	100	140	10	420	80	130	680	50
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.92	0.95		0.93	0.99		0.96	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	25	76	10	111	111	67	12	500	68	162	850	45
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.79	0.79	0.79	0.90	0.90	0.90	0.84	0.84	0.84	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	477	375	398	477	376	414	1382	187	586	1699	90
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.89	0.89	0.13	1.00	1.00
Sat Flow, veh/h	1150	1863	1464	1237	1863	1467	1774	3114	421	1774	3409	180
Grp Volume(v), veh/h	25	76	10	111	111	67	12	283	285	162	441	454
Grp Sat Flow(s),veh/h/ln	1150	1863	1464	1237	1863	1467	1774	1770	1766	1774	1770	1819
Q Serve(g_s), s	1.1	1.9	0.3	4.6	2.8	2.1	0.2	1.6	1.6	2.9	0.1	0.1
Cycle Q Clear(g_c), s	3.9	1.9	0.3	6.5	2.8	2.1	0.2	1.6	1.6	2.9	0.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		0.10
Lane Grp Cap(c), veh/h	360	477	375	398	477	376	414	785	784	586	882	907
V/C Ratio(X)	0.07	0.16	0.03	0.28	0.23	0.18	0.03	0.36	0.36	0.28	0.50	0.50
Avail Cap(c_a), veh/h	392	528	415	431	528	416	510	785	784	586	882	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.63	0.63	0.63
Uniform Delay (d), s/veh	19.2	17.3	16.7	19.8	17.7	17.4	8.8	2.0	2.0	6.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.4	0.2	0.2	0.0	1.3	1.3	0.2	1.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.0	0.1	1.6	1.5	0.9	0.1	0.9	0.9	1.3	0.3	0.3
LnGrp Delay(d),s/veh	19.3	17.5	16.7	20.2	17.9	17.6	8.9	3.2	3.3	7.0	1.3	1.3
LnGrp LOS	B	B	B	C	B	B	A	A	A	A	A	A
Approach Vol, veh/h		111			289			580			1057	
Approach Delay, s/veh		17.8			18.7			3.4			2.2	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	34.9		20.4	8.0	31.6		20.4
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	25.0		17.0	4.0	25.0		17.0
Max Q Clear Time (g_c+I1), s	2.2	2.1		8.5	4.9	3.6		5.9
Green Ext Time (p_c), s	0.0	11.2		1.4	0.0	10.8		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	5.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	10	130	40	40	470	0	0	470	320
Future Volume (veh/h)	0	0	0	10	130	40	40	470	0	0	470	320
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.91	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				14	183	17	45	534	0	0	540	314
Adj No. of Lanes				0	3	0	1	2	0	0	1	1
Peak Hour Factor				0.71	0.71	0.71	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				50	687	64	557	2413	0	0	1270	1054
Arrive On Green				0.15	0.15	0.15	0.68	0.68	0.00	0.00	1.00	1.00
Sat Flow, veh/h				329	4532	421	642	3632	0	0	1863	1546
Grp Volume(v), veh/h				79	65	70	45	534	0	0	540	314
Grp Sat Flow(s),veh/h/ln				1846	1695	1741	642	1770	0	0	1863	1546
Q Serve(g_s), s				2.3	2.0	2.1	1.4	3.4	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				2.3	2.0	2.1	1.4	3.4	0.0	0.0	0.0	0.0
Prop In Lane				0.18		0.24	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				280	257	264	557	2413	0	0	1270	1054
V/C Ratio(X)				0.28	0.25	0.27	0.08	0.22	0.00	0.00	0.43	0.30
Avail Cap(c_a), veh/h				677	622	638	557	2413	0	0	1270	1054
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.93	0.93
Uniform Delay (d), s/veh				22.6	22.5	22.5	3.3	3.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.5	0.5	0.5	0.3	0.2	0.0	0.0	1.0	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	1.0	1.1	0.3	1.7	0.0	0.0	0.3	0.2
LnGrp Delay(d),s/veh				23.1	23.0	23.0	3.5	3.8	0.0	0.0	1.0	0.7
LnGrp LOS				C	C	C	A	A			A	A
Approach Vol, veh/h					214			579			854	
Approach Delay, s/veh					23.0			3.8			0.9	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		45.9		14.1		45.9		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		28.0		22.0		28.0		
Max Q Clear Time (g_c+I1), s		2.0		4.3		5.4		
Green Ext Time (p_c), s		8.2		0.9		7.9		

Intersection Summary		
HCM 2010 Ctrl Delay		4.8
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	170	90	210	270	10	110	170	130	10	140	10
Future Volume (veh/h)	10	170	90	210	270	10	110	170	130	10	140	10
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	0.99		0.97	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	12	198	76	256	329	3	159	246	145	15	215	7
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.82	0.82	0.82	0.69	0.69	0.69	0.65	0.65	0.65
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	443	459	366	599	711	584	468	382	225	326	629	20
Arrive On Green	0.01	0.25	0.25	0.15	0.38	0.38	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1774	1863	1488	1774	1863	1531	1148	1088	642	983	1792	58
Grp Volume(v), veh/h	12	198	76	256	329	3	159	0	391	15	0	222
Grp Sat Flow(s),veh/h/ln	1774	1863	1488	1774	1863	1531	1148	0	1730	983	0	1850
Q Serve(g_s), s	0.2	3.9	1.7	4.1	5.7	0.1	5.1	0.0	8.2	0.6	0.0	3.8
Cycle Q Clear(g_c), s	0.2	3.9	1.7	4.1	5.7	0.1	8.9	0.0	8.2	8.7	0.0	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.37	1.00		0.03
Lane Grp Cap(c), veh/h	443	459	366	599	711	584	468	0	607	326	0	649
V/C Ratio(X)	0.03	0.43	0.21	0.43	0.46	0.01	0.34	0.00	0.64	0.05	0.00	0.34
Avail Cap(c_a), veh/h	997	1253	1001	913	1253	1030	571	0	762	460	0	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.9	13.7	12.9	8.4	10.0	8.3	13.6	0.0	11.7	15.4	0.0	10.3
Incr Delay (d2), s/veh	0.0	0.6	0.3	0.5	0.5	0.0	0.4	0.0	1.3	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.1	0.7	2.0	3.0	0.0	1.6	0.0	4.0	0.2	0.0	2.0
LnGrp Delay(d),s/veh	12.0	14.4	13.2	8.9	10.5	8.3	14.0	0.0	13.0	15.5	0.0	10.6
LnGrp LOS	B	B	B	A	B	A	B		B	B		B
Approach Vol, veh/h		286			588			550			237	
Approach Delay, s/veh		13.9			9.8			13.3			10.9	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	3.5	20.4		19.1	9.4	14.6		19.1
Change Period (Y+Rc), s	3.0	4.0		4.0	3.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	29.0		19.0	14.0	29.0		21.0
Max Q Clear Time (g_c+I1), s	2.2	7.7		10.9	6.1	5.9		10.7
Green Ext Time (p_c), s	0.0	3.7		3.1	0.6	3.8		3.6

Intersection Summary		
HCM 2010 Ctrl Delay		11.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	240	20	160	390	20	40	300	150	10	190	60
Future Volume (veh/h)	70	240	20	160	390	20	40	300	150	10	190	60
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.94	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	104	358	26	168	411	21	45	337	138	12	229	61
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.67	0.67	0.67	0.95	0.95	0.95	0.89	0.89	0.89	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	772	631	216	854	708	308	395	162	162	451	120
Arrive On Green	0.08	0.41	0.41	0.12	0.46	0.46	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1774	1863	1523	1774	1863	1544	1083	1232	504	913	1407	375
Grp Volume(v), veh/h	104	358	26	168	411	21	45	0	475	12	0	290
Grp Sat Flow(s),veh/h/ln	1774	1863	1523	1774	1863	1544	1083	0	1736	913	0	1782
Q Serve(g_s), s	4.0	9.7	0.7	6.4	10.7	0.5	2.5	0.0	17.9	0.9	0.0	9.2
Cycle Q Clear(g_c), s	4.0	9.7	0.7	6.4	10.7	0.5	11.7	0.0	17.9	18.8	0.0	9.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.29	1.00		0.21
Lane Grp Cap(c), veh/h	138	772	631	216	854	708	308	0	557	162	0	572
V/C Ratio(X)	0.75	0.46	0.04	0.78	0.48	0.03	0.15	0.00	0.85	0.07	0.00	0.51
Avail Cap(c_a), veh/h	482	772	631	482	854	708	332	0	596	183	0	611
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.6	14.8	12.2	29.8	13.2	10.4	24.0	0.0	22.2	31.0	0.0	19.3
Incr Delay (d2), s/veh	8.1	2.0	0.1	6.0	1.9	0.1	0.2	0.0	10.9	0.2	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	5.4	0.3	3.5	5.9	0.2	0.8	0.0	10.3	0.2	0.0	4.6
LnGrp Delay(d),s/veh	39.7	16.8	12.3	35.8	15.1	10.5	24.2	0.0	33.2	31.2	0.0	20.0
LnGrp LOS	D	B	B	D	B	B	C		C	C		B
Approach Vol, veh/h		488			600			520			302	
Approach Delay, s/veh		21.5			20.7			32.4			20.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.5	32.5		25.9	8.4	35.6		25.9
Change Period (Y+Rc), s	3.0	3.5		3.5	3.0	3.5		3.5
Max Green Setting (Gmax), s	19.0	29.0		24.0	19.0	29.0		24.0
Max Q Clear Time (g_c+I1), s	8.4	11.7		20.8	6.0	12.7		19.9
Green Ext Time (p_c), s	0.4	4.9		1.7	0.2	4.8		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations			↕				↕				↕				↕	
Traffic Vol, veh/h	0	10	20	5	0	60	40	10	0	5	10	10	0	60	90	30
Future Vol, veh/h	0	10	20	5	0	60	40	10	0	5	10	10	0	60	90	30
Peak Hour Factor	0.92	0.70	0.70	0.70	0.92	0.85	0.85	0.85	0.92	0.75	0.75	0.75	0.92	0.59	0.59	0.59
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	29	7	0	71	47	12	0	7	13	13	0	102	153	51
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.2	8.9	7.7	10
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	29%	55%	33%
Vol Thru, %	40%	57%	36%	50%
Vol Right, %	40%	14%	9%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	25	35	110	180
LT Vol	5	10	60	60
Through Vol	10	20	40	90
RT Vol	10	5	10	30
Lane Flow Rate	33	50	129	305
Geometry Grp	1	1	1	1
Degree of Util (X)	0.042	0.067	0.174	0.371
Departure Headway (Hd)	4.515	4.847	4.827	4.382
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	792	738	743	821
Service Time	2.549	2.883	2.857	2.405
HCM Lane V/C Ratio	0.042	0.068	0.174	0.371
HCM Control Delay	7.7	8.2	8.9	10
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.6	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	30	330	30	20	160	0	0	140	120
Future Volume (veh/h)	0	0	0	30	330	30	20	160	0	0	140	120
Number				5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.90	0.96		1.00	1.00		0.91
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				36	398	32	23	182	0	0	163	92
Adj No. of Lanes				0	3	0	1	1	0	0	1	1
Peak Hour Factor				0.83	0.83	0.83	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				181	2115	172	430	683	0	0	683	530
Arrive On Green				0.47	0.47	0.47	0.73	0.73	0.00	0.00	0.12	0.12
Sat Flow, veh/h				387	4532	369	1079	1863	0	0	1863	1445
Grp Volume(v), veh/h				171	143	152	23	182	0	0	163	92
Grp Sat Flow(s),veh/h/ln				1843	1695	1750	1079	1863	0	0	1863	1445
Q Serve(g_s), s				3.3	2.9	3.0	0.6	1.9	0.0	0.0	4.8	3.4
Cycle Q Clear(g_c), s				3.3	2.9	3.0	5.3	1.9	0.0	0.0	4.8	3.4
Prop In Lane				0.21		0.21	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				860	791	817	430	683	0	0	683	530
V/C Ratio(X)				0.20	0.18	0.19	0.05	0.27	0.00	0.00	0.24	0.17
Avail Cap(c_a), veh/h				860	791	817	430	683	0	0	683	530
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				9.4	9.3	9.3	6.8	5.3	0.0	0.0	18.8	18.2
Incr Delay (d2), s/veh				0.5	0.5	0.5	0.2	1.0	0.0	0.0	0.8	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	1.5	1.5	0.2	1.1	0.0	0.0	2.6	1.5
LnGrp Delay(d),s/veh				9.9	9.8	9.8	7.1	6.3	0.0	0.0	19.6	18.9
LnGrp LOS				A	A	A	A	A			B	B
Approach Vol, veh/h					466			205			255	
Approach Delay, s/veh					9.9			6.4			19.4	
Approach LOS					A			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		28.0		22.0				22.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary		
HCM 2010 Ctrl Delay		11.7
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	40	360	20	30	60	0	0	30	30
Future Volume (veh/h)	0	0	0	40	360	20	30	60	0	0	30	30
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.82	0.97		1.00	1.00		0.95
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1863
Adj Flow Rate, veh/h				44	400	21	41	82	0	0	45	36
Adj No. of Lanes				0	3	0	0	1	0	0	1	1
Peak Hour Factor				0.90	0.90	0.90	0.73	0.73	0.73	0.66	0.66	0.66
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				150	1449	77	322	608	0	0	962	781
Arrive On Green				0.10	0.10	0.10	0.52	0.52	0.00	0.00	0.52	0.52
Sat Flow, veh/h				474	4575	243	469	1178	0	0	1863	1511
Grp Volume(v), veh/h				171	142	152	123	0	0	0	45	36
Grp Sat Flow(s),veh/h/ln				1839	1695	1758	1646	0	0	0	1863	1511
Q Serve(g_s), s				5.1	4.6	4.8	0.0	0.0	0.0	0.0	0.7	0.7
Cycle Q Clear(g_c), s				5.1	4.6	4.8	2.1	0.0	0.0	0.0	0.7	0.7
Prop In Lane				0.26		0.14	0.33		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				582	537	557	931	0	0	0	962	781
V/C Ratio(X)				0.29	0.27	0.27	0.13	0.00	0.00	0.00	0.05	0.05
Avail Cap(c_a), veh/h				582	537	557	931	0	0	0	962	781
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				20.7	20.4	20.5	7.5	0.0	0.0	0.0	7.2	7.2
Incr Delay (d2), s/veh				1.3	1.2	1.2	0.3	0.0	0.0	0.0	0.1	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.8	2.4	2.5	1.1	0.0	0.0	0.0	0.4	0.3
LnGrp Delay(d),s/veh				21.9	21.6	21.7	7.8	0.0	0.0	0.0	7.3	7.3
LnGrp LOS				C	C	C	A				A	A
Approach Vol, veh/h					465			123			81	
Approach Delay, s/veh					21.8			7.8			7.3	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		36.0				36.0		24.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		31.0				31.0		19.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		17.4
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	100	320	30	60	120	0	0	90	40
Future Volume (veh/h)	0	0	0	100	320	30	60	120	0	0	90	40
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.92	0.97		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				116	372	30	65	130	0	0	105	37
Adj No. of Lanes				0	3	0	0	1	0	0	1	0
Peak Hour Factor				0.86	0.86	0.86	0.92	0.92	0.92	0.86	0.86	0.86
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				500	1735	141	247	456	0	0	495	174
Arrive On Green				0.45	0.45	0.45	0.38	0.38	0.00	0.00	0.38	0.38
Sat Flow, veh/h				1110	3855	313	435	1190	0	0	1292	455
Grp Volume(v), veh/h				189	159	170	195	0	0	0	0	142
Grp Sat Flow(s),veh/h/ln				1807	1695	1777	1625	0	0	0	0	1747
Q Serve(g_s), s				3.8	3.4	3.5	0.4	0.0	0.0	0.0	0.0	3.3
Cycle Q Clear(g_c), s				3.8	3.4	3.5	4.4	0.0	0.0	0.0	0.0	3.3
Prop In Lane				0.61		0.18	0.33		0.00	0.00		0.26
Lane Grp Cap(c), veh/h				813	763	800	703	0	0	0	0	670
V/C Ratio(X)				0.23	0.21	0.21	0.28	0.00	0.00	0.00	0.00	0.21
Avail Cap(c_a), veh/h				813	763	800	703	0	0	0	0	670
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				10.1	10.0	10.0	12.7	0.0	0.0	0.0	0.0	12.4
Incr Delay (d2), s/veh				0.7	0.6	0.6	1.0	0.0	0.0	0.0	0.0	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.0	1.7	1.8	2.4	0.0	0.0	0.0	0.0	1.7
LnGrp Delay(d),s/veh				10.8	10.6	10.6	13.7	0.0	0.0	0.0	0.0	13.1
LnGrp LOS				B	B	B	B					B
Approach Vol, veh/h					518			195			142	
Approach Delay, s/veh					10.7			13.7			13.1	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.0		32.0		28.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		23.0		27.0		23.0		
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		
Green Ext Time (p_c), s		0.0		0.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		11.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	300	30	0	0	0	0	210	20	140	340	0
Future Volume (veh/h)	300	300	30	0	0	0	0	210	20	140	340	0
Number	5	2	12				3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	274	565	31				0	216	12	173	420	0
Adj No. of Lanes	1	2	0				0	1	0	1	1	0
Peak Hour Factor	0.76	0.76	0.76				0.97	0.97	0.97	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	899	1770	97				0	570	32	384	608	0
Arrive On Green	0.51	0.51	0.51				0.00	0.33	0.33	0.33	0.33	0.00
Sat Flow, veh/h	1774	3491	191				0	1746	97	1143	1863	0
Grp Volume(v), veh/h	274	301	295				0	0	228	173	420	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1819				0	0	1843	1143	1863	0
Q Serve(g_s), s	5.4	5.7	5.7				0.0	0.0	5.7	8.2	11.8	0.0
Cycle Q Clear(g_c), s	5.4	5.7	5.7				0.0	0.0	5.7	13.9	11.8	0.0
Prop In Lane	1.00		0.11				0.00		0.05	1.00		0.00
Lane Grp Cap(c), veh/h	899	944	922				0	0	602	384	608	0
V/C Ratio(X)	0.30	0.32	0.32				0.00	0.00	0.38	0.45	0.69	0.00
Avail Cap(c_a), veh/h	899	944	922				0	0	768	487	776	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.6	8.7	8.7				0.0	0.0	15.5	20.9	17.6	0.0
Incr Delay (d2), s/veh	0.9	0.9	0.9				0.0	0.0	0.4	0.8	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	3.2	3.1				0.0	0.0	3.0	2.7	6.3	0.0
LnGrp Delay(d),s/veh	9.5	9.6	9.6				0.0	0.0	15.9	21.7	19.4	0.0
LnGrp LOS	A	A	A						B	C	B	
Approach Vol, veh/h		870						228			593	
Approach Delay, s/veh		9.6						15.9			20.1	
Approach LOS		A						B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		35.4		24.6				24.6
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		25.0		25.0				25.0
Max Q Clear Time (g_c+I1), s		7.7		15.9				7.7
Green Ext Time (p_c), s		4.9		3.5				5.1

Intersection Summary	
HCM 2010 Ctrl Delay	14.1
HCM 2010 LOS	B

Notes

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Vol, veh/h	0	0	0	0	0	20	150	20	0	10	210	0	0	0	250	110
Future Vol, veh/h	0	0	0	0	0	20	150	20	0	10	210	0	0	0	250	110
Peak Hour Factor	0.92	1.00	1.00	1.00	0.92	0.80	0.80	0.80	0.92	0.93	0.93	0.93	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	25	188	25	0	11	226	0	0	0	284	125
Number of Lanes	0	0	0	0	0	0	2	0	0	0	1	0	0	0	1	1

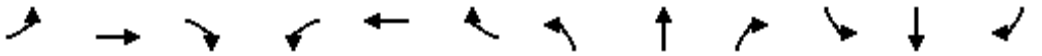
Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	10.5	12.3	11.3
HCM LOS	B	B	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	5%	21%	0%	0%	0%
Vol Thru, %	95%	79%	79%	100%	0%
Vol Right, %	0%	0%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	220	95	95	250	110
LT Vol	10	20	0	0	0
Through Vol	210	75	75	250	0
RT Vol	0	0	20	0	110
Lane Flow Rate	237	119	119	284	125
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.38	0.208	0.199	0.432	0.166
Departure Headway (Hd)	5.788	6.299	6.043	5.583	4.876
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	625	572	596	648	740
Service Time	3.788	4.01	3.754	3.283	2.576
HCM Lane V/C Ratio	0.379	0.208	0.2	0.438	0.169
HCM Control Delay	12.3	10.7	10.3	12.5	8.5
HCM Lane LOS	B	B	B	B	A
HCM 95th-tile Q	1.8	0.8	0.7	2.2	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	40	20	140	20	5	5	370	170	10	290	5
Future Volume (veh/h)	10	40	20	140	20	5	5	370	170	10	290	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.99	1.00		0.96	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	13	51	13	215	31	3	6	435	169	12	354	6
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.78	0.78	0.78	0.65	0.65	0.65	0.85	0.85	0.85	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	540	122	657	86	7	446	525	204	263	759	13
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	156	1351	306	1223	214	18	1014	1311	509	808	1898	32
Grp Volume(v), veh/h	77	0	0	249	0	0	6	0	604	12	0	360
Grp Sat Flow(s),veh/h/ln	1813	0	0	1455	0	0	1014	0	1821	808	0	1930
Q Serve(g_s), s	0.0	0.0	0.0	3.7	0.0	0.0	0.2	0.0	11.9	0.5	0.0	5.5
Cycle Q Clear(g_c), s	1.0	0.0	0.0	4.7	0.0	0.0	5.7	0.0	11.9	12.5	0.0	5.5
Prop In Lane	0.17		0.17	0.86		0.01	1.00		0.28	1.00		0.02
Lane Grp Cap(c), veh/h	831	0	0	750	0	0	446	0	728	263	0	772
V/C Ratio(X)	0.09	0.00	0.00	0.33	0.00	0.00	0.01	0.00	0.83	0.05	0.00	0.47
Avail Cap(c_a), veh/h	831	0	0	750	0	0	446	0	728	263	0	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.5	0.0	0.0	8.5	0.0	0.0	10.9	0.0	10.8	16.4	0.0	8.9
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.2	0.0	0.0	0.1	0.0	10.6	0.3	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	2.2	0.0	0.0	0.1	0.0	8.0	0.1	0.0	3.3
LnGrp Delay(d),s/veh	7.7	0.0	0.0	9.7	0.0	0.0	11.0	0.0	21.3	16.7	0.0	10.9
LnGrp LOS	A			A			B		C	B		B
Approach Vol, veh/h		77			249			610			372	
Approach Delay, s/veh		7.7			9.7			21.2			11.1	
Approach LOS		A			A			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		20.0		20.0		20.0		20.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		13.9		3.0		14.5		6.7
Green Ext Time (p_c), s		1.3		1.1		1.0		0.9

Intersection Summary		
HCM 2010 Ctrl Delay		15.3
HCM 2010 LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	570	270	0	0	0	130	0	280	0	260	200
Future Volume (vph)	0	570	270	0	0	0	130	0	280	0	260	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5				4.2		4.2		4.2	4.5
Lane Util. Factor		0.95	1.00				1.00		1.00		1.00	1.00
Frpb, ped/bikes		1.00	1.00				1.00		0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00				1.00		1.00		1.00	1.00
Frt		1.00	0.85				1.00		0.85		1.00	0.85
Flt Protected		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (prot)		3539	1583				1770		1558		1863	1571
Flt Permitted		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (perm)		3539	1583				1770		1558		1863	1571
Peak-hour factor, PHF	0.83	0.83	0.83	1.00	1.00	1.00	0.81	0.81	0.81	0.87	0.87	0.87
Adj. Flow (vph)	0	687	325	0	0	0	160	0	346	0	299	230
RTOR Reduction (vph)	0	0	83	0	0	0	0	0	254	0	0	85
Lane Group Flow (vph)	0	687	242	0	0	0	160	0	92	0	299	145
Confl. Peds. (#/hr)						3			6			4
Confl. Bikes (#/hr)												9
Turn Type		NA	Perm				Prot		Perm		NA	custom
Protected Phases		2					3				4	2
Permitted Phases			2						4			4
Actuated Green, G (s)		24.9	24.9				12.4		18.1		18.1	43.0
Effective Green, g (s)		24.9	24.9				12.4		18.1		18.1	43.0
Actuated g/C Ratio		0.36	0.36				0.18		0.27		0.27	0.63
Clearance Time (s)		4.5	4.5				4.2		4.2		4.2	4.5
Vehicle Extension (s)		3.0	3.0				3.0		3.0		3.0	3.0
Lane Grp Cap (vph)		1290	577				321		412		493	989
v/s Ratio Prot		c0.19					c0.09				c0.16	0.05
v/s Ratio Perm			0.15						0.06			0.04
v/c Ratio		0.53	0.42				0.50		0.22		0.61	0.15
Uniform Delay, d1		17.1	16.3				25.2		19.6		22.0	5.2
Progression Factor		1.00	1.00				1.00		1.00		1.00	1.00
Incremental Delay, d2		0.4	0.5				1.2		0.3		2.1	0.1
Delay (s)		17.5	16.8				26.4		19.9		24.1	5.2
Level of Service		B	B				C		B		C	A
Approach Delay (s)		17.3			0.0			21.9			15.9	
Approach LOS		B			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	18.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	68.3	Sum of lost time (s)	12.9
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	10	5	30	10	5	5	550	20	5	490	10
Future Volume (veh/h)	30	10	5	30	10	5	5	550	20	5	490	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.97	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	14	7	48	16	8	6	688	25	7	671	14
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.70	0.70	0.70	0.63	0.63	0.63	0.80	0.80	0.80	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	373	115	45	422	123	412	377	1004	36	358	1022	21
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	914	420	164	1071	449	1500	753	1784	65	733	1817	38
Grp Volume(v), veh/h	64	0	0	64	0	8	6	0	713	7	0	685
Grp Sat Flow(s),veh/h/ln	1498	0	0	1520	0	1500	753	0	1849	733	0	1855
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.2	0.3	0.0	13.5	0.3	0.0	12.6
Cycle Q Clear(g_c), s	1.6	0.0	0.0	1.3	0.0	0.2	12.9	0.0	13.5	13.8	0.0	12.6
Prop In Lane	0.67		0.11	0.75		1.00	1.00		0.04	1.00		0.02
Lane Grp Cap(c), veh/h	534	0	0	545	0	412	377	0	1040	358	0	1044
V/C Ratio(X)	0.12	0.00	0.00	0.12	0.00	0.02	0.02	0.00	0.69	0.02	0.00	0.66
Avail Cap(c_a), veh/h	672	0	0	712	0	580	567	0	1506	543	0	1511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.4	0.0	0.0	13.4	0.0	13.0	11.9	0.0	7.6	12.6	0.0	7.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.7	0.0	0.1	0.1	0.0	7.0	0.1	0.0	6.5
LnGrp Delay(d),s/veh	13.5	0.0	0.0	13.5	0.0	13.0	11.9	0.0	8.5	12.6	0.0	8.2
LnGrp LOS	B			B		B	B		A	B		A
Approach Vol, veh/h		64			72			719			692	
Approach Delay, s/veh		13.5			13.4			8.5			8.2	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.6		17.5		31.6		17.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		18.0		40.0		19.0
Max Q Clear Time (g_c+I1), s		15.5		3.6		15.8		3.3
Green Ext Time (p_c), s		11.9		0.6		11.8		0.6

Intersection Summary		
HCM 2010 Ctrl Delay		8.8
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	170	420	400	110	10	250	350	400	20	570	40
Future Volume (veh/h)	70	170	420	400	110	10	250	350	400	20	570	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	75	183	252	296	348	11	281	393	273	23	655	38
Adj No. of Lanes	1	1	1	1	1	0	2	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	366	384	470	378	383	12	339	1377	934	28	1042	60
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.10	0.39	0.39	0.02	0.31	0.31
Sat Flow, veh/h	1774	1863	1522	1774	1794	57	3442	3539	1532	1774	3396	197
Grp Volume(v), veh/h	75	183	252	296	0	359	281	393	273	23	341	352
Grp Sat Flow(s),veh/h/ln	1774	1863	1522	1774	0	1851	1721	1770	1532	1774	1770	1824
Q Serve(g_s), s	4.6	11.3	18.1	20.6	0.0	24.8	10.5	10.0	11.3	1.7	21.7	21.7
Cycle Q Clear(g_c), s	4.6	11.3	18.1	20.6	0.0	24.8	10.5	10.0	11.3	1.7	21.7	21.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	366	384	470	378	0	395	339	1377	934	28	543	559
V/C Ratio(X)	0.21	0.48	0.54	0.78	0.00	0.91	0.83	0.29	0.29	0.81	0.63	0.63
Avail Cap(c_a), veh/h	366	384	470	406	0	424	420	1377	934	68	543	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	45.8	38.0	48.7	0.0	50.3	58.0	27.5	12.6	64.3	39.0	39.0
Incr Delay (d2), s/veh	1.3	4.2	4.3	9.0	0.0	22.5	10.9	0.5	0.8	39.9	2.3	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.3	8.1	11.1	0.0	15.1	5.5	5.0	7.6	1.1	11.0	11.3
LnGrp Delay(d),s/veh	44.4	50.0	42.3	57.7	0.0	72.8	68.8	28.0	13.4	104.2	41.3	41.3
LnGrp LOS	D	D	D	E		E	E	C	B	F	D	D
Approach Vol, veh/h		510			655			947			716	
Approach Delay, s/veh		45.4			66.0			35.9			43.3	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	57.0		33.0	17.9	46.2		33.9
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0
Max Green Setting (Gmax), s	5.0	51.0		27.0	16.0	40.0		30.0
Max Q Clear Time (g_c+I1), s	3.7	13.3		20.1	12.5	23.7		26.8
Green Ext Time (p_c), s	0.0	10.9		1.4	0.4	7.8		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	46.5
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	940	60	120	430	20	350	10	500	10	10	10
Future Volume (veh/h)	20	940	60	120	430	20	350	10	500	10	10	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	22	1022	52	135	483	20	464	0	585	16	16	6
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.77	0.77	0.77	0.62	0.62	0.62
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	33	1917	97	171	2328	96	610	0	421	305	320	271
Arrive On Green	0.02	0.39	0.39	0.10	0.47	0.47	0.17	0.00	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1774	4943	251	1774	5005	206	3548	0	1562	1774	1863	1578
Grp Volume(v), veh/h	22	700	374	135	326	177	464	0	585	16	16	6
Grp Sat Flow(s),veh/h/ln	1774	1695	1804	1774	1695	1821	1774	0	1562	1774	1863	1578
Q Serve(g_s), s	1.1	14.8	14.9	6.9	5.3	5.4	11.6	0.0	16.0	0.7	0.7	0.3
Cycle Q Clear(g_c), s	1.1	14.8	14.9	6.9	5.3	5.4	11.6	0.0	16.0	0.7	0.7	0.3
Prop In Lane	1.00		0.14	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	33	1315	700	171	1577	847	610	0	421	305	320	271
V/C Ratio(X)	0.67	0.53	0.53	0.79	0.21	0.21	0.76	0.00	1.39	0.05	0.05	0.02
Avail Cap(c_a), veh/h	95	1315	700	382	1577	847	610	0	421	305	320	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	22.0	22.0	41.1	14.7	14.7	36.7	0.0	34.1	32.2	32.2	32.0
Incr Delay (d2), s/veh	20.5	1.6	2.9	8.0	0.3	0.6	8.7	0.0	189.4	0.3	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	7.2	7.9	3.8	2.5	2.8	6.4	0.0	32.9	0.4	0.4	0.1
LnGrp Delay(d),s/veh	65.9	23.5	24.9	49.1	15.0	15.3	45.3	0.0	223.5	32.5	32.4	32.1
LnGrp LOS	E	C	C	D	B	B	D		F	C	C	C
Approach Vol, veh/h		1096			638			1049			38	
Approach Delay, s/veh		24.8			22.3			144.7			32.4	
Approach LOS		C			C			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.9	40.1		20.0	5.7	47.3		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	20.0	25.0		16.0	5.0	40.0		16.0
Max Q Clear Time (g_c+I1), s	8.9	16.9		2.7	3.1	7.4		18.0
Green Ext Time (p_c), s	0.3	5.5		0.1	0.0	13.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	68.9
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	410	1020	0	0	490	130	80	5	170	0	0	0
Future Volume (veh/h)	410	1020	0	0	490	130	80	5	170	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900			
Adj Flow Rate, veh/h	519	1291	0	0	563	118	91	6	150			
Adj No. of Lanes	2	2	0	0	2	0	1	1	0			
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.88	0.88	0.88			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	1360	2769	0	0	1000	209	234	8	198			
Arrive On Green	0.40	0.78	0.00	0.00	0.34	0.34	0.13	0.13	0.13			
Sat Flow, veh/h	3442	3632	0	0	3000	607	1774	60	1504			
Grp Volume(v), veh/h	519	1291	0	0	342	339	91	0	156			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1745	1774	0	1564			
Q Serve(g_s), s	10.0	11.6	0.0	0.0	14.6	14.7	4.4	0.0	8.9			
Cycle Q Clear(g_c), s	10.0	11.6	0.0	0.0	14.6	14.7	4.4	0.0	8.9			
Prop In Lane	1.00		0.00	0.00		0.35	1.00		0.96			
Lane Grp Cap(c), veh/h	1360	2769	0	0	609	600	234	0	206			
V/C Ratio(X)	0.38	0.47	0.00	0.00	0.56	0.56	0.39	0.00	0.76			
Avail Cap(c_a), veh/h	1360	2769	0	0	609	600	401	0	353			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.95	0.95	1.00	0.00	1.00			
Uniform Delay (d), s/veh	20.0	3.5	0.0	0.0	24.8	24.8	37.0	0.0	38.9			
Incr Delay (d2), s/veh	0.2	0.6	0.0	0.0	3.5	3.6	1.1	0.0	5.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.8	5.8	0.0	0.0	7.7	7.7	2.2	0.0	4.2			
LnGrp Delay(d),s/veh	20.2	4.0	0.0	0.0	28.3	28.4	38.0	0.0	44.5			
LnGrp LOS	C	A			C	C	D		D			
Approach Vol, veh/h		1810			681			247				
Approach Delay, s/veh		8.7			28.4			42.1				
Approach LOS		A			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		76.8			40.8	36.0		16.2
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		64.0			28.0	32.0		21.0
Max Q Clear Time (g_c+I1), s		13.6			12.0	16.7		10.9
Green Ext Time (p_c), s		18.6			10.3	3.7		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	16.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	390	5	230	30	770	0	0	630	390
Future Volume (veh/h)	0	0	0	390	5	230	30	770	0	0	630	390
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				476	6	157	36	917	0	0	700	433
Adj No. of Lanes				0	1	1	1	2	0	0	2	1
Peak Hour Factor				0.82	0.82	0.82	0.84	0.84	0.84	0.90	0.90	0.90
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				542	7	490	399	2113	0	0	1138	496
Arrive On Green				0.31	0.31	0.31	0.22	0.60	0.00	0.00	0.32	0.32
Sat Flow, veh/h				1753	22	1583	1774	3632	0	0	3632	1544
Grp Volume(v), veh/h				482	0	157	36	917	0	0	700	433
Grp Sat Flow(s),veh/h/ln				1775	0	1583	1774	1770	0	0	1770	1544
Q Serve(g_s), s				25.0	0.0	7.4	1.6	13.7	0.0	0.0	16.2	25.6
Cycle Q Clear(g_c), s				25.0	0.0	7.4	1.6	13.7	0.0	0.0	16.2	25.6
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				549	0	490	399	2113	0	0	1138	496
V/C Ratio(X)				0.88	0.00	0.32	0.09	0.43	0.00	0.00	0.62	0.87
Avail Cap(c_a), veh/h				692	0	617	399	2113	0	0	1244	543
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.84	0.84	0.00	0.00	0.95	0.95
Uniform Delay (d), s/veh				31.8	0.0	25.7	29.7	10.6	0.0	0.0	27.8	31.0
Incr Delay (d2), s/veh				10.4	0.0	0.4	0.1	0.5	0.0	0.0	2.4	17.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				13.8	0.0	3.3	0.8	6.8	0.0	0.0	8.2	13.4
LnGrp Delay(d),s/veh				42.2	0.0	26.1	29.8	11.2	0.0	0.0	30.2	48.9
LnGrp LOS				D		C	C	B			C	D
Approach Vol, veh/h					639			953			1133	
Approach Delay, s/veh					38.2			11.9			37.4	
Approach LOS					D			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	16.7	36.1				62.8		34.2
Change Period (Y+Rc), s	4.9	* 4.9				4.9		4.2
Max Green Setting (Gmax), s	12.5	* 34				50.1		37.8
Max Q Clear Time (g_c+I1), s	13.6	27.6				15.7		27.0
Green Ext Time (p_c), s	4.2	3.5				8.0		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.7
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	330	10	340	20	650	260	360	1100	10
Future Volume (veh/h)	10	10	10	330	10	340	20	650	260	360	1100	10
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	14	14	0	367	0	172	24	774	242	404	1236	11
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	2	2	0
Peak Hour Factor	0.70	0.70	0.70	0.92	0.92	0.92	0.84	0.84	0.84	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	20	34	586	0	486	9	1613	971	501	2104	19
Arrive On Green	0.02	0.02	0.00	0.17	0.00	0.17	0.01	0.46	0.46	0.15	0.59	0.59
Sat Flow, veh/h	909	909	1583	3548	0	1546	1774	3539	1557	3442	3593	32
Grp Volume(v), veh/h	28	0	0	367	0	172	24	774	242	404	609	638
Grp Sat Flow(s),veh/h/ln	1817	0	1583	1774	0	1546	1774	1770	1557	1721	1770	1856
Q Serve(g_s), s	1.5	0.0	0.0	9.5	0.0	8.5	0.5	15.1	6.9	11.3	21.5	21.5
Cycle Q Clear(g_c), s	1.5	0.0	0.0	9.5	0.0	8.5	0.5	15.1	6.9	11.3	21.5	21.5
Prop In Lane	0.50		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	39	0	34	586	0	486	9	1613	971	501	1036	1087
V/C Ratio(X)	0.71	0.00	0.00	0.63	0.00	0.35	2.53	0.48	0.25	0.81	0.59	0.59
Avail Cap(c_a), veh/h	73	0	64	1075	0	699	90	1613	971	730	1036	1087
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	0.0	0.0	38.5	0.0	26.5	49.3	18.8	8.4	41.0	13.0	13.0
Incr Delay (d2), s/veh	20.8	0.0	0.0	1.1	0.0	0.4	750.7	1.0	0.6	4.3	2.4	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	4.8	0.0	3.7	2.2	7.5	4.4	5.6	11.2	11.7
LnGrp Delay(d),s/veh	69.0	0.0	0.0	39.6	0.0	26.9	799.9	19.8	9.0	45.3	15.4	15.3
LnGrp LOS	E			D		C	F	B	A	D	B	B
Approach Vol, veh/h		28			539			1040			1651	
Approach Delay, s/veh		69.0			35.6			35.3			22.7	
Approach LOS		E			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	64.0		21.4	19.4	51.1		7.1
Change Period (Y+Rc), s	6.0	* 6		5.0	5.0	6.0		5.0
Max Green Setting (Gmax), s	5.0	* 58		30.0	21.0	42.0		4.0
Max Q Clear Time (g_c+I1), s	2.5	23.5		11.5	13.3	17.1		3.5
Green Ext Time (p_c), s	0.0	10.8		2.3	1.2	6.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.2
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	40	30	970	1420	10
Future Vol, veh/h	10	40	30	970	1420	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	180	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	94	94	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	61	32	1032	1671	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2256	841	1682	0	-	0
Stage 1	1676	-	-	-	-	-
Stage 2	580	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	35	308	377	-	-	-
Stage 1	137	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	32	308	377	-	-	-
Mov Cap-2 Maneuver	32	-	-	-	-	-
Stage 1	137	-	-	-	-	-
Stage 2	479	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	85.6	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	377	-	113	-	-
HCM Lane V/C Ratio	0.085	-	0.67	-	-
HCM Control Delay (s)	15.4	-	85.6	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	3.5	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	40	70	920	70	120	1360
Future Vol, veh/h	40	70	920	70	120	1360
Conflicting Peds, #/hr	0	0	0	14	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	89	89	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	88	1034	79	125	1417

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2045	570	0	0	1126	0
Stage 1	1087	-	-	-	-	-
Stage 2	958	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 49	465	-	-	616	-
Stage 1	285	-	-	-	-	-
Stage 2	333	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 39	459	-	-	616	-
Mov Cap-2 Maneuver	142	-	-	-	-	-
Stage 1	281	-	-	-	-	-
Stage 2	265	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.2	0	1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	142	459	616	-
HCM Lane V/C Ratio	-	-	0.352	0.191	0.203	-
HCM Control Delay (s)	-	-	43.5	14.7	12.3	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	1.4	0.7	0.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	30	1330	5	10	990
Future Vol, veh/h	10	30	1330	5	10	990
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	40	1478	6	13	1238

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2122	739	0	0	1478	0
Stage 1	1478	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	43	360	-	-	452	-
Stage 1	176	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	42	360	-	-	452	-
Mov Cap-2 Maneuver	132	-	-	-	-	-
Stage 1	176	-	-	-	-	-
Stage 2	471	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.2	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	251	452	-
HCM Lane V/C Ratio	-	-	0.212	0.028	-
HCM Control Delay (s)	-	-	23.2	13.2	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.8	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	100	90	200	120	130	80	1220	110	30	1150	40
Future Volume (veh/h)	100	100	90	200	120	130	80	1220	110	30	1150	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.90	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1976	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	119	157	88	205	225	145	86	1312	118	41	1554	53
Adj No. of Lanes	1	2	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.74	0.74	0.74	0.78	0.78	0.78	0.93	0.93	0.93	0.74	0.74	0.74
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	370	190	249	261	200	103	1943	858	47	1831	795
Arrive On Green	0.17	0.17	0.17	0.14	0.14	0.14	0.06	0.55	0.55	0.03	0.52	0.52
Sat Flow, veh/h	1774	2240	1151	1774	1863	1426	1774	3539	1564	1774	3539	1536
Grp Volume(v), veh/h	119	128	117	205	225	145	86	1312	118	41	1554	53
Grp Sat Flow(s),veh/h/ln	1774	1863	1529	1774	1863	1426	1774	1770	1564	1774	1770	1536
Q Serve(g_s), s	8.0	8.3	9.3	15.1	15.8	13.0	6.4	35.6	4.9	3.1	50.6	2.3
Cycle Q Clear(g_c), s	8.0	8.3	9.3	15.1	15.8	13.0	6.4	35.6	4.9	3.1	50.6	2.3
Prop In Lane	1.00		0.75	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	293	308	253	249	261	200	103	1943	858	47	1831	795
V/C Ratio(X)	0.41	0.42	0.46	0.82	0.86	0.73	0.84	0.68	0.14	0.88	0.85	0.07
Avail Cap(c_a), veh/h	423	445	365	278	292	223	258	1943	858	232	1901	825
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	50.2	50.6	56.0	56.4	55.2	62.5	21.7	14.7	65.1	27.8	16.2
Incr Delay (d2), s/veh	0.9	0.9	1.3	16.6	20.7	9.9	16.0	0.9	0.1	36.0	3.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	4.3	4.0	8.5	9.7	5.7	3.6	17.6	2.1	2.0	25.6	1.0
LnGrp Delay(d),s/veh	51.0	51.1	51.9	72.6	77.1	65.1	78.6	22.6	14.8	101.1	31.6	16.2
LnGrp LOS	D	D	D	E	E	E	E	C	B	F	C	B
Approach Vol, veh/h		364			575			1516			1648	
Approach Delay, s/veh		51.3			72.5			25.2			32.8	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	77.6		26.1	11.8	73.4		22.8
Change Period (Y+Rc), s	3.5	6.0		4.0	3.5	6.0		4.0
Max Green Setting (Gmax), s	18.0	70.0		32.0	20.0	70.0		21.0
Max Q Clear Time (g_c+I1), s	5.1	37.6		11.3	8.4	52.6		17.8
Green Ext Time (p_c), s	0.1	28.5		1.9	0.2	14.7		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	37.2
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	210	300	50	70	50
Future Vol, veh/h	10	210	300	50	70	50
Conflicting Peds, #/hr	0	0	0	38	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	62	62	85	85	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	339	353	59	81	58

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	450	0	-	0	791	422
Stage 1	-	-	-	-	420	-
Stage 2	-	-	-	-	371	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1110	-	-	-	358	632
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	698	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1108	-	-	-	327	608
Mov Cap-2 Maneuver	-	-	-	-	327	-
Stage 1	-	-	-	-	639	-
Stage 2	-	-	-	-	661	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	16.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1108	-	-	-	327	608
HCM Lane V/C Ratio	0.015	-	-	-	0.249	0.096
HCM Control Delay (s)	8.3	0	-	-	19.6	11.5
HCM Lane LOS	A	A	-	-	C	B
HCM 95th %tile Q(veh)	0	-	-	-	1	0.3

Intersection	
Intersection Delay, s/veh	14.2
Intersection LOS	B

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Lane Configurations									
Traffic Vol, veh/h	0	200	80	0	220	290	0	100	170
Future Vol, veh/h	0	200	80	0	220	290	0	100	170
Peak Hour Factor	0.92	0.64	0.64	0.92	0.94	0.94	0.92	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	313	125	0	234	309	0	133	227
Number of Lanes	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay	13	15.8	13.2
HCM LOS	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	45%	0%	100%
Vol Right, %	0%	100%	0%	55%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	170	133	147	220	290
LT Vol	100	0	0	0	220	0
Through Vol	0	0	133	67	0	290
RT Vol	0	170	0	80	0	0
Lane Flow Rate	133	227	208	229	234	309
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.278	0.396	0.377	0.39	0.445	0.543
Departure Headway (Hd)	7.505	6.285	6.514	6.124	6.844	6.335
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	477	571	550	584	524	568
Service Time	5.27	4.05	4.28	3.891	4.606	4.097
HCM Lane V/C Ratio	0.279	0.398	0.378	0.392	0.447	0.544
HCM Control Delay	13.2	13.2	13.2	12.8	15	16.4
HCM Lane LOS	B	B	B	B	B	C
HCM 95th-tile Q	1.1	1.9	1.7	1.8	2.3	3.2

Intersection	
Intersection Delay, s/veh	15.2
Intersection LOS	C

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	170	40	0	200	120	0	20	360
Future Vol, veh/h	0	170	40	0	200	120	0	20	360
Peak Hour Factor	0.92	0.79	0.79	0.92	0.87	0.87	0.92	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	215	51	0	230	138	0	24	429
Number of Lanes	0	1	0	0	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	13.8	11.2	19.2
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	81%	5%
Vol Thru, %	100%	0%	0%	95%
Vol Right, %	0%	100%	19%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	200	120	210	380
LT Vol	0	0	170	20
Through Vol	200	0	0	360
RT Vol	0	120	40	0
Lane Flow Rate	230	138	266	452
Geometry Grp	7	7	2	5
Degree of Util (X)	0.38	0.201	0.443	0.679
Departure Headway (Hd)	5.956	5.245	6.004	5.403
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	605	683	598	670
Service Time	3.698	2.987	4.049	3.44
HCM Lane V/C Ratio	0.38	0.202	0.445	0.675
HCM Control Delay	12.3	9.3	13.8	19.2
HCM Lane LOS	B	A	B	C
HCM 95th-tile Q	1.8	0.7	2.3	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	280	190	100	380	240	320	1060	80	300	1000	150
Future Volume (veh/h)	120	280	190	100	380	240	320	1060	80	300	1000	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.89	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	145	337	127	106	404	200	364	1205	89	349	1163	96
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.83	0.83	0.83	0.94	0.94	0.94	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	473	379	135	524	254	375	1158	499	322	1103	484
Arrive On Green	0.09	0.25	0.25	0.08	0.24	0.24	0.11	0.33	0.33	0.09	0.31	0.31
Sat Flow, veh/h	1774	1863	1492	1774	2215	1073	3442	3539	1527	3442	3539	1555
Grp Volume(v), veh/h	145	337	127	106	321	283	364	1205	89	349	1163	96
Grp Sat Flow(s),veh/h/ln	1774	1863	1492	1774	1770	1518	1721	1770	1527	1721	1770	1555
Q Serve(g_s), s	5.2	10.6	4.5	3.8	10.9	11.2	6.8	21.0	2.7	6.0	20.0	2.9
Cycle Q Clear(g_c), s	5.2	10.6	4.5	3.8	10.9	11.2	6.8	21.0	2.7	6.0	20.0	2.9
Prop In Lane	1.00		1.00	1.00		0.71	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	473	379	135	419	359	375	1158	499	322	1103	484
V/C Ratio(X)	0.87	0.71	0.34	0.78	0.77	0.79	0.97	1.04	0.18	1.08	1.05	0.20
Avail Cap(c_a), veh/h	166	473	379	166	441	378	375	1158	499	322	1103	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	21.8	19.5	29.1	22.8	23.0	28.5	21.6	15.4	29.1	22.1	16.2
Incr Delay (d2), s/veh	36.8	5.0	0.5	17.6	7.6	10.2	38.4	37.7	0.8	74.7	42.7	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	6.1	1.9	2.5	6.1	5.7	5.2	16.2	1.2	6.2	16.2	1.4
LnGrp Delay(d),s/veh	65.5	26.8	20.1	46.7	30.4	33.1	66.9	59.3	16.2	103.8	64.8	17.1
LnGrp LOS	E	C	C	D	C	C	E	F	B	F	F	B
Approach Vol, veh/h		609			710			1658			1608	
Approach Delay, s/veh		34.6			33.9			58.6			70.4	
Approach LOS		C			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.0	8.9	20.3	11.0	24.0	10.0	19.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	21.0	6.0	16.0	7.0	20.0	6.0	16.0
Max Q Clear Time (g_c+I1), s	6.0	23.0	5.8	12.6	8.8	22.0	7.2	13.2
Green Ext Time (p_c), s	0.0	0.0	0.0	2.1	0.0	0.0	0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	55.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	140	400	80	120	20	410	220	30	20	350	120
Future Volume (veh/h)	140	140	400	80	120	20	410	220	30	20	350	120
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.79	0.93		0.97	1.00		0.95	1.00		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	169	169	464	89	133	20	488	262	31	21	365	117
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.84	0.84	0.84	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	429	632	729	288	535	80	666	1537	179	54	599	442
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.33	0.19	0.48	0.47	0.03	0.32	0.32
Sat Flow, veh/h	1229	1863	1246	735	1576	237	3442	3173	370	1774	1863	1376
Grp Volume(v), veh/h	169	169	464	89	0	153	488	145	148	21	365	117
Grp Sat Flow(s),veh/h/ln	1229	1863	1246	735	0	1813	1721	1770	1774	1774	1863	1376
Q Serve(g_s), s	9.5	5.4	22.8	8.2	0.0	5.0	11.0	3.8	3.9	1.0	13.6	5.2
Cycle Q Clear(g_c), s	14.5	5.4	22.8	13.7	0.0	5.0	11.0	3.8	3.9	1.0	13.6	5.2
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	429	632	729	288	0	615	666	857	859	54	599	442
V/C Ratio(X)	0.39	0.27	0.64	0.31	0.00	0.25	0.73	0.17	0.17	0.39	0.61	0.26
Avail Cap(c_a), veh/h	460	679	761	288	0	615	1170	967	969	496	860	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.9	19.8	14.3	24.7	0.0	19.7	31.2	11.9	12.0	39.1	23.6	20.7
Incr Delay (d2), s/veh	0.6	0.2	1.7	0.6	0.0	0.2	1.6	0.1	0.1	4.4	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	2.8	8.1	1.7	0.0	2.5	5.4	1.9	1.9	0.5	7.2	2.0
LnGrp Delay(d),s/veh	25.5	20.0	16.0	25.3	0.0	19.9	32.8	12.0	12.1	43.6	24.6	21.0
LnGrp LOS	C	B	B	C		B	C	B	B	D	C	C
Approach Vol, veh/h		802			242			781			503	
Approach Delay, s/veh		18.8			21.9			25.0			24.5	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	30.5		31.9	6.5	43.9		31.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	27.0	37.0		26.0	22.0	44.0		29.0
Max Q Clear Time (g_c+I1), s	13.0	15.6		15.7	3.0	5.9		24.8
Green Ext Time (p_c), s	2.0	5.0		4.7	0.0	5.6		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	22.5
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	5.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	40	170	20	100	110	20
Future Vol, veh/h	40	170	20	100	110	20
Conflicting Peds, #/hr	0	155	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	73	73	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	200	27	137	143	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	402	0	494	304
Stage 1	-	-	-	-	302	-
Stage 2	-	-	-	-	192	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1157	-	535	736
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	841	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1155	-	445	626
Mov Cap-2 Maneuver	-	-	-	-	445	-
Stage 1	-	-	-	-	639	-
Stage 2	-	-	-	-	820	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	17
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	466	-	-	1155	-
HCM Lane V/C Ratio	0.362	-	-	0.024	-
HCM Control Delay (s)	17	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.6	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	13
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	50	10	70	0	10	10	5	0	100	210	10
Future Vol, veh/h	0	50	10	70	0	10	10	5	0	100	210	10
Peak Hour Factor	0.92	0.79	0.79	0.79	0.92	0.70	0.70	0.70	0.92	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	63	13	89	0	14	14	7	0	118	247	12
Number of Lanes	0	0	1	0	0	0	1	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	1
HCM Control Delay	12.5	10.7	10.8
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	38%	40%	5%	0%	0%
Vol Thru, %	0%	100%	88%	8%	40%	95%	100%	0%
Vol Right, %	0%	0%	12%	54%	20%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	140	80	130	25	183	347	60
LT Vol	100	0	0	50	10	10	0	0
Through Vol	0	140	70	10	10	173	347	0
RT Vol	0	0	10	70	5	0	0	60
Lane Flow Rate	118	165	94	165	36	204	385	67
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.215	0.278	0.156	0.308	0.073	0.328	0.617	0.094
Departure Headway (Hd)	6.576	6.069	5.98	6.731	7.314	5.792	5.765	5.056
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	545	591	599	533	489	619	624	707
Service Time	4.326	3.819	3.73	4.483	5.079	3.534	3.506	2.797
HCM Lane V/C Ratio	0.217	0.279	0.157	0.31	0.074	0.33	0.617	0.095
HCM Control Delay	11.1	11.2	9.8	12.5	10.7	11.4	17.4	8.3
HCM Lane LOS	B	B	A	B	B	B	C	A
HCM 95th-tile Q	0.8	1.1	0.5	1.3	0.2	1.4	4.2	0.3

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	10	520	60
Future Vol, veh/h	0	10	520	60
Peak Hour Factor	0.92	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	11	578	67
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	14.6
HCM LOS	B

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	60	40	300	570	10
Future Vol, veh/h	10	60	40	300	570	10
Conflicting Peds, #/hr	0	3	0	0	0	13
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	80	80	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	71	50	375	704	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1011	374	729	0	-	0
Stage 1	723	-	-	-	-	-
Stage 2	288	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	236	623	871	-	-	-
Stage 1	441	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	217	614	869	-	-	-
Mov Cap-2 Maneuver	334	-	-	-	-	-
Stage 1	436	-	-	-	-	-
Stage 2	684	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.7	1.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	869	-	548	-	-
HCM Lane V/C Ratio	0.058	-	0.15	-	-
HCM Control Delay (s)	9.4	-	12.7	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	5	20	40	90	300	20	50	330	280
Future Vol, veh/h	0	0	0	5	20	40	90	300	20	50	330	280
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	18	0	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	66	66	66	95	95	95	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	8	30	61	95	316	21	62	407	346

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	861	1422	186	764	0	0	355	0	0
Stage 1	534	534	-	-	-	-	-	-	-
Stage 2	327	888	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	295	135	824	845	-	-	1200	-	-
Stage 1	552	523	-	-	-	-	-	-	-
Stage 2	703	360	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	244	0	810	845	-	-	1200	-	-
Mov Cap-2 Maneuver	244	0	-	-	-	-	-	-	-
Stage 1	482	0	-	-	-	-	-	-	-
Stage 2	667	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.6	2.2	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	845	-	-	644	1200	-	-
HCM Lane V/C Ratio	0.112	-	-	0.153	0.051	-	-
HCM Control Delay (s)	9.8	-	-	11.6	8.2	-	-
HCM Lane LOS	A	-	-	B	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.5	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	10	50	5	0	10	0	210	10	10	300	0
Future Volume (veh/h)	140	10	50	5	0	10	0	210	10	10	300	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.95	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	177	13	63	11	0	15	0	231	11	11	341	0
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	1	2	0
Peak Hour Factor	0.79	0.79	0.79	0.46	0.46	0.46	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	277	20	99	18	0	25	0	967	46	533	997	0
Arrive On Green	0.23	0.23	0.23	0.03	0.00	0.03	0.00	0.28	0.28	0.28	0.28	0.00
Sat Flow, veh/h	1202	88	428	702	0	957	0	3524	162	1116	3632	0
Grp Volume(v), veh/h	253	0	0	26	0	0	0	118	124	11	341	0
Grp Sat Flow(s),veh/h/ln	1718	0	0	1659	0	0	0	1770	1823	1116	1770	0
Q Serve(g_s), s	3.5	0.0	0.0	0.4	0.0	0.0	0.0	1.3	1.4	0.2	2.0	0.0
Cycle Q Clear(g_c), s	3.5	0.0	0.0	0.4	0.0	0.0	0.0	1.3	1.4	1.6	2.0	0.0
Prop In Lane	0.70		0.25	0.42		0.58	0.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	396	0	0	44	0	0	0	499	514	533	997	0
V/C Ratio(X)	0.64	0.00	0.00	0.60	0.00	0.00	0.00	0.24	0.24	0.02	0.34	0.00
Avail Cap(c_a), veh/h	1058	0	0	1021	0	0	0	1089	1122	906	2179	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.0	0.0	0.0	12.5	0.0	0.0	0.0	7.2	7.2	7.8	7.4	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.0	12.3	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	0.3	0.0	0.0	0.0	0.7	0.7	0.1	1.0	0.0
LnGrp Delay(d),s/veh	10.8	0.0	0.0	24.8	0.0	0.0	0.0	7.4	7.4	7.8	7.6	0.0
LnGrp LOS	B			C				A	A	A	A	
Approach Vol, veh/h		253			26			242			352	
Approach Delay, s/veh		10.8			24.8			7.4			7.6	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		11.3		10.0		11.3		4.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		3.4		5.5		4.0		2.4
Green Ext Time (p_c), s		3.0		1.1		2.9		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	9.0
HCM 2010 LOS	A

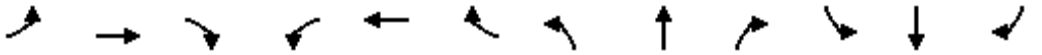
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	5	20	5	5	10	10	180	5	20	300	20
Future Vol, veh/h	20	5	20	5	5	10	10	180	5	20	300	20
Conflicting Peds, #/hr	0	0	3	0	0	9	0	0	12	0	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	40	40	40	92	92	92	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	6	25	13	13	25	11	196	5	27	405	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	612	712	223	495	722	122	436	0	0	213	0	0
Stage 1	477	477	-	232	232	-	-	-	-	-	-	-
Stage 2	135	235	-	263	490	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	377	356	780	457	351	906	1120	-	-	1355	-	-
Stage 1	538	554	-	750	711	-	-	-	-	-	-	-
Stage 2	854	709	-	719	547	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	342	338	775	418	333	888	1117	-	-	1343	-	-
Mov Cap-2 Maneuver	342	338	-	418	333	-	-	-	-	-	-	-
Stage 1	531	537	-	734	696	-	-	-	-	-	-	-
Stage 2	800	694	-	668	530	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14	12.3	0.4	0.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1117	-	-	454	418	571	1343	-	-
HCM Lane V/C Ratio	0.01	-	-	0.122	0.03	0.066	0.02	-	-
HCM Control Delay (s)	8.3	-	-	14	13.9	11.7	7.7	0.1	-
HCM Lane LOS	A	-	-	B	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.1	0.2	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	470	5	5	280	20	5	5	0	110	0	210
Future Volume (veh/h)	170	470	5	5	280	20	5	5	0	110	0	210
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	0.99		1.00	0.95		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	195	540	6	5	295	15	7	7	0	145	0	127
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.87	0.87	0.87	0.95	0.95	0.95	0.75	0.75	0.75	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	658	1074	12	500	705	580	244	198	0	493	0	331
Arrive On Green	0.11	0.58	0.60	0.38	0.38	0.38	0.22	0.22	0.00	0.22	0.00	0.23
Sat Flow, veh/h	1774	1838	20	850	1863	1532	505	907	0	1328	0	1517
Grp Volume(v), veh/h	195	0	546	5	295	15	14	0	0	145	0	127
Grp Sat Flow(s),veh/h/ln	1774	0	1858	850	1863	1532	1413	0	0	1328	0	1517
Q Serve(g_s), s	2.3	0.0	7.0	0.1	4.7	0.2	0.0	0.0	0.0	0.2	0.0	2.9
Cycle Q Clear(g_c), s	2.3	0.0	7.0	0.1	4.7	0.2	2.9	0.0	0.0	3.0	0.0	2.9
Prop In Lane	1.00		0.01	1.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	658	0	1086	500	705	580	442	0	0	493	0	331
V/C Ratio(X)	0.30	0.00	0.50	0.01	0.42	0.03	0.03	0.00	0.00	0.29	0.00	0.38
Avail Cap(c_a), veh/h	1300	0	2592	1364	2598	2136	1204	0	0	973	0	880
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.4	0.0	5.0	7.9	9.3	7.9	12.5	0.0	0.0	13.5	0.0	13.3
Incr Delay (d2), s/veh	0.2	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.3	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	3.6	0.0	2.5	0.1	0.1	0.0	0.0	1.4	0.0	1.3
LnGrp Delay(d),s/veh	5.6	0.0	5.3	7.9	9.7	7.9	12.5	0.0	0.0	13.9	0.0	14.0
LnGrp LOS	A		A	A	A	A	B			B		B
Approach Vol, veh/h		741			315			14			272	
Approach Delay, s/veh		5.4			9.6			12.5			13.9	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		27.7		12.8	8.3	19.3		12.8
Change Period (Y+Rc), s		3.5		3.5	4.0	3.5		3.5
Max Green Setting (Gmax), s		57.0		24.0	19.0	57.0		30.0
Max Q Clear Time (g_c+I1), s		9.0		5.0	4.3	6.7		4.9
Green Ext Time (p_c), s		7.0		1.3	0.6	7.1		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	8.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	30	140	10	40	40	1420	80	30	1310	20
Future Volume (veh/h)	10	10	30	140	10	40	40	1420	80	30	1310	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	13	13	7	192	14	51	43	1527	63	34	1489	22
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.77	0.77	0.77	0.73	0.73	0.73	0.93	0.93	0.93	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	55	457	102	4	450	58	1741	72	49	1778	26
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.03	0.50	0.50	0.03	0.50	0.50
Sat Flow, veh/h	0	186	1561	0	14	1536	1774	3461	142	1774	3569	53
Grp Volume(v), veh/h	26	0	7	206	0	51	43	778	812	34	738	773
Grp Sat Flow(s),veh/h/ln	186	0	1561	14	0	1536	1774	1770	1834	1774	1770	1852
Q Serve(g_s), s	0.0	0.0	0.2	0.0	0.0	1.7	1.6	26.6	26.9	1.3	24.5	24.5
Cycle Q Clear(g_c), s	20.0	0.0	0.2	20.0	0.0	1.7	1.6	26.6	26.9	1.3	24.5	24.5
Prop In Lane	0.50		1.00	0.93		1.00	1.00		0.08	1.00		0.03
Lane Grp Cap(c), veh/h	134	0	457	106	0	450	58	890	923	49	882	923
V/C Ratio(X)	0.19	0.00	0.02	1.94	0.00	0.11	0.74	0.87	0.88	0.69	0.84	0.84
Avail Cap(c_a), veh/h	134	0	457	106	0	450	104	890	923	130	882	923
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	17.1	33.4	0.0	17.6	32.7	15.0	15.1	32.9	14.7	14.7
Incr Delay (d2), s/veh	0.7	0.0	0.0	457.7	0.0	0.1	16.8	11.7	11.7	15.6	9.3	9.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.1	15.4	0.0	0.7	1.1	15.6	16.5	0.8	14.2	14.8
LnGrp Delay(d),s/veh	20.4	0.0	17.1	491.0	0.0	17.7	49.6	26.7	26.8	48.5	24.0	23.7
LnGrp LOS	C		B	F		B	D	C	C	D	C	C
Approach Vol, veh/h		33			257			1633			1545	
Approach Delay, s/veh		19.7			397.1			27.4			24.4	
Approach LOS		B			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	38.3		24.0	6.2	38.0		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	33.0		16.0	4.0	34.0		20.0
Max Q Clear Time (g_c+I1), s	3.3	28.9		22.0	3.6	26.5		22.0
Green Ext Time (p_c), s	0.0	4.0		0.0	0.0	7.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	5	80	30	10	5	90	1490	190	10	790	710
Future Volume (veh/h)	30	5	80	30	10	5	90	1490	190	10	790	710
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.99	0.99		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	36	6	35	49	16	1	110	1817	232	11	888	797
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.61	0.61	0.61	0.82	0.82	0.82	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	34	82	259	66	3	338	2213	275	218	2483	1076
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	552	290	702	994	562	24	291	3154	392	204	3539	1533
Grp Volume(v), veh/h	77	0	0	66	0	0	110	998	1051	11	888	797
Grp Sat Flow(s),veh/h/ln	1544	0	0	1580	0	0	291	1770	1777	204	1770	1533
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.0	10.7	17.1	19.1	1.8	4.4	14.3
Cycle Q Clear(g_c), s	1.9	0.0	0.0	1.5	0.0	0.0	15.1	17.1	19.1	20.9	4.4	14.3
Prop In Lane	0.47		0.45	0.74		0.02	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	301	0	0	327	0	0	338	1242	1247	218	2483	1076
V/C Ratio(X)	0.26	0.00	0.00	0.20	0.00	0.00	0.33	0.80	0.84	0.05	0.36	0.74
Avail Cap(c_a), veh/h	660	0	0	682	0	0	338	1242	1247	218	2483	1076
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	0.0	17.9	0.0	0.0	5.6	4.5	4.8	12.5	2.6	4.1
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.3	0.0	0.0	2.5	5.6	7.0	0.4	0.4	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.8	0.0	0.0	1.1	9.7	11.2	0.1	2.2	7.1
LnGrp Delay(d),s/veh	18.5	0.0	0.0	18.2	0.0	0.0	8.2	10.1	11.9	12.9	3.0	8.7
LnGrp LOS	B			B			A	B	B	B	A	A
Approach Vol, veh/h		77			66			2159			1696	
Approach Delay, s/veh		18.5			18.2			10.9			5.8	
Approach LOS		B			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		9.2		35.0		9.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		16.0		31.0		16.0
Max Q Clear Time (g_c+I1), s		21.1		3.9		22.9		3.5
Green Ext Time (p_c), s		9.8		0.6		8.0		0.6

Intersection Summary		
HCM 2010 Ctrl Delay		9.0
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	10	10	10	5	550	5	1090	50	40	700	150
Future Volume (veh/h)	110	10	10	10	5	550	5	1090	50	40	700	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	131	12	12	12	6	658	6	1362	62	44	769	165
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.83	0.83	0.83	0.80	0.80	0.80	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	401	37	25	501	227	595	11	1152	52	66	1054	226
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.01	0.33	0.33	0.04	0.37	0.37
Sat Flow, veh/h	695	98	67	996	601	1580	1774	3438	156	1774	2883	619
Grp Volume(v), veh/h	155	0	0	18	0	658	6	700	724	44	472	462
Grp Sat Flow(s),veh/h/ln	860	0	0	1597	0	1580	1774	1770	1825	1774	1770	1732
Q Serve(g_s), s	5.8	0.0	0.0	0.0	0.0	18.0	0.2	16.0	16.0	1.2	11.0	11.0
Cycle Q Clear(g_c), s	6.2	0.0	0.0	0.3	0.0	18.0	0.2	16.0	16.0	1.2	11.0	11.0
Prop In Lane	0.85		0.08	0.67		1.00	1.00		0.09	1.00		0.36
Lane Grp Cap(c), veh/h	463	0	0	727	0	595	11	593	611	66	647	633
V/C Ratio(X)	0.33	0.00	0.00	0.02	0.00	1.11	0.53	1.18	1.19	0.67	0.73	0.73
Avail Cap(c_a), veh/h	463	0	0	727	0	595	149	593	611	149	647	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.1	0.0	0.0	9.4	0.0	14.9	23.7	15.9	15.9	22.7	13.1	13.1
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.0	0.0	69.2	33.1	97.6	99.3	11.2	7.1	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	0.2	0.0	19.2	0.2	23.6	24.7	0.8	6.6	6.5
LnGrp Delay(d),s/veh	11.5	0.0	0.0	9.4	0.0	84.1	56.7	113.5	115.1	33.9	20.2	20.4
LnGrp LOS	B			A		F	E	F	F	C	C	C
Approach Vol, veh/h		155			676			1430			978	
Approach Delay, s/veh		11.5			82.1			114.1			20.9	
Approach LOS		B			F			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	20.0		22.0	4.3	21.5		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	16.0		18.0	4.0	16.0		18.0
Max Q Clear Time (g_c+I1), s	3.2	18.0		8.2	2.2	13.0		20.0
Green Ext Time (p_c), s	0.0	0.0		3.7	0.0	2.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	74.4
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	60	550	110	40	770
Future Vol, veh/h	20	60	550	110	40	770
Conflicting Peds, #/hr	0	0	0	9	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	0	25	-	0	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	91	91	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	75	604	121	45	875

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1570	604	0	-	604	0
Stage 1	604	-	-	-	-	-
Stage 2	966	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	122	498	-	0	974	-
Stage 1	546	-	-	0	-	-
Stage 2	369	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	116	498	-	-	974	-
Mov Cap-2 Maneuver	116	-	-	-	-	-
Stage 1	546	-	-	-	-	-
Stage 2	352	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.2	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	116	498	974	-
HCM Lane V/C Ratio	-	0.216	0.151	0.047	-
HCM Control Delay (s)	-	44.4	13.5	8.9	-
HCM Lane LOS	-	E	B	A	-
HCM 95th %tile Q(veh)	-	0.8	0.5	0.1	-

Intersection	
Int Delay, s/veh	6.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	100	580	200	210	570
Future Vol, veh/h	30	100	580	200	210	570
Conflicting Peds, #/hr	0	0	0	5	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	132	637	220	231	626

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1840	434	0	0	862	0
Stage 1	752	-	-	-	-	-
Stage 2	1088	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	74	571	-	-	778	-
Stage 1	427	-	-	-	-	-
Stage 2	322	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	52	568	-	-	778	-
Mov Cap-2 Maneuver	52	-	-	-	-	-
Stage 1	425	-	-	-	-	-
Stage 2	226	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	52.4	0	3.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	52	568	778	-
HCM Lane V/C Ratio	-	-	0.759	0.232	0.297	-
HCM Control Delay (s)	-	-	183.1	13.2	11.6	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	3.1	0.9	1.2	-

Intersection	
Int Delay, s/veh	4.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	260	520	70	300	310
Future Vol, veh/h	70	260	520	70	300	310
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	0	0	-	150	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	88	88	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	289	591	80	313	323

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1539	-	0	-	591	0
Stage 1	591	-	-	-	-	-
Stage 2	948	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	127	0	-	0	985	-
Stage 1	553	0	-	0	-	-
Stage 2	377	0	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	87	-	-	-	985	-
Mov Cap-2 Maneuver	193	-	-	-	-	-
Stage 1	553	-	-	-	-	-
Stage 2	257	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	35.7	0	5.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	193	-	985	-
HCM Lane V/C Ratio	-	0.403	-	0.317	-
HCM Control Delay (s)	-	35.7	0	10.3	-
HCM Lane LOS	-	E	A	B	-
HCM 95th %tile Q(veh)	-	1.8	-	1.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	50	20	20	60	120	10	950	30	30	680	20
Future Volume (veh/h)	50	50	20	20	60	120	10	950	30	30	680	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.95	1.00		0.95	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	81	81	16	29	88	123	12	1131	30	34	782	23
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.62	0.62	0.62	0.68	0.68	0.68	0.84	0.84	0.84	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	388	387	76	96	174	213	454	2141	57	412	2135	63
Arrive On Green	0.26	0.26	0.24	0.26	0.26	0.24	1.00	1.00	1.00	0.61	0.61	0.59
Sat Flow, veh/h	1148	1500	296	112	675	827	673	3517	93	479	3507	103
Grp Volume(v), veh/h	81	0	97	240	0	0	12	569	592	34	394	411
Grp Sat Flow(s),veh/h/ln	1148	0	1797	1614	0	0	673	1770	1840	479	1770	1841
Q Serve(g_s), s	0.0	0.0	2.5	1.2	0.0	0.0	0.2	0.0	0.0	1.8	6.7	6.7
Cycle Q Clear(g_c), s	4.3	0.0	2.5	7.6	0.0	0.0	7.0	0.0	0.0	1.8	6.7	6.7
Prop In Lane	1.00		0.16	0.12		0.51	1.00		0.05	1.00		0.06
Lane Grp Cap(c), veh/h	388	0	463	483	0	0	454	1077	1120	412	1077	1121
V/C Ratio(X)	0.21	0.00	0.21	0.50	0.00	0.00	0.03	0.53	0.53	0.08	0.37	0.37
Avail Cap(c_a), veh/h	513	0	659	655	0	0	454	1077	1120	412	1077	1121
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.91	0.91	0.91	0.68	0.68	0.68
Uniform Delay (d), s/veh	18.1	0.0	17.5	19.6	0.0	0.0	0.6	0.0	0.0	4.9	5.9	5.9
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.8	0.0	0.0	0.1	1.7	1.6	0.3	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.3	3.6	0.0	0.0	0.0	0.5	0.5	0.3	3.4	3.5
LnGrp Delay(d),s/veh	18.4	0.0	17.8	20.3	0.0	0.0	0.7	1.7	1.6	5.2	6.6	6.6
LnGrp LOS	B		B	C			A	A	A	A	A	A
Approach Vol, veh/h		178			240			1173			839	
Approach Delay, s/veh		18.0			20.3			1.7			6.5	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		40.5		19.5		40.5		19.5
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		29.0		21.0		29.0		21.0
Max Q Clear Time (g_c+I1), s		9.0		6.3		8.7		9.6
Green Ext Time (p_c), s		14.4		2.3		14.5		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	6.4
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	30	60	10	20	30	20	850	30	10	650	50
Future Volume (veh/h)	80	30	60	10	20	30	20	850	30	10	650	50
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.92	0.95		0.98	0.99		0.95	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	108	41	63	17	34	27	24	1024	36	11	722	56
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.74	0.74	0.74	0.59	0.59	0.59	0.83	0.83	0.83	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	386	431	338	380	220	175	570	2212	78	384	1663	129
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.21	0.13	1.00	1.00	1.00	1.00	0.97
Sat Flow, veh/h	1311	1863	1462	1216	952	756	1774	3482	122	527	3314	257
Grp Volume(v), veh/h	108	41	63	17	0	61	24	520	540	11	385	393
Grp Sat Flow(s),veh/h/ln	1311	1863	1462	1216	0	1708	1774	1770	1834	527	1770	1801
Q Serve(g_s), s	4.3	1.0	2.1	0.7	0.0	1.7	0.3	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	6.0	1.0	2.1	1.7	0.0	1.7	0.3	0.0	0.0	0.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		0.44	1.00		0.07	1.00		0.14
Lane Grp Cap(c), veh/h	386	431	338	380	0	395	570	1124	1165	384	888	904
V/C Ratio(X)	0.28	0.10	0.19	0.04	0.00	0.15	0.04	0.46	0.46	0.03	0.43	0.43
Avail Cap(c_a), veh/h	497	590	463	484	0	541	570	1124	1165	384	888	904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.78	0.78	0.78	0.93	0.93	0.93
Uniform Delay (d), s/veh	20.8	18.1	18.5	18.8	0.0	18.6	4.9	0.0	0.0	0.0	0.0	0.1
Incr Delay (d2), s/veh	0.4	0.1	0.3	0.0	0.0	0.2	0.1	1.1	1.0	0.1	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.5	0.9	0.2	0.0	0.8	0.2	0.3	0.3	0.0	0.4	0.4
LnGrp Delay(d),s/veh	21.2	18.2	18.8	18.8	0.0	18.7	5.0	1.1	1.0	0.1	1.4	1.5
LnGrp LOS	C	B	B	B		B	A	A	A	A	A	A
Approach Vol, veh/h		212			78			1084			789	
Approach Delay, s/veh		19.9			18.8			1.1			1.4	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	8.0	34.1		17.9		42.1		17.9
Change Period (Y+Rc), s	4.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	4.0	24.0		18.0		32.0		18.0
Max Q Clear Time (g_c+I1), s	2.3	2.1		3.7		2.0		8.0
Green Ext Time (p_c), s	0.0	9.6		1.2		10.8		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	3.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	70	30	130	130	140	10	730	140	160	520	50
Future Volume (veh/h)	30	70	30	130	130	140	10	730	140	160	520	50
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.89	0.92		0.91	0.98		0.94	0.99		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	36	84	13	143	143	65	11	830	123	172	559	51
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.83	0.83	0.83	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	368	526	400	416	526	409	482	1382	205	454	1649	150
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.02	0.90	0.87	0.13	1.00	0.98
Sat Flow, veh/h	1113	1863	1415	1192	1863	1447	1774	3065	454	1774	3258	296
Grp Volume(v), veh/h	36	84	13	143	143	65	11	479	474	172	303	307
Grp Sat Flow(s),veh/h/ln	1113	1863	1415	1192	1863	1447	1774	1770	1750	1774	1770	1784
Q Serve(g_s), s	1.6	2.0	0.4	6.1	3.6	2.0	0.2	3.5	3.8	3.2	0.0	0.1
Cycle Q Clear(g_c), s	5.1	2.0	0.4	8.2	3.6	2.0	0.2	3.5	3.8	3.2	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		0.17
Lane Grp Cap(c), veh/h	368	526	400	416	526	409	482	798	789	454	896	903
V/C Ratio(X)	0.10	0.16	0.03	0.34	0.27	0.16	0.02	0.60	0.60	0.38	0.34	0.34
Avail Cap(c_a), veh/h	387	559	425	437	559	434	581	798	789	454	896	903
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93	0.86	0.86	0.86
Uniform Delay (d), s/veh	18.7	16.2	15.6	19.2	16.7	16.2	9.2	1.8	2.0	7.3	0.0	0.1
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.5	0.3	0.2	0.0	3.1	3.1	0.4	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.1	0.2	2.1	1.9	0.8	0.1	2.0	2.1	1.5	0.2	0.2
LnGrp Delay(d),s/veh	18.8	16.3	15.6	19.7	17.0	16.3	9.2	4.9	5.1	7.8	0.9	0.9
LnGrp LOS	B	B	B	B	B	B	A	A	A	A	A	A
Approach Vol, veh/h		133			351			964			782	
Approach Delay, s/veh		16.9			18.0			5.1			2.4	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	34.4		21.0	8.0	31.0		21.0
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	25.0		17.0	4.0	25.0		17.0
Max Q Clear Time (g_c+I1), s	2.2	2.1		10.2	5.2	5.8		7.1
Green Ext Time (p_c), s	0.0	12.2		1.5	0.0	11.0		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	6.9
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	30	150	60	50	870	0	0	380	350
Future Volume (veh/h)	0	0	0	30	150	60	50	870	0	0	380	350
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.89	0.99		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				34	172	18	54	946	0	0	400	262
Adj No. of Lanes				0	3	0	1	2	0	0	1	1
Peak Hour Factor				0.87	0.87	0.87	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				141	757	79	615	2291	0	0	1206	995
Arrive On Green				0.20	0.19	0.19	0.65	0.65	0.00	0.00	1.00	1.00
Sat Flow, veh/h				756	4068	423	765	3632	0	0	1863	1538
Grp Volume(v), veh/h				82	68	74	54	946	0	0	400	262
Grp Sat Flow(s),veh/h/ln				1825	1695	1726	765	1770	0	0	1863	1538
Q Serve(g_s), s				2.3	2.1	2.2	1.6	7.7	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				2.3	2.1	2.2	1.6	7.7	0.0	0.0	0.0	0.0
Prop In Lane				0.41		0.24	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				340	315	321	615	2291	0	0	1206	995
V/C Ratio(X)				0.24	0.22	0.23	0.09	0.41	0.00	0.00	0.33	0.26
Avail Cap(c_a), veh/h				669	622	633	615	2291	0	0	1206	995
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.96	0.96
Uniform Delay (d), s/veh				20.6	20.7	20.8	4.0	5.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.4	0.3	0.4	0.3	0.6	0.0	0.0	0.7	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	1.0	1.1	0.4	3.9	0.0	0.0	0.2	0.2
LnGrp Delay(d),s/veh				21.0	21.0	21.1	4.3	5.6	0.0	0.0	0.7	0.6
LnGrp LOS				C	C	C	A	A			A	A
Approach Vol, veh/h					224			1000			662	
Approach Delay, s/veh					21.1			5.6			0.7	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		43.8		16.2		43.8		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		28.0		22.0		28.0		
Max Q Clear Time (g_c+I1), s		0.0		4.3		0.0		
Green Ext Time (p_c), s		0.0		1.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		5.7
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	270	90	110	290	10	120	140	130	20	120	20
Future Volume (veh/h)	10	270	90	110	290	10	120	140	130	20	120	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		0.95	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	284	87	128	337	6	130	152	113	25	152	19
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.86	0.86	0.86	0.92	0.92	0.92	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	431	601	486	461	730	588	469	300	223	388	490	61
Arrive On Green	0.00	0.32	0.32	0.05	0.39	0.39	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1774	1863	1507	1774	1863	1500	1198	991	737	1106	1617	202
Grp Volume(v), veh/h	11	284	87	128	337	6	130	0	265	25	0	171
Grp Sat Flow(s),veh/h/ln	1774	1863	1507	1774	1863	1500	1198	0	1728	1106	0	1819
Q Serve(g_s), s	0.1	4.6	1.6	1.8	5.0	0.1	3.5	0.0	4.7	0.7	0.0	2.7
Cycle Q Clear(g_c), s	0.1	4.6	1.6	1.8	5.0	0.1	6.2	0.0	4.7	5.4	0.0	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.43	1.00		0.11
Lane Grp Cap(c), veh/h	431	601	486	461	730	588	469	0	524	388	0	551
V/C Ratio(X)	0.03	0.47	0.18	0.28	0.46	0.01	0.28	0.00	0.51	0.06	0.00	0.31
Avail Cap(c_a), veh/h	1042	1440	1165	980	1440	1160	712	0	875	672	0	1018
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.1	10.2	9.1	8.5	8.5	7.0	12.4	0.0	10.8	13.0	0.0	10.0
Incr Delay (d2), s/veh	0.0	0.6	0.2	0.3	0.5	0.0	0.3	0.0	0.8	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.4	0.7	0.9	2.6	0.0	1.2	0.0	2.3	0.2	0.0	1.4
LnGrp Delay(d),s/veh	10.1	10.7	9.3	8.8	8.9	7.0	12.8	0.0	11.5	13.1	0.0	10.4
LnGrp LOS	B	B	A	A	A	A	B		B	B		B
Approach Vol, veh/h		382			471			395			196	
Approach Delay, s/veh		10.4			8.9			11.9			10.7	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	3.4	18.7		15.4	6.0	16.1		15.4
Change Period (Y+Rc), s	3.0	4.0		4.0	3.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	29.0		19.0	14.0	29.0		21.0
Max Q Clear Time (g_c+I1), s	2.1	7.0		8.2	3.8	6.6		7.4
Green Ext Time (p_c), s	0.0	4.5		2.7	0.3	4.5		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	390	30	200	260	30	30	350	200	20	250	100
Future Volume (veh/h)	90	390	30	200	260	30	30	350	200	20	250	100
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	96	415	22	235	306	35	33	385	186	22	275	90
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.85	0.85	0.85	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	706	568	264	874	713	230	364	176	96	414	135
Arrive On Green	0.06	0.38	0.38	0.15	0.47	0.47	0.31	0.31	0.32	0.31	0.31	0.32
Sat Flow, veh/h	1774	1863	1498	1774	1863	1521	1010	1164	563	838	1324	433
Grp Volume(v), veh/h	96	415	22	235	306	35	33	0	571	22	0	365
Grp Sat Flow(s),veh/h/ln	1774	1863	1498	1774	1863	1521	1010	0	1727	838	0	1757
Q Serve(g_s), s	4.0	13.4	0.7	9.8	7.8	0.9	2.2	0.0	23.5	0.0	0.0	13.5
Cycle Q Clear(g_c), s	4.0	13.4	0.7	9.8	7.8	0.9	15.7	0.0	23.5	23.5	0.0	13.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		0.25
Lane Grp Cap(c), veh/h	104	706	568	264	874	713	230	0	540	96	0	549
V/C Ratio(X)	0.92	0.59	0.04	0.89	0.35	0.05	0.14	0.00	1.06	0.23	0.00	0.66
Avail Cap(c_a), veh/h	425	706	568	425	874	713	230	0	540	96	0	549
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.2	18.7	14.7	31.4	12.7	10.8	29.3	0.0	25.8	37.6	0.0	22.4
Incr Delay (d2), s/veh	25.2	3.6	0.1	13.1	1.1	0.1	0.3	0.0	54.9	1.2	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	7.5	0.3	5.7	4.3	0.4	0.6	0.0	19.3	0.5	0.0	6.9
LnGrp Delay(d),s/veh	60.4	22.2	14.8	44.5	13.8	11.0	29.5	0.0	80.7	38.8	0.0	25.4
LnGrp LOS	E	C	B	D	B	B	C		F	D		C
Approach Vol, veh/h		533			576			604			387	
Approach Delay, s/veh		28.8			26.1			77.9			26.2	
Approach LOS		C			C			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.2	32.5		27.5	8.4	39.3		27.5
Change Period (Y+Rc), s	3.0	3.5		3.5	3.0	3.5		3.5
Max Green Setting (Gmax), s	19.0	29.0		24.0	19.0	29.0		24.0
Max Q Clear Time (g_c+I1), s	11.8	15.4		25.5	6.0	9.8		25.5
Green Ext Time (p_c), s	0.5	4.2		0.0	0.2	4.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	41.7
HCM 2010 LOS	D

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations			↕				↕				↕				↕	
Traffic Vol, veh/h	0	10	50	10	0	70	110	20	0	10	60	80	0	40	40	50
Future Vol, veh/h	0	10	50	10	0	70	110	20	0	10	60	80	0	40	40	50
Peak Hour Factor	0.92	0.81	0.81	0.81	0.92	0.86	0.86	0.86	0.92	0.90	0.90	0.90	0.92	0.71	0.71	0.71
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	12	62	12	0	81	128	23	0	11	67	89	0	56	56	70
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.8	10.2	9	9.3
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	14%	35%	31%
Vol Thru, %	40%	71%	55%	31%
Vol Right, %	53%	14%	10%	38%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	150	70	200	130
LT Vol	10	10	70	40
Through Vol	60	50	110	40
RT Vol	80	10	20	50
Lane Flow Rate	167	86	233	183
Geometry Grp	1	1	1	1
Degree of Util (X)	0.215	0.12	0.314	0.242
Departure Headway (Hd)	4.641	4.997	4.867	4.753
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	768	710	733	751
Service Time	2.705	3.076	2.934	2.816
HCM Lane V/C Ratio	0.217	0.121	0.318	0.244
HCM Control Delay	9	8.8	10.2	9.3
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.8	0.4	1.3	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	80	510	70	60	240	0	0	130	180
Future Volume (veh/h)	0	0	0	80	510	70	60	240	0	0	130	180
Number				5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.59	0.86		1.00	1.00		0.74
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				83	531	68	73	293	0	0	141	182
Adj No. of Lanes				0	3	0	1	1	0	0	1	1
Peak Hour Factor				0.96	0.96	0.96	0.82	0.82	0.82	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				278	1864	233	407	714	0	0	714	446
Arrive On Green				0.48	0.48	0.47	0.77	0.77	0.00	0.00	0.13	0.13
Sat Flow, veh/h				575	3856	482	909	1863	0	0	1863	1164
Grp Volume(v), veh/h				265	222	195	73	293	0	0	141	182
Grp Sat Flow(s),veh/h/ln				1834	1695	1383	909	1863	0	0	1863	1164
Q Serve(g_s), s				5.2	4.7	5.1	2.1	3.2	0.0	0.0	4.1	8.6
Cycle Q Clear(g_c), s				5.2	4.7	5.1	6.2	3.2	0.0	0.0	4.1	8.6
Prop In Lane				0.31		0.35	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				886	819	669	407	714	0	0	714	446
V/C Ratio(X)				0.30	0.27	0.29	0.18	0.41	0.00	0.00	0.20	0.41
Avail Cap(c_a), veh/h				886	819	669	407	714	0	0	714	446
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				9.4	9.2	9.4	5.9	4.7	0.0	0.0	17.9	19.9
Incr Delay (d2), s/veh				0.9	0.8	1.1	1.0	1.7	0.0	0.0	0.6	2.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.9	2.3	2.1	0.6	1.8	0.0	0.0	2.2	3.1
LnGrp Delay(d),s/veh				10.2	10.0	10.5	6.9	6.4	0.0	0.0	18.6	22.7
LnGrp LOS				B	B	B	A	A			B	C
Approach Vol, veh/h					682			366			323	
Approach Delay, s/veh					10.3			6.5			20.9	
Approach LOS					B			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		28.0		22.0				22.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary		
HCM 2010 Ctrl Delay		11.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	50	520	40	60	90	0	0	50	70
Future Volume (veh/h)	0	0	0	50	520	40	60	90	0	0	50	70
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.44	0.88		1.00	1.00		0.85
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1863
Adj Flow Rate, veh/h				53	553	39	76	114	0	0	57	69
Adj No. of Lanes				0	3	0	0	1	0	0	1	1
Peak Hour Factor				0.94	0.94	0.94	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				130	1413	97	368	518	0	0	993	715
Arrive On Green				0.11	0.11	0.10	0.53	0.53	0.00	0.00	0.53	0.53
Sat Flow, veh/h				390	4239	291	532	972	0	0	1863	1340
Grp Volume(v), veh/h				251	209	185	190	0	0	0	57	69
Grp Sat Flow(s),veh/h/ln				1843	1695	1382	1504	0	0	0	1863	1340
Q Serve(g_s), s				7.6	6.9	7.5	0.2	0.0	0.0	0.0	0.9	1.5
Cycle Q Clear(g_c), s				7.6	6.9	7.5	3.2	0.0	0.0	0.0	0.9	1.5
Prop In Lane				0.21		0.21	0.40		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				614	565	461	886	0	0	0	993	715
V/C Ratio(X)				0.41	0.37	0.40	0.21	0.00	0.00	0.00	0.06	0.10
Avail Cap(c_a), veh/h				614	565	461	886	0	0	0	993	715
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				21.2	20.9	21.2	7.3	0.0	0.0	0.0	6.7	6.9
Incr Delay (d2), s/veh				2.0	1.9	2.6	0.6	0.0	0.0	0.0	0.1	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.2	3.5	3.2	1.8	0.0	0.0	0.0	0.5	0.6
LnGrp Delay(d),s/veh				23.2	22.7	23.8	7.8	0.0	0.0	0.0	6.8	7.2
LnGrp LOS				C	C	C	A				A	A
Approach Vol, veh/h					645			190			126	
Approach Delay, s/veh					23.2			7.8			7.0	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		36.0				36.0		24.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		31.0				31.0		19.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		18.0
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	70	470	40	90	230	0	0	90	60
Future Volume (veh/h)	0	0	0	70	470	40	90	230	0	0	90	60
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.87	0.92		1.00	1.00		0.85
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				73	490	38	103	264	0	0	117	64
Adj No. of Lanes				0	3	0	0	1	0	0	1	0
Peak Hour Factor				0.96	0.96	0.96	0.87	0.87	0.87	0.77	0.77	0.77
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				282	2019	159	216	509	0	0	425	232
Arrive On Green				0.47	0.47	0.45	0.40	0.40	0.00	0.00	0.40	0.38
Sat Flow, veh/h				605	4327	340	349	1272	0	0	1062	581
Grp Volume(v), veh/h				221	185	195	367	0	0	0	0	181
Grp Sat Flow(s),veh/h/ln				1832	1695	1744	1621	0	0	0	0	1643
Q Serve(g_s), s				4.4	3.9	4.0	5.0	0.0	0.0	0.0	0.0	4.5
Cycle Q Clear(g_c), s				4.4	3.9	4.0	9.8	0.0	0.0	0.0	0.0	4.5
Prop In Lane				0.33		0.20	0.28		0.00	0.00		0.35
Lane Grp Cap(c), veh/h				855	791	814	725	0	0	0	0	657
V/C Ratio(X)				0.26	0.23	0.24	0.51	0.00	0.00	0.00	0.00	0.28
Avail Cap(c_a), veh/h				855	791	814	725	0	0	0	0	657
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				9.7	9.6	9.7	13.6	0.0	0.0	0.0	0.0	12.3
Incr Delay (d2), s/veh				0.7	0.7	0.7	2.5	0.0	0.0	0.0	0.0	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.4	2.0	2.1	5.1	0.0	0.0	0.0	0.0	2.2
LnGrp Delay(d),s/veh				10.4	10.3	10.4	16.1	0.0	0.0	0.0	0.0	13.3
LnGrp LOS				B	B	B	B					B
Approach Vol, veh/h					601			367			181	
Approach Delay, s/veh					10.4			16.1			13.3	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.0		32.0		28.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		23.0		27.0		23.0		
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		
Green Ext Time (p_c), s		0.0		0.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		12.7
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	290	30	0	0	0	0	310	40	110	320	0
Future Volume (veh/h)	520	290	30	0	0	0	0	310	40	110	320	0
Number	5	2	12				3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94				1.00		0.97	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	592	242	26				0	378	31	124	360	0
Adj No. of Lanes	2	1	0				0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95				0.82	0.82	0.82	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1699	786	84				0	657	54	325	722	0
Arrive On Green	0.48	0.48	0.48				0.00	0.39	0.37	0.39	0.39	0.00
Sat Flow, veh/h	3548	1642	176				0	1694	139	966	1863	0
Grp Volume(v), veh/h	592	0	268				0	0	409	124	360	0
Grp Sat Flow(s),veh/h/ln	1774	0	1819				0	0	1833	966	1863	0
Q Serve(g_s), s	6.3	0.0	5.4				0.0	0.0	10.6	7.0	8.8	0.0
Cycle Q Clear(g_c), s	6.3	0.0	5.4				0.0	0.0	10.6	17.5	8.8	0.0
Prop In Lane	1.00		0.10				0.00		0.08	1.00		0.00
Lane Grp Cap(c), veh/h	1699	0	871				0	0	711	325	722	0
V/C Ratio(X)	0.35	0.00	0.31				0.00	0.00	0.58	0.38	0.50	0.00
Avail Cap(c_a), veh/h	1699	0	871				0	0	794	369	807	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.8	0.0	9.6				0.0	0.0	14.5	21.4	13.9	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.9				0.0	0.0	0.8	0.7	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	2.9				0.0	0.0	5.5	1.9	4.6	0.0
LnGrp Delay(d),s/veh	10.3	0.0	10.5				0.0	0.0	15.3	22.1	14.5	0.0
LnGrp LOS	B		B						B	C	B	
Approach Vol, veh/h		860						409			484	
Approach Delay, s/veh		10.4						15.3			16.4	
Approach LOS		B						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		32.7		27.3				27.3
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		25.0		25.0				25.0
Max Q Clear Time (g_c+I1), s		8.3		19.5				12.6
Green Ext Time (p_c), s		4.6		2.7				4.9

Intersection Summary	
HCM 2010 Ctrl Delay	13.2
HCM 2010 LOS	B

Notes

Intersection	
Intersection Delay, s/veh	12.8
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Vol, veh/h	0	0	0	0	0	10	170	20	0	10	270	0	0	0	220	170
Future Vol, veh/h	0	0	0	0	0	10	170	20	0	10	270	0	0	0	220	170
Peak Hour Factor	0.92	1.00	1.00	1.00	0.92	0.69	0.69	0.69	0.92	0.88	0.88	0.88	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	14	246	29	0	11	307	0	0	0	262	202
Number of Lanes	0	0	0	0	0	0	2	0	0	0	1	0	0	0	1	1

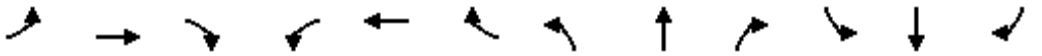
Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	11.5	15.7	11.7
HCM LOS	B	C	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	4%	11%	0%	0%	0%
Vol Thru, %	96%	89%	81%	100%	0%
Vol Right, %	0%	0%	19%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	280	95	105	220	170
LT Vol	10	10	0	0	0
Through Vol	270	85	85	220	0
RT Vol	0	0	20	0	170
Lane Flow Rate	318	138	152	262	202
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.532	0.252	0.271	0.429	0.291
Departure Headway (Hd)	6.022	6.593	6.404	5.893	5.183
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	598	545	562	610	692
Service Time	4.055	4.33	4.141	3.626	2.917
HCM Lane V/C Ratio	0.532	0.253	0.27	0.43	0.292
HCM Control Delay	15.7	11.5	11.5	13	10
HCM Lane LOS	C	B	B	B	A
HCM 95th-tile Q	3.1	1	1.1	2.1	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	70	10	120	30	10	10	370	190	40	340	10
Future Volume (veh/h)	10	70	10	120	30	10	10	370	190	40	340	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.96	0.99		0.93	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	11	80	2	135	34	5	12	440	194	47	395	12
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.84	0.84	0.84	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	308	7	312	61	8	708	869	383	530	1287	39
Arrive On Green	0.18	0.18	0.16	0.18	0.18	0.16	0.69	0.69	0.67	0.69	0.69	0.67
Sat Flow, veh/h	112	1736	41	1154	344	44	971	1261	556	789	1868	57
Grp Volume(v), veh/h	93	0	0	174	0	0	12	0	634	47	0	407
Grp Sat Flow(s),veh/h/ln	1889	0	0	1542	0	0	971	0	1817	789	0	1925
Q Serve(g_s), s	0.0	0.0	0.0	3.4	0.0	0.0	0.3	0.0	10.1	1.8	0.0	5.0
Cycle Q Clear(g_c), s	2.5	0.0	0.0	5.9	0.0	0.0	5.3	0.0	10.1	11.9	0.0	5.0
Prop In Lane	0.12		0.02	0.78		0.03	1.00		0.31	1.00		0.03
Lane Grp Cap(c), veh/h	403	0	0	381	0	0	708	0	1252	530	0	1326
V/C Ratio(X)	0.23	0.00	0.00	0.46	0.00	0.00	0.02	0.00	0.51	0.09	0.00	0.31
Avail Cap(c_a), veh/h	781	0	0	678	0	0	708	0	1252	530	0	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.3	0.0	0.0	22.6	0.0	0.0	4.7	0.0	4.5	7.3	0.0	3.7
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.9	0.0	0.0	0.0	0.0	1.5	0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	2.7	0.0	0.0	0.1	0.0	5.5	0.4	0.0	2.8
LnGrp Delay(d),s/veh	21.6	0.0	0.0	23.4	0.0	0.0	4.8	0.0	6.0	7.7	0.0	4.3
LnGrp LOS	C			C			A		A	A		A
Approach Vol, veh/h		93			174			646			454	
Approach Delay, s/veh		21.6			23.4			6.0			4.6	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		45.3		14.7		45.3		14.7
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		28.0		22.0		22.0		22.0
Max Q Clear Time (g_c+I1), s		12.1		4.5		13.9		7.9
Green Ext Time (p_c), s		7.3		1.0		4.6		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	8.8
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	450	160	0	0	0	230	0	480	0	330	450
Future Volume (vph)	0	450	160	0	0	0	230	0	480	0	330	450
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.5	3.5				4.0		4.0		4.0	3.5
Lane Util. Factor		0.95	1.00				1.00		1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.97				1.00		0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00				1.00		1.00		1.00	1.00
Frt		1.00	0.85				1.00		0.85		1.00	0.85
Flt Protected		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (prot)		3539	1537				1770		1564		1863	1559
Flt Permitted		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (perm)		3539	1537				1770		1564		1863	1559
Peak-hour factor, PHF	0.94	0.94	0.94	1.00	1.00	1.00	0.83	0.83	0.83	0.89	0.89	0.89
Adj. Flow (vph)	0	479	170	0	0	0	277	0	578	0	371	506
RTOR Reduction (vph)	0	0	74	0	0	0	0	0	11	0	0	160
Lane Group Flow (vph)	0	479	96	0	0	0	277	0	567	0	371	346
Confl. Peds. (#/hr)			5			5			1			10
Confl. Bikes (#/hr)												13
Turn Type		NA	Perm				Prot		Perm		NA	custom
Protected Phases		2					3				4	2
Permitted Phases			2						8			4
Actuated Green, G (s)		15.2	15.2				15.2		37.3		17.9	33.1
Effective Green, g (s)		15.7	15.7				15.4		37.5		18.1	34.1
Actuated g/C Ratio		0.26	0.26				0.25		0.62		0.30	0.56
Clearance Time (s)		4.0	4.0				4.2		4.2		4.2	4.0
Vehicle Extension (s)		3.0	3.0				3.0		3.0		3.0	3.0
Lane Grp Cap (vph)		915	397				449		966		555	875
v/s Ratio Prot		c0.14					0.16				c0.20	0.10
v/s Ratio Perm			0.06						c0.36			0.12
v/c Ratio		0.52	0.24				0.62		0.59		0.67	0.40
Uniform Delay, d1		19.3	17.8				20.0		7.0		18.7	7.5
Progression Factor		1.00	1.00				1.00		1.00		1.00	1.00
Incremental Delay, d2		0.5	0.3				2.5		0.9		3.1	0.3
Delay (s)		19.8	18.1				22.6		7.9		21.7	7.8
Level of Service		B	B				C		A		C	A
Approach Delay (s)		19.4			0.0			12.6			13.7	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	14.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	60.7	Sum of lost time (s)	11.5
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	5	10	60	5	10	10	700	20	5	520	10
Future Volume (veh/h)	20	5	10	60	5	10	10	700	20	5	520	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	24	6	12	83	7	14	11	805	23	6	619	12
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.72	0.72	0.72	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	85	111	477	35	391	435	1061	30	305	1073	21
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	738	326	425	1336	135	1507	792	1800	51	659	1820	35
Grp Volume(v), veh/h	42	0	0	90	0	14	11	0	828	6	0	631
Grp Sat Flow(s),veh/h/ln	1489	0	0	1471	0	1507	792	0	1852	659	0	1855
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.0	17.6	0.4	0.0	11.2
Cycle Q Clear(g_c), s	2.1	0.0	0.0	2.1	0.0	0.4	11.7	0.0	17.6	18.0	0.0	11.2
Prop In Lane	0.57		0.29	0.92		1.00	1.00		0.03	1.00		0.02
Lane Grp Cap(c), veh/h	493	0	0	513	0	391	435	0	1091	305	0	1094
V/C Ratio(X)	0.09	0.00	0.00	0.18	0.00	0.04	0.03	0.00	0.76	0.02	0.00	0.58
Avail Cap(c_a), veh/h	614	0	0	651	0	539	565	0	1395	414	0	1398
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.9	0.0	0.0	15.3	0.0	14.7	10.4	0.0	8.1	14.8	0.0	6.8
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	1.0	0.0	0.2	0.1	0.0	9.3	0.1	0.0	5.8
LnGrp Delay(d),s/veh	15.0	0.0	0.0	15.5	0.0	14.7	10.4	0.0	9.9	14.8	0.0	7.3
LnGrp LOS	B			B		B	B		A	B		A
Approach Vol, veh/h		42			104			839			637	
Approach Delay, s/veh		15.0			15.4			9.9			7.3	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.3		17.8		35.3		17.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		18.0		40.0		19.0
Max Q Clear Time (g_c+I1), s		19.6		4.1		20.0		4.1
Green Ext Time (p_c), s		11.4		0.6		11.3		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	9.4
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	230	320	440	140	20	430	690	510	30	530	50
Future Volume (veh/h)	60	230	320	440	140	20	430	690	510	30	530	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	65	247	213	360	407	20	494	793	395	36	631	48
Adj No. of Lanes	1	1	1	1	1	0	2	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.83	0.83	0.83	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	324	543	379	376	18	606	1323	905	44	740	56
Arrive On Green	0.17	0.17	0.17	0.21	0.21	0.21	0.18	0.37	0.37	0.02	0.22	0.22
Sat Flow, veh/h	1774	1863	1515	1774	1758	86	3442	3539	1515	1774	3329	253
Grp Volume(v), veh/h	65	247	213	360	0	427	494	793	395	36	335	344
Grp Sat Flow(s),veh/h/ln	1774	1863	1515	1774	0	1844	1721	1770	1515	1774	1770	1812
Q Serve(g_s), s	2.4	9.5	8.0	15.0	0.0	16.0	10.3	13.5	10.9	1.5	13.6	13.6
Cycle Q Clear(g_c), s	2.4	9.5	8.0	15.0	0.0	16.0	10.3	13.5	10.9	1.5	13.6	13.6
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	309	324	543	379	0	394	606	1323	905	44	394	403
V/C Ratio(X)	0.21	0.76	0.39	0.95	0.00	1.08	0.82	0.60	0.44	0.82	0.85	0.85
Avail Cap(c_a), veh/h	379	398	603	379	0	394	735	1323	905	95	394	403
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	29.4	18.4	29.1	0.0	29.4	29.7	18.9	8.6	36.4	27.9	27.9
Incr Delay (d2), s/veh	0.3	6.7	0.5	33.4	0.0	69.7	5.9	2.0	1.5	29.6	16.2	16.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	5.5	3.4	10.8	0.0	15.6	5.4	7.0	7.3	1.1	8.4	8.6
LnGrp Delay(d),s/veh	26.8	36.2	18.9	62.5	0.0	99.1	35.6	20.9	10.2	65.9	44.1	44.0
LnGrp LOS	C	D	B	E		F	D	C	B	E	D	D
Approach Vol, veh/h		525			787			1682			715	
Approach Delay, s/veh		28.0			82.4			22.7			45.2	
Approach LOS		C			F			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	32.0		17.0	17.2	20.7		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	28.0		16.0	16.0	16.0		16.0
Max Q Clear Time (g_c+I1), s	3.5	15.5		11.5	12.3	15.6		18.0
Green Ext Time (p_c), s	0.0	8.7		1.1	0.8	0.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.4
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1080	120	170	860	10	610	20	200	20	10	10
Future Volume (veh/h)	30	1080	120	170	860	10	610	20	200	20	10	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	32	1149	114	183	925	11	752	0	204	22	25	6
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.93	0.93	0.93	0.83	0.83	0.83	0.66	0.66	0.66
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	1310	130	210	1935	23	916	0	596	305	320	271
Arrive On Green	0.02	0.28	0.28	0.12	0.37	0.37	0.26	0.00	0.26	0.17	0.17	0.17
Sat Flow, veh/h	1774	4687	465	1774	5178	62	3548	0	1583	1774	1863	1578
Grp Volume(v), veh/h	32	831	432	183	605	331	752	0	204	22	25	6
Grp Sat Flow(s),veh/h/ln	1774	1695	1761	1774	1695	1850	1774	0	1583	1774	1863	1578
Q Serve(g_s), s	1.7	21.8	21.8	9.4	12.7	12.7	18.6	0.0	8.6	1.0	1.0	0.3
Cycle Q Clear(g_c), s	1.7	21.8	21.8	9.4	12.7	12.7	18.6	0.0	8.6	1.0	1.0	0.3
Prop In Lane	1.00		0.26	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	43	948	492	210	1267	691	916	0	596	305	320	271
V/C Ratio(X)	0.75	0.88	0.88	0.87	0.48	0.48	0.82	0.00	0.34	0.07	0.08	0.02
Avail Cap(c_a), veh/h	114	948	492	210	1267	691	916	0	596	305	320	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	32.0	32.0	40.3	22.2	22.2	32.5	0.0	20.8	32.3	32.3	32.0
Incr Delay (d2), s/veh	22.2	11.2	19.4	30.6	1.3	2.4	8.2	0.0	1.6	0.5	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	11.6	13.2	6.4	6.1	6.9	10.1	0.0	4.0	0.5	0.6	0.1
LnGrp Delay(d),s/veh	67.3	43.2	51.4	70.9	23.5	24.6	40.7	0.0	22.3	32.7	32.8	32.1
LnGrp LOS	E	D	D	E	C	C	D		C	C	C	C
Approach Vol, veh/h		1295			1119			956			53	
Approach Delay, s/veh		46.5			31.6			36.8			32.7	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.0	30.0		20.0	6.2	38.8		28.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	11.0	26.0		16.0	6.0	31.0		24.0
Max Q Clear Time (g_c+I1), s	11.4	23.8		3.0	3.7	14.7		20.6
Green Ext Time (p_c), s	0.0	2.0		0.1	0.0	12.1		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	38.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	530	760	0	0	870	170	180	5	120	0	0	0
Future Volume (veh/h)	530	760	0	0	870	170	180	5	120	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900			
Adj Flow Rate, veh/h	546	784	0	0	1000	134	198	5	65			
Adj No. of Lanes	2	2	0	0	2	0	1	1	0			
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.91	0.91	0.91			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	973	2751	0	0	1414	189	242	15	200			
Arrive On Green	0.28	0.78	0.00	0.00	0.45	0.45	0.14	0.14	0.14			
Sat Flow, veh/h	3442	3632	0	0	3224	419	1774	113	1464			
Grp Volume(v), veh/h	546	784	0	0	565	569	198	0	70			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1780	1774	0	1577			
Q Serve(g_s), s	12.6	5.9	0.0	0.0	23.9	24.0	10.1	0.0	3.7			
Cycle Q Clear(g_c), s	12.6	5.9	0.0	0.0	23.9	24.0	10.1	0.0	3.7			
Prop In Lane	1.00		0.00	0.00		0.24	1.00		0.93			
Lane Grp Cap(c), veh/h	973	2751	0	0	799	804	242	0	215			
V/C Ratio(X)	0.56	0.28	0.00	0.00	0.71	0.71	0.82	0.00	0.32			
Avail Cap(c_a), veh/h	973	2751	0	0	799	804	343	0	305			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.75	0.75	1.00	0.00	1.00			
Uniform Delay (d), s/veh	28.4	3.0	0.0	0.0	20.5	20.6	39.0	0.0	36.3			
Incr Delay (d2), s/veh	0.7	0.3	0.0	0.0	3.9	3.9	9.9	0.0	0.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.1	2.9	0.0	0.0	12.5	12.6	5.6	0.0	1.7			
LnGrp Delay(d),s/veh	29.2	3.2	0.0	0.0	24.5	24.5	49.0	0.0	37.1			
LnGrp LOS	C	A			C	C	D		D			
Approach Vol, veh/h		1330			1134			268				
Approach Delay, s/veh		13.9			24.5			45.9				
Approach LOS		B			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		76.3			30.3	46.0		16.7
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		67.0			21.0	42.0		18.0
Max Q Clear Time (g_c+I1), s		7.9			14.6	26.0		12.1
Green Ext Time (p_c), s		10.5			3.9	6.7		0.6

Intersection Summary		
HCM 2010 Ctrl Delay		21.4
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	170	0	300	50	1280	0	0	800	650
Future Volume (veh/h)	0	0	0	170	0	300	50	1280	0	0	800	650
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				202	0	253	60	1524	0	0	860	699
Adj No. of Lanes				0	1	1	1	2	0	0	2	1
Peak Hour Factor				0.84	0.84	0.84	0.84	0.84	0.84	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				695	0	620	1064	3598	0	0	1277	555
Arrive On Green				0.39	0.00	0.39	0.60	1.00	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	3632	1538
Grp Volume(v), veh/h				202	0	253	60	1524	0	0	860	699
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1770	1538
Q Serve(g_s), s				7.6	0.0	11.2	1.4	0.0	0.0	0.0	19.9	35.0
Cycle Q Clear(g_c), s				7.6	0.0	11.2	1.4	0.0	0.0	0.0	19.9	35.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				695	0	620	1064	3598	0	0	1277	555
V/C Ratio(X)				0.29	0.00	0.41	0.06	0.42	0.00	0.00	0.67	1.26
Avail Cap(c_a), veh/h				695	0	620	1064	3598	0	0	1277	555
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.82	0.82	0.00	0.00	0.84	0.84
Uniform Delay (d), s/veh				20.2	0.0	21.4	8.0	0.0	0.0	0.0	26.2	31.0
Incr Delay (d2), s/veh				1.1	0.0	2.0	0.1	0.3	0.0	0.0	2.4	128.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.9	0.0	5.3	0.7	0.2	0.0	0.0	10.1	34.6
LnGrp Delay(d),s/veh				21.3	0.0	23.3	8.1	0.3	0.0	0.0	28.6	159.7
LnGrp LOS				C		C	A	A			C	F
Approach Vol, veh/h					455			1584			1559	
Approach Delay, s/veh					22.4			0.6			87.4	
Approach LOS					C			A			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	15.0	39.0				104.0		42.0
Change Period (Y+Rc), s	4.9	* 4.9				4.9		4.2
Max Green Setting (Gmax), s	12.5	* 34				50.1		37.8
Max Q Clear Time (g_c+I1), s	9.4	37.0				2.0		13.2
Green Ext Time (p_c), s	6.7	0.0				18.7		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	41.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	20	30	340	20	400	40	1200	260	370	960	10
Future Volume (veh/h)	30	20	30	340	20	400	40	1200	260	370	960	10
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	44	29	10	438	0	277	47	1412	227	398	1032	11
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	2	2	0
Peak Hour Factor	0.68	0.68	0.68	0.81	0.81	0.81	0.85	0.85	0.85	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	38	84	766	0	537	60	1428	962	463	1775	19
Arrive On Green	0.05	0.05	0.05	0.22	0.00	0.22	0.03	0.40	0.40	0.13	0.50	0.50
Sat Flow, veh/h	1090	718	1574	3548	0	1502	1774	3539	1536	3442	3586	38
Grp Volume(v), veh/h	73	0	10	438	0	277	47	1412	227	398	509	534
Grp Sat Flow(s),veh/h/ln	1808	0	1574	1774	0	1502	1774	1770	1536	1721	1770	1855
Q Serve(g_s), s	4.3	0.0	0.7	12.0	0.0	16.0	2.9	43.2	7.2	12.3	22.3	22.3
Cycle Q Clear(g_c), s	4.3	0.0	0.7	12.0	0.0	16.0	2.9	43.2	7.2	12.3	22.3	22.3
Prop In Lane	0.60		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	97	0	84	766	0	537	60	1428	962	463	876	918
V/C Ratio(X)	0.76	0.00	0.12	0.57	0.00	0.52	0.78	0.99	0.24	0.86	0.58	0.58
Avail Cap(c_a), veh/h	99	0	87	943	0	612	98	1428	962	505	876	918
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	0.0	49.2	38.2	0.0	28.2	52.3	32.3	9.3	46.2	19.5	19.5
Incr Delay (d2), s/veh	26.9	0.0	0.6	0.7	0.0	0.8	19.5	21.3	0.6	13.2	2.8	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.3	6.0	0.0	6.7	1.7	25.2	4.9	6.7	11.4	12.0
LnGrp Delay(d),s/veh	77.8	0.0	49.8	38.9	0.0	29.0	71.8	53.5	9.8	59.4	22.3	22.2
LnGrp LOS	E		D	D		C	E	D	A	E	C	C
Approach Vol, veh/h		83			715			1686			1441	
Approach Delay, s/veh		74.5			35.1			48.2			32.5	
Approach LOS		E			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.7	60.0		28.6	19.7	50.0		10.8
Change Period (Y+Rc), s	6.0	* 6		5.0	5.0	6.0		5.0
Max Green Setting (Gmax), s	6.0	* 54		29.0	16.0	44.0		6.0
Max Q Clear Time (g_c+I1), s	14.9	24.3		18.0	14.3	45.2		6.3
Green Ext Time (p_c), s	0.2	8.0		2.6	0.3	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.6
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	20	50	1400	1280	10
Future Vol, veh/h	10	20	50	1400	1280	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	180	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	88	88	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	30	57	1591	1561	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2476	787	1573	0	-	0
Stage 1	1567	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	25	334	415	-	-	-
Stage 1	157	-	-	-	-	-
Stage 2	353	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	22	334	415	-	-	-
Mov Cap-2 Maneuver	22	-	-	-	-	-
Stage 1	157	-	-	-	-	-
Stage 2	305	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	174.2	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	415	-	58	-	-
HCM Lane V/C Ratio	0.137	-	0.784	-	-
HCM Control Delay (s)	15	-	174.2	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.5	-	3.4	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	100	1440	60	70	1310
Future Vol, veh/h	30	100	1440	60	70	1310
Conflicting Peds, #/hr	0	0	0	13	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	93	93	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	141	1548	65	79	1472

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2487	819	0	0	1626	0
Stage 1	1594	-	-	-	-	-
Stage 2	893	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 24	319	-	-	396	-
Stage 1	152	-	-	-	-	-
Stage 2	360	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 19	315	-	-	396	-
Mov Cap-2 Maneuver	98	-	-	-	-	-
Stage 1	150	-	-	-	-	-
Stage 2	288	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	35	0	0.8
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	98	315	396	-
HCM Lane V/C Ratio	-	-	0.431	0.447	0.199	-
HCM Control Delay (s)	-	-	67.1	25.4	16.3	-
HCM Lane LOS	-	-	F	D	C	-
HCM 95th %tile Q(veh)	-	-	1.8	2.2	0.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Appendix D.2

Intersection Bicycle LOS Worksheets for 2021 Near-Term No Project Conditions

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	76	5	10	6
Total Flow Rate (veh/h)	569	117	1900	1511
Effct. Green for Bike (s)	22.6	10.5	68.2	75.8
Cross Street Width (ft)	82.0	73.9	69.4	52.1
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	282	131	852	948
Bicycle Delay (s/bike)	61.3	70.0	26.5	22.2
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.28	1.81	4.19	3.60
Bicycle LOS	C	A	D	D

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	62	8	14	0
Total Flow Rate (veh/h)	1060	633	1582	1431
Effct. Green for Bike (s)	17.5	13.3	21.1	20.1
Cross Street Width (ft)	87.8	85.7	63.1	61.6
Through Lanes Number	1	2	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	538	409	649	618
Bicycle Delay (s/bike)	17.9	20.6	14.9	15.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.58	2.32	3.83	2.61
Bicycle LOS	D	B	D	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	19	4	44	1
Total Flow Rate (veh/h)	1054	133	1156	185
Effct. Green for Bike (s)	27.8	10.3	38.4	15.3
Cross Street Width (ft)	60.2	71.4	36.3	60.7
Through Lanes Number	1	1	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	394	146	545	217
Bicycle Delay (s/bike)	45.9	60.7	38.2	56.1
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	4.22	2.87	3.07	2.79
Bicycle LOS	D	C	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	21	5
Total Flow Rate (veh/h)	657	39	443	212
Effct. Green for Bike (s)	16.6	5.7	10.2	10.2
Cross Street Width (ft)	58.5	61.2	24.0	12.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	553	190	340	340
Bicycle Delay (s/bike)	15.7	24.6	20.9	20.7
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.54	2.56	1.01	0.63
Bicycle LOS	D	B	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	5	0
Total Flow Rate (veh/h)	555	554	26	227
Effct. Green for Bike (s)	40.0	20.1	7.8	7.8
Cross Street Width (ft)	55.3	62.1	49.9	36.3
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	684	344	133	133
Bicycle Delay (s/bike)	25.3	40.1	51.1	51.0
Bicycle Compliance	Fair	Poor	Poor	Poor
Bicycle LOS Score	3.32	2.35	2.37	2.49
Bicycle LOS	C	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	0	18	2
Total Flow Rate (veh/h)	60	125	1663	1442
Effct. Green for Bike (s)	8.9	9.7	41.2	43.2
Cross Street Width (ft)	72.8	72.5	38.1	38.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	198	216	916	960
Bicycle Delay (s/bike)	36.7	35.8	13.4	12.2
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.77	2.88	2.23	2.05
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	20	5
Total Flow Rate (veh/h)	332	91	1732	1467
Effct. Green for Bike (s)	11.8	11.8	32.2	32.2
Cross Street Width (ft)	59.9	72.0	23.9	26.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	429	429	1171	1171
Bicycle Delay (s/bike)	17.0	17.0	4.8	4.7
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	3.02	2.81	2.28	2.11
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	16	5
Total Flow Rate (veh/h)	189	792	775	1275
Effct. Green for Bike (s)	18.1	18.1	16.1	16.1
Cross Street Width (ft)	59.9	61.1	35.9	23.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	724	724	644	644
Bicycle Delay (s/bike)	10.2	10.2	11.6	11.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.79	3.80	1.68	1.91
Bicycle LOS	C	D	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	13	1	17	4
Total Flow Rate (veh/h)	67	207	744	1213
Effct. Green for Bike (s)	9.6	9.6	40.4	40.4
Cross Street Width (ft)	60.1	59.9	32.9	35.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	320	320	1347	1347
Bicycle Delay (s/bike)	21.3	21.2	3.2	3.2
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.59	2.82	1.60	2.04
Bicycle LOS	B	C	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	18	5
Total Flow Rate (veh/h)	188	106	631	1093
Effct. Green for Bike (s)	9.5	9.5	43.6	24.0
Cross Street Width (ft)	61.3	60.1	36.1	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	317	317	1453	800
Bicycle Delay (s/bike)	21.3	21.3	2.3	10.8
Bicycle Compliance	Fair	Fair	Good	Fair
Bicycle LOS Score	2.81	2.65	1.56	2.12
Bicycle LOS	C	B	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	2	5	1
Total Flow Rate (veh/h)	126	378	607	1074
Effct. Green for Bike (s)	13.8	13.8	32.3	39.2
Cross Street Width (ft)	61.2	60.9	48.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	460	460	1077	1307
Bicycle Delay (s/bike)	17.8	17.8	6.4	3.6
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.70	3.12	1.72	2.11
Bicycle LOS	B	C	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	3	18	5
Total Flow Rate (veh/h)	0	253	579	908
Effct. Green for Bike (s)	0.0	7.8	42.2	42.2
Cross Street Width (ft)	48.1	60.0	36.0	38.1
Through Lanes Number	0	3	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	260	1407	1407
Bicycle Delay (s/bike)	0.0	22.7	2.7	2.6
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.62	1.52	2.57
Bicycle LOS		B	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	3	1	3
Total Flow Rate (veh/h)	315	597	593	245
Effct. Green for Bike (s)	10.7	23.7	16.5	16.5
Cross Street Width (ft)	35.9	38.6	60.1	47.9
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	285	632	440	440
Bicycle Delay (s/bike)	27.7	17.6	22.8	22.8
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.63	3.14	2.39	2.70
Bicycle LOS	B	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	1	21	9
Total Flow Rate (veh/h)	492	600	551	313
Effct. Green for Bike (s)	29.1	33.7	23.5	23.5
Cross Street Width (ft)	38.0	38.8	48.2	48.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	710	822	573	573
Bicycle Delay (s/bike)	17.1	14.2	21.1	21.0
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.95	3.14	1.92	1.53
Bicycle LOS	C	C	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	6	1	10
Total Flow Rate (veh/h)	0	470	205	303
Effct. Green for Bike (s)	0.0	28.0	22.0	22.0
Cross Street Width (ft)	35.9	48.1	36.1	37.4
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	933	733	733
Bicycle Delay (s/bike)	0.0	8.6	12.0	12.1
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.55	2.45	2.63
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	8	6	4
Total Flow Rate (veh/h)	0	466	123	90
Effct. Green for Bike (s)	0.0	19.0	31.0	31.0
Cross Street Width (ft)	24.0	36.0	36.0	38.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	633	1033	1033
Bicycle Delay (s/bike)	0.0	14.1	7.0	7.0
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.37	2.31	2.29
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	5	2	3
Total Flow Rate (veh/h)	0	523	195	152
Effct. Green for Bike (s)	0.0	27.0	23.0	23.0
Cross Street Width (ft)	23.9	24.1	36.0	36.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	900	767	767
Bicycle Delay (s/bike)	0.0	9.1	11.4	11.4
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.22	2.43	2.36
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	13	0	4	0
Total Flow Rate (veh/h)	829	0	237	593
Effct. Green for Bike (s)	30.4	0.0	19.6	19.6
Cross Street Width (ft)	34.7	48.2	38.5	35.9
Through Lanes Number	2	0	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1013	0	653	653
Bicycle Delay (s/bike)	7.3	0.0	13.6	13.6
Bicycle Compliance	Good		Fair	Fair
Bicycle LOS Score	1.49	0.00	1.47	2.02
Bicycle LOS	A		A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	0	3	5
Total Flow Rate (veh/h)	90	254	641	372
Effct. Green for Bike (s)	16.0	16.0	16.0	16.0
Cross Street Width (ft)	38.0	38.0	26.0	26.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	14.0	14.0	14.0	14.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	800	800	800	800
Bicycle Delay (s/bike)	7.2	7.2	7.2	7.2
Bicycle Compliance	Good	Good	Good	Good
Bicycle LOS Score	1.86	2.13	2.59	2.14
Bicycle LOS	A	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	10
Total Flow Rate (veh/h)	1012	0	506	529
Effct. Green for Bike (s)	24.9	0.0	0.0	18.1
Cross Street Width (ft)	37.6	25.0	24.1	52.2
Through Lanes Number	2	0	0	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	461	0	0	335
Bicycle Delay (s/bike)	32.0	0.0	0.0	37.6
Bicycle Compliance	Poor			Poor
Bicycle LOS Score	2.97	0.00	0.00	2.37
Bicycle LOS	C			B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	2	8	6
Total Flow Rate (veh/h)	64	72	719	692
Effct. Green for Bike (s)	10.9	16.4	32.3	32.3
Cross Street Width (ft)	39.5	37.8	36.2	30.8
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	16.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	325	490	964	964
Bicycle Delay (s/bike)	23.6	19.1	9.0	9.0
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.41	1.18	2.23	3.17
Bicycle LOS	A	A	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	13	4	5	3
Total Flow Rate (veh/h)	710	591	1123	724
Effct. Green for Bike (s)	27.1	27.4	51.2	36.6
Cross Street Width (ft)	87.2	73.8	37.1	62.5
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	399	403	753	538
Bicycle Delay (s/bike)	43.9	43.4	26.5	36.4
Bicycle Compliance	Poor	Poor	Fair	Poor
Bicycle LOS Score	4.07	3.66	1.98	2.04
Bicycle LOS	D	D	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	11	2	1	0
Total Flow Rate (veh/h)	1109	640	1117	48
Effct. Green for Bike (s)	31.0	45.4	16.0	16.0
Cross Street Width (ft)	48.7	48.2	84.8	86.6
Through Lanes Number	3	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	667	976	344	344
Bicycle Delay (s/bike)	20.8	12.2	31.9	31.9
Bicycle Compliance	Fair	Fair	Poor	Poor
Bicycle LOS Score	1.84	1.58	4.70	2.96
Bicycle LOS	A	A	E	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	10	5	0	0
Total Flow Rate (veh/h)	1810	712	290	0
Effct. Green for Bike (s)	72.3	40.3	12.7	0.0
Cross Street Width (ft)	38.7	35.1	92.8	91.2
Through Lanes Number	2	2	1	0
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1555	867	273	0
Bicycle Delay (s/bike)	2.3	15.0	34.7	0.0
Bicycle Compliance	Good	Fair	Poor	
Bicycle LOS Score	2.57	1.61	3.46	0.00
Bicycle LOS	B	A	C	

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	1	4
Total Flow Rate (veh/h)	0	762	953	1133
Effct. Green for Bike (s)	0.0	32.9	55.0	47.7
Cross Street Width (ft)	60.2	73.8	24.0	14.8
Through Lanes Number	0	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	678	1134	984
Bicycle Delay (s/bike)	0.0	21.2	9.1	12.6
Bicycle Compliance		Fair	Good	Fair
Bicycle LOS Score	0.00	3.95	1.86	1.86
Bicycle LOS		D	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	1	15
Total Flow Rate (veh/h)	42	740	1108	1651
Effct. Green for Bike (s)	4.1	17.6	42.9	61.6
Cross Street Width (ft)	81.6	80.9	63.0	56.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	69	298	727	1044
Bicycle Delay (s/bike)	55.0	42.7	23.9	13.6
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.88	2.95	2.37	2.72
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	13	55	1	1
Total Flow Rate (veh/h)	392	577	1516	1649
Effct. Green for Bike (s)	15.9	20.5	75.3	69.8
Cross Street Width (ft)	82.0	73.9	69.4	52.1
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	199	256	941	873
Bicycle Delay (s/bike)	65.3	62.5	22.4	25.4
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.14	2.57	3.87	3.72
Bicycle LOS	C	B	D	D

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	17	58	0	2
Total Flow Rate (veh/h)	711	765	1660	1686
Effct. Green for Bike (s)	16.5	14.3	21.1	20.0
Cross Street Width (ft)	87.8	85.7	63.1	61.5
Through Lanes Number	1	2	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	508	440	649	615
Bicycle Delay (s/bike)	18.2	20.4	14.8	15.6
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.00	2.43	3.89	2.82
Bicycle LOS	C	B	D	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	4	25	10	50
Total Flow Rate (veh/h)	820	244	786	511
Effct. Green for Bike (s)	18.2	18.2	42.6	22.6
Cross Street Width (ft)	60.2	71.1	36.3	60.8
Through Lanes Number	1	1	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	331	331	775	411
Bicycle Delay (s/bike)	38.4	38.8	20.8	35.6
Bicycle Compliance	Poor	Poor	Fair	Poor
Bicycle LOS Score	3.83	3.05	2.76	3.33
Bicycle LOS	D	C	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	9	5
Total Flow Rate (veh/h)	253	33	242	352
Effct. Green for Bike (s)	10.2	5.8	12.2	12.2
Cross Street Width (ft)	58.1	61.2	24.0	12.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	340	193	407	407
Bicycle Delay (s/bike)	20.7	24.5	19.1	19.1
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.87	2.55	0.84	0.75
Bicycle LOS	C	B	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	1	2	8
Total Flow Rate (veh/h)	741	321	14	421
Effct. Green for Bike (s)	27.9	13.1	10.5	10.5
Cross Street Width (ft)	54.0	62.1	49.8	36.3
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	477	224	179	179
Bicycle Delay (s/bike)	34.0	46.2	48.5	48.7
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	3.61	1.97	2.34	2.81
Bicycle LOS	D	A	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	9	2	6
Total Flow Rate (veh/h)	65	261	1656	1546
Effct. Green for Bike (s)	8.4	15.7	37.9	38.4
Cross Street Width (ft)	72.9	72.6	38.1	38.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	187	349	842	853
Bicycle Delay (s/bike)	37.0	30.8	15.1	14.8
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.78	3.10	2.22	2.13
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	8	10
Total Flow Rate (veh/h)	137	73	2159	1697
Effct. Green for Bike (s)	7.8	7.8	36.5	36.5
Cross Street Width (ft)	60.0	72.0	23.9	26.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	284	284	1327	1327
Bicycle Delay (s/bike)	20.3	20.3	3.1	3.1
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.70	2.78	2.63	2.30
Bicycle LOS	B	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	6	8
Total Flow Rate (veh/h)	155	681	1430	978
Effct. Green for Bike (s)	17.5	17.5	16.2	17.6
Cross Street Width (ft)	59.9	61.1	35.9	23.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	700	700	648	704
Bicycle Delay (s/bike)	10.6	10.6	11.5	10.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.73	3.62	2.22	1.66
Bicycle LOS	B	D	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	11	5	5
Total Flow Rate (veh/h)	194	293	1179	839
Effct. Green for Bike (s)	15.7	15.7	36.3	36.3
Cross Street Width (ft)	60.1	59.9	32.5	36.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	523	523	1210	1210
Bicycle Delay (s/bike)	16.4	16.4	4.7	4.7
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.80	2.96	1.96	1.73
Bicycle LOS	C	C	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	5	5
Total Flow Rate (veh/h)	230	102	1084	789
Effct. Green for Bike (s)	11.4	11.4	43.5	25.0
Cross Street Width (ft)	61.3	60.1	36.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	380	380	1450	833
Bicycle Delay (s/bike)	19.7	19.7	2.3	10.2
Bicycle Compliance	Fair	Fair	Good	Fair
Bicycle LOS Score	2.88	2.65	1.93	1.87
Bicycle LOS	C	B	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	5	1	3
Total Flow Rate (veh/h)	156	440	1000	785
Effct. Green for Bike (s)	15.3	15.3	26.5	35.1
Cross Street Width (ft)	61.2	60.8	48.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	510	510	883	1170
Bicycle Delay (s/bike)	16.7	16.7	9.4	5.2
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.75	3.22	2.05	1.87
Bicycle LOS	C	C	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	3	3	8
Total Flow Rate (veh/h)	0	275	1000	768
Effct. Green for Bike (s)	0.0	8.0	42.0	42.0
Cross Street Width (ft)	48.0	60.0	36.0	38.2
Through Lanes Number	0	3	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	267	1400	1400
Bicycle Delay (s/bike)	0.0	22.6	2.7	2.7
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.63	1.86	2.34
Bicycle LOS		B	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	11	0	1
Total Flow Rate (veh/h)	390	477	423	202
Effct. Green for Bike (s)	12.9	20.1	12.0	12.0
Cross Street Width (ft)	35.9	38.6	60.1	48.0
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	344	536	320	320
Bicycle Delay (s/bike)	25.7	20.2	26.5	26.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.75	2.94	2.11	2.63
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	5	4	15
Total Flow Rate (veh/h)	543	576	638	407
Effct. Green for Bike (s)	28.6	35.9	23.6	23.6
Cross Street Width (ft)	38.1	38.7	48.1	48.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	698	876	576	576
Bicycle Delay (s/bike)	17.4	13.0	20.8	21.0
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.04	3.10	2.06	1.68
Bicycle LOS	C	C	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	15	3	11
Total Flow Rate (veh/h)	0	687	366	337
Effct. Green for Bike (s)	0.0	29.0	23.0	23.0
Cross Street Width (ft)	36.0	48.1	36.1	37.4
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	967	767	767
Bicycle Delay (s/bike)	0.0	8.1	11.4	11.5
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.67	2.72	2.69
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	12	9	9
Total Flow Rate (veh/h)	0	649	190	137
Effct. Green for Bike (s)	0.0	20.0	32.0	32.0
Cross Street Width (ft)	24.0	36.0	36.0	38.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	667	1067	1067
Bicycle Delay (s/bike)	0.0	13.4	6.6	6.6
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.47	2.42	2.37
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	8	9	1
Total Flow Rate (veh/h)	0	605	367	195
Effct. Green for Bike (s)	0.0	28.0	24.0	24.0
Cross Street Width (ft)	23.9	24.0	36.0	36.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	933	800	800
Bicycle Delay (s/bike)	0.0	8.6	10.8	10.8
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.26	2.72	2.43
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	0	4	5
Total Flow Rate (veh/h)	884	0	427	484
Effct. Green for Bike (s)	31.9	0.0	20.1	20.1
Cross Street Width (ft)	34.2	48.2	38.5	36.0
Through Lanes Number	2	0	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1063	0	670	670
Bicycle Delay (s/bike)	6.6	0.0	13.3	13.3
Bicycle Compliance	Good		Fair	Fair
Bicycle LOS Score	1.53	0.00	1.78	1.84
Bicycle LOS	A		A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	6	1	6
Total Flow Rate (veh/h)	102	180	678	454
Effct. Green for Bike (s)	13.6	13.6	38.4	38.4
Cross Street Width (ft)	38.0	37.9	26.0	26.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	14.0	14.0	14.0	14.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	453	453	1280	1280
Bicycle Delay (s/bike)	18.0	18.0	3.9	3.9
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.88	2.01	2.65	2.28
Bicycle LOS	A	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	13
Total Flow Rate (veh/h)	649	0	855	877
Effct. Green for Bike (s)	14.7	0.0	0.0	20.0
Cross Street Width (ft)	37.6	25.1	24.2	52.2
Through Lanes Number	2	0	0	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	330	0	0	449
Bicycle Delay (s/bike)	31.0	0.0	0.0	26.9
Bicycle Compliance	Poor			Fair
Bicycle LOS Score	2.67	0.00	0.00	2.95
Bicycle LOS	B			C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	5	6	4	12
Total Flow Rate (veh/h)	42	104	839	637
Effct. Green for Bike (s)	12.8	16.3	36.3	36.3
Cross Street Width (ft)	39.5	37.8	36.2	30.8
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	16.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	382	487	1084	1084
Bicycle Delay (s/bike)	22.0	19.2	7.0	7.1
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.38	1.24	2.43	3.08
Bicycle LOS	A	A	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	13	13	2
Total Flow Rate (veh/h)	656	723	1873	727
Effct. Green for Bike (s)	14.0	16.1	30.3	16.1
Cross Street Width (ft)	87.1	73.6	37.1	62.5
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	350	402	758	402
Bicycle Delay (s/bike)	27.3	25.7	15.5	25.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.97	3.88	2.60	2.04
Bicycle LOS	D	D	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	10	0	0
Total Flow Rate (veh/h)	1309	1119	1000	60
Effct. Green for Bike (s)	26.0	35.0	24.0	16.0
Cross Street Width (ft)	48.7	48.2	84.9	86.6
Through Lanes Number	3	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	559	753	516	344
Bicycle Delay (s/bike)	24.2	18.2	25.6	31.9
Bicycle Compliance	Fair	Fair	Fair	Poor
Bicycle LOS Score	1.95	1.84	4.51	2.98
Bicycle LOS	A	A	E	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	9	1	0
Total Flow Rate (veh/h)	1330	1195	335	0
Effct. Green for Bike (s)	70.1	45.1	14.9	0.0
Cross Street Width (ft)	38.8	35.1	92.6	91.2
Through Lanes Number	2	2	1	0
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	6.0	0.0
Curb Is Present?	Yes	Yes	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1508	970	320	0
Bicycle Delay (s/bike)	2.8	12.4	32.8	0.0
Bicycle Compliance	Good	Fair	Poor	
Bicycle LOS Score	2.18	2.01	2.24	0.00
Bicycle LOS	B	B	B	

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	8	8
Total Flow Rate (veh/h)	0	559	1584	1559
Effct. Green for Bike (s)	0.0	38.0	51.0	33.1
Cross Street Width (ft)	60.2	73.7	24.0	14.8
Through Lanes Number	0	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	784	1052	682
Bicycle Delay (s/bike)	0.0	17.9	11.0	21.1
Bicycle Compliance		Fair	Fair	Fair
Bicycle LOS Score	0.00	3.61	2.38	2.21
Bicycle LOS		D	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	1	14	3
Total Flow Rate (veh/h)	117	939	1765	1441
Effct. Green for Bike (s)	6.0	20.7	44.2	56.0
Cross Street Width (ft)	81.6	80.9	62.9	56.1
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	103	357	762	966
Bicycle Delay (s/bike)	52.2	39.2	22.4	15.5
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.00	3.27	2.91	2.53
Bicycle LOS	C	C	C	B

Appendix D.3

Intersection Pedestrian LOS Worksheets for 2021 Near-Term No Project Conditions

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	96861800
Level of Service	F

Crosswalk	
Length (ft)	80
Lanes Crossed	4
Veh Vol Crossed	2510
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	25.86
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	96861800.00
Avg Ped Delay (s)	96861800.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	8871610
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2510
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	8871610.00
Avg Ped Delay (s)	8871610.00

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.1	69.4	82.0	73.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	0.0	8.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	4	0
Ped. Right-Left Flow Rate (p/h)	8	0	41	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	90	30	180	50
Veh. RTOR Flow in Walk (v/h)	14	3	8	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	1355.6	0.0	1537.8	9112.5
Right Corner Quality of Service	A	-	A	A
Ped. Circulation Area (sq.ft)	855.4	0.0	83.8	0.0
Crosswalk Circulation Code	A	-	A	-
Pedestrian Delay (s/p)	69.4	80.0	72.2	80.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.36	2.49	3.04	3.02
Pedestrian Crosswalk LOS	B	B	C	C

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	23.2
Level of Service	D

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	550
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.84
Prob of Blocked Lane	0.60
Delay for adq Gap	27.45
Avg Ped Delay (s)	23.16

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	24.7
Level of Service	D

Crosswalk	
Length (ft)	33
Lanes Crossed	2
Veh Vol Crossed	550
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.43
Prob of Delayed X-ing	0.85
Prob of Blocked Lane	0.61
Delay for adq Gap	29.09
Avg Ped Delay (s)	24.74

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	61.6	63.1	87.8	85.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	7	7
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	25	7	19
Ped. Right-Left Flow Rate (p/h)	3	2	5	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	260	300	50	50
Veh. RTOR Flow in Walk (v/h)	61	12	0	3
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	4270.5	1445.3	1799.9	2597.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2618.7	453.7	1659.2	860.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	24.1	24.1	24.1	24.1
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.69	2.60	3.01	3.02
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.7	36.3	60.2	71.4
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	19	0	98	0
Ped. Right-Left Flow Rate (p/h)	92	21	6	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	3	13
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	290	10	30	40
Veh. RTOR Flow in Walk (v/h)	29	3	5	7
85th percentile speed (mph)	30	25	35	25
Right Corner Area per Ped (sq.ft)	270.8	3394.2	565.9	576.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	13.3	364.5	76.7	0.0
Crosswalk Circulation Code	E	A	A	-
Pedestrian Delay (s/p)	61.8	61.8	61.8	70.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.70	2.10	2.72	2.52
Pedestrian Crosswalk LOS	B	B	B	B

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	2
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	90
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.26
Prob of Blocked Lane	0.14
Delay for adq Gap	7.81
Avg Ped Delay (s)	2.04

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	2
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	90
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.26
Prob of Blocked Lane	0.14
Delay for adq Gap	7.81
Avg Ped Delay (s)	2.04

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	2229.5
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1040
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.80
Delay for adq Gap	2232.95
Avg Ped Delay (s)	2229.52

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	2229.5
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1040
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.80
Delay for adq Gap	2232.95
Avg Ped Delay (s)	2229.52

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	512.1
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	760
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.69
Delay for adq Gap	516.69
Avg Ped Delay (s)	512.15

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	512.1
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	760
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.69
Delay for adq Gap	516.69
Avg Ped Delay (s)	512.15

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	24.0	58.5	61.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	4	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	3	3	0
Ped. Right-Left Flow Rate (p/h)	12	4	9	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	5
Veh. Perm. R. Flow in Walk (v/h)	80	10	10	0
Veh. RTOR Flow in Walk (v/h)	0	2	0	0
85th percentile speed (mph)	30	25	35	35
Right Corner Area per Ped (sq.ft)	2788.2	10398.8	3819.7	5203.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	451.0	2337.5	1747.4	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	21.7	21.7	21.7	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.04	1.73	2.33	2.58
Pedestrian Crosswalk LOS	B	A	B	B

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	11.3	
Level of Service	C	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	340	150
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.65	0.37
Prob of Blocked Lane	0.41	0.20
Delay for adq Gap	12.90	8.04
Avg Ped Delay (s)	8.33	2.95

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	131.7
Level of Service	F

Crosswalk	
Length (ft)	69
Lanes Crossed	4
Veh Vol Crossed	490
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.71
Prob of Delayed X-ing	0.95
Prob of Blocked Lane	0.54
Delay for adq Gap	137.94
Avg Ped Delay (s)	131.67

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	119.3	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	480	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	0.95	
Prob of Blocked Lane	0.53	
Delay for adq Gap	125.60	
Avg Ped Delay (s)	119.29	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	10.7	
Level of Service	C	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	180	300
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.42	0.60
Prob of Blocked Lane	0.24	0.37
Delay for adq Gap	8.66	11.68
Avg Ped Delay (s)	3.67	7.01

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.3	49.9	55.3	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	7	1
Ped. Right-Left Flow Rate (p/h)	6	1	4	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	183	0	5	40
Veh. Perm. R. Flow in Walk (v/h)	10	60	0	150
Veh. RTOR Flow in Walk (v/h)	0	8	0	80
85th percentile speed (mph)	30	30	25	35
Right Corner Area per Ped (sq.ft)	4239.7	36386.5	6053.8	10414.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	197.4	7562.7	857.4	4923.9
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	50.8	50.8	50.8	50.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.62	2.36	1.75	2.36
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	38.1	72.8	72.5
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	1	0	1
Ped. Right-Left Flow Rate (p/h)	3	4	0	5
Ped. R. Sidewalk Flow Rate (p/h)	0	4	0	0
Veh. Perm. L. Flow in Walk (v/h)	10	60	0	0
Veh. Perm. R. Flow in Walk (v/h)	20	30	150	10
Veh. RTOR Flow in Walk (v/h)	14	7	33	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	24254.4	4844.8	14570.9	8074.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3933.2	1905.4	0.0	2407.8
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	36.5	36.5	45.0	36.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.01	2.15	2.97	2.88
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.9	23.9	59.9	72.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	6	0	2
Ped. Right-Left Flow Rate (p/h)	1	4	0	3
Ped. R. Sidewalk Flow Rate (p/h)	2	1	0	0
Veh. Perm. L. Flow in Walk (v/h)	30	30	40	5
Veh. Perm. R. Flow in Walk (v/h)	210	10	60	490
Veh. RTOR Flow in Walk (v/h)	129	3	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18219.0	4547.2	7275.6	10400.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3775.2	1629.5	0.0	2559.2
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	19.2	19.2	19.2	19.2
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.37	1.82	2.92	2.95
Pedestrian Crosswalk LOS	B	A	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	23.9	35.9	59.9	61.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	3	0	1
Ped. Right-Left Flow Rate (p/h)	1	6	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	90	10	0	0
Veh. Perm. R. Flow in Walk (v/h)	20	650	20	90
Veh. RTOR Flow in Walk (v/h)	0	222	2	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	36439.5	7275.3	8093.0	14575.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	7248.5	0.1	0.0	23375.0
Crosswalk Circulation Code	A	F	-	A
Pedestrian Delay (s/p)	16.8	16.8	16.8	16.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.96	2.52	2.66	2.84
Pedestrian Crosswalk LOS	A	B	B	C

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	19	
Level of Service	C	

Crosswalk		
Length (ft)	16	16
Lanes Crossed	1	1
Veh Vol Crossed	910	360
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	7.57	7.57
Prob of Delayed X-ing	0.85	0.53
Prob of Blocked Lane	0.85	0.53
Delay for adq Gap	17.94	7.06
Avg Ped Delay (s)	15.29	3.75

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	57.9	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	1	2
Veh Vol Crossed	360	910
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.67	0.94
Prob of Blocked Lane	0.67	0.75
Delay for adq Gap	13.55	52.08
Avg Ped Delay (s)	9.04	48.85

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	28	
Level of Service	D	

Crosswalk		
Length (ft)	28	16
Lanes Crossed	2	1
Veh Vol Crossed	670	280
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	7.57
Prob of Delayed X-ing	0.87	0.45
Prob of Blocked Lane	0.64	0.45
Delay for adq Gap	28.99	6.16
Avg Ped Delay (s)	25.25	2.74

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	547.5
Level of Service	F

Crosswalk	
Length (ft)	56
Lanes Crossed	3
Veh Vol Crossed	950
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	19.00
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.81
Delay for adq Gap	551.15
Avg Ped Delay (s)	547.48

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	92
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	720
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.96
Prob of Blocked Lane	0.79
Delay for adq Gap	96.29
Avg Ped Delay (s)	92.01

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	92
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	720
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.96
Prob of Blocked Lane	0.79
Delay for adq Gap	96.29
Avg Ped Delay (s)	92.01

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	35.9	32.9	60.1	59.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	10.0	10.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	5	23	17	7
Ped. Right-Left Flow Rate (p/h)	2	1	1	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	10	20	20	60
Veh. Perm. R. Flow in Walk (v/h)	10	90	20	60
Veh. RTOR Flow in Walk (v/h)	4	40	2	5
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	2896.3	2076.9	1721.4	4037.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3220.2	753.3	1257.1	1867.2
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	20.8	20.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.00	1.92	2.61	2.70
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	36.1	61.3	60.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	7.0	7.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	4	61	12
Ped. Right-Left Flow Rate (p/h)	16	9	7	1
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	6
Veh. Perm. L. Flow in Walk (v/h)	60	5	4	30
Veh. Perm. R. Flow in Walk (v/h)	40	20	10	70
Veh. RTOR Flow in Walk (v/h)	8	4	0	3
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	822.3	2781.7	885.3	1968.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1209.6	1720.3	237.6	1073.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	23.4	23.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.28	1.98	2.56	2.63
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	48.0	61.2	60.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	18	15	5	11
Ped. Right-Left Flow Rate (p/h)	13	3	47	40
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	20	100	1	82
Veh. Perm. R. Flow in Walk (v/h)	20	140	80	50
Veh. RTOR Flow in Walk (v/h)	12	80	23	14
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	872.8	1051.1	1017.9	870.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	763.2	965.9	369.1	350.5
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	21.7	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.22	2.51	2.57	2.70
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.1	36.0	48.1	60.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Pretimed	Pretimed
Corresponding Signal Phase	2	6	0	4
Effective Walk Time (s)	13.0	13.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	18	11	7	35
Ped. Right-Left Flow Rate (p/h)	4	2	3	1
Ped. R. Sidewalk Flow Rate (p/h)	3	4	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	10	40	0
Veh. Perm. R. Flow in Walk (v/h)	0	40	0	320
Veh. RTOR Flow in Walk (v/h)	0	28	0	47
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	2072.7	1358.1	3153.7	1228.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1269.3	1968.7	0.0	488.0
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	18.4	18.4	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.20	2.09	2.41	2.48
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	60.1	35.9	38.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	8	4	6	2
Effective Walk Time (s)	8.0	8.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	5	4	2
Ped. Right-Left Flow Rate (p/h)	2	9	11	5
Ped. R. Sidewalk Flow Rate (p/h)	2	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	110	10
Veh. Perm. R. Flow in Walk (v/h)	90	10	130	10
Veh. RTOR Flow in Walk (v/h)	25	7	30	5
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	3160.0	3451.9	2493.6	5582.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1947.9	1064.7	387.1	2115.1
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	29.9	29.9	29.0	29.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.36	2.50	2.51	2.12
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.1	48.2	38.0	38.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	7	6	3
Ped. Right-Left Flow Rate (p/h)	0	2	7	1
Ped. R. Sidewalk Flow Rate (p/h)	1	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	40	10
Veh. Perm. R. Flow in Walk (v/h)	20	20	150	60
Veh. RTOR Flow in Walk (v/h)	3	0	28	9
85th percentile speed (mph)	30	30	25	25
Right Corner Area per Ped (sq.ft)	4540.6	5591.6	3287.1	10396.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	6338.5	1407.7	416.7	2515.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	33.4	33.4	33.4	33.4
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.38	2.41	2.30	2.18
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	37.4	36.1	35.9	48.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	4	8	0	2
Effective Walk Time (s)	11.0	11.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	30	21	15	33
Ped. Right-Left Flow Rate (p/h)	13	22	21	37
Ped. R. Sidewalk Flow Rate (p/h)	1	13	2	16
Veh. Perm. L. Flow in Walk (v/h)	0	30	20	0
Veh. Perm. R. Flow in Walk (v/h)	0	30	0	120
Veh. RTOR Flow in Walk (v/h)	0	3	0	41
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	900.2	567.7	883.8	552.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	545.6	486.5	0.0	301.3
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	20.0	20.0	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.19	2.19	2.07	2.12
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.0	36.0	24.0	36.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	23	15	23	60
Ped. Right-Left Flow Rate (p/h)	32	39	30	36
Ped. R. Sidewalk Flow Rate (p/h)	15	9	8	15
Veh. Perm. L. Flow in Walk (v/h)	0	40	30	0
Veh. Perm. R. Flow in Walk (v/h)	0	20	0	30
Veh. RTOR Flow in Walk (v/h)	0	1	0	6
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	578.6	441.6	620.6	429.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	350.0	307.8	0.0	184.4
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	21.7	21.7	30.0	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.16	2.21	1.84	1.98
Pedestrian Crosswalk LOS	B	B	A	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.0	23.9	24.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	4
Effective Walk Time (s)	12.0	12.0	0.0	17.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	13	8	11	33
Ped. Right-Left Flow Rate (p/h)	18	7	13	15
Ped. R. Sidewalk Flow Rate (p/h)	3	2	0	15
Veh. Perm. L. Flow in Walk (v/h)	0	100	60	0
Veh. Perm. R. Flow in Walk (v/h)	0	30	0	40
Veh. RTOR Flow in Walk (v/h)	0	4	0	9
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	1242.3	1109.2	1851.8	769.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	819.2	1356.2	0.0	617.9
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	19.2	19.2	30.0	15.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.15	2.32	1.96	1.82
Pedestrian Crosswalk LOS	B	B	A	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	35.9	38.5	34.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	0
Effective Walk Time (s)	11.0	11.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	1	6	0
Ped. Right-Left Flow Rate (p/h)	14	6	5	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	300	0	0	140
Veh. Perm. R. Flow in Walk (v/h)	30	0	20	0
Veh. RTOR Flow in Walk (v/h)	6	0	9	0
85th percentile speed (mph)	25	30	25	25
Right Corner Area per Ped (sq.ft)	2496.5	10392.8	4041.7	3640.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	572.9	3392.2	2027.5	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	20.0	20.0	20.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.58	2.11	1.99	2.57
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.1	26.0	38.0	38.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	11	7	2
Ped. Right-Left Flow Rate (p/h)	4	5	1	4
Ped. R. Sidewalk Flow Rate (p/h)	2	1	1	0
Veh. Perm. L. Flow in Walk (v/h)	10	140	5	10
Veh. Perm. R. Flow in Walk (v/h)	20	5	170	5
Veh. RTOR Flow in Walk (v/h)	10	3	26	0
85th percentile speed (mph)	25	25	25	30
Right Corner Area per Ped (sq.ft)	4545.9	3165.0	2908.8	6067.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	4098.3	1177.8	2806.0	4750.3
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	12.0	12.0	12.0	12.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.75	2.09	2.28	2.18
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.2	24.1	37.6	25.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	2	3	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	0	2	0
Effective Walk Time (s)	11.0	0.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	6	0	0
Ped. Right-Left Flow Rate (p/h)	2	0	0	3
Ped. R. Sidewalk Flow Rate (p/h)	0	0	2	6
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	270	0	280	200
Veh. RTOR Flow in Walk (v/h)	28	0	26	0
85th percentile speed (mph)	30	30	30	45
Right Corner Area per Ped (sq.ft)	18197.8	8100.0	9061.9	5583.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1538.5	0.1	0.0	0.1
Crosswalk Circulation Code	A	F	-	F
Pedestrian Delay (s/p)	43.6	54.0	43.6	54.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.52	2.24	2.35	2.12
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	30.8	36.2	39.5	37.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	1	0	12
Ped. Right-Left Flow Rate (p/h)	1	6	1	7
Ped. R. Sidewalk Flow Rate (p/h)	0	1	4	0
Veh. Perm. L. Flow in Walk (v/h)	30	30	5	5
Veh. Perm. R. Flow in Walk (v/h)	5	5	20	10
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18217.7	2679.1	6069.9	3300.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	6163.4	2794.0	14661.2	779.0
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	23.4	23.4	26.0	26.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.79	2.00	2.40	2.40
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	62.5	37.1	87.2	73.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	7	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	3	5	3
Ped. Right-Left Flow Rate (p/h)	3	3	3	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	420	10	400	40
Veh. RTOR Flow in Walk (v/h)	186	0	157	7
85th percentile speed (mph)	40	30	35	30
Right Corner Area per Ped (sq.ft)	6025.6	5573.5	4830.4	6593.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	1350.3	286.1	1263.8
Crosswalk Circulation Code	F	A	A	A
Pedestrian Delay (s/p)	59.3	59.3	59.3	59.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.89	2.37	3.27	2.57
Pedestrian Crosswalk LOS	C	B	C	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	86.6	84.8	48.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	7	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	9.0	0.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	3	1
Ped. Right-Left Flow Rate (p/h)	2	0	8	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	60	20	500	10
Veh. RTOR Flow in Walk (v/h)	12	2	49	6
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	5589.5	72852.6	6592.8	18225.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	6702.3	0.0	0.0	12894.4
Crosswalk Circulation Code	A	-	F	A
Pedestrian Delay (s/p)	37.9	46.5	37.9	37.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.00	3.04	2.53	2.17
Pedestrian Crosswalk LOS	C	C	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	91.2	92.8	38.7	35.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	6	4	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	Actuated	Actuated	None
Corresponding Signal Phase	0	8	2	6
Effective Walk Time (s)	0.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	7	9	0
Ped. Right-Left Flow Rate (p/h)	0	0	1	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	130	170	0
Veh. RTOR Flow in Walk (v/h)	0	27	38	0
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	7247.3	10414.3	4028.9	0.0
Right Corner Quality of Service	A	A	A	-
Ped. Circulation Area (sq.ft)	0.0	1759.3	620.8	0.0
Crosswalk Circulation Code	-	A	A	-
Pedestrian Delay (s/p)	46.5	37.9	37.9	46.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.00	2.89	1.91	2.05
Pedestrian Crosswalk LOS	C	C	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	14.8	24.0	60.2	73.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	No signal	Actuated	Actuated
Corresponding Signal Phase	2	6	0	8
Effective Walk Time (s)	0.0	50.1	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	230	0	390
Veh. RTOR Flow in Walk (v/h)	0	101	0	0
85th percentile speed (mph)	30	30	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	48.5	11.3	48.5	39.9
Pedestrian Compliance Code	Poor	Fair	Poor	Poor
Pedestrian Crosswalk Score	1.90	2.18	2.80	2.84
Pedestrian Crosswalk LOS	A	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	56.7	63.0	81.6	80.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	5	5	6
Number of Right-Turn Islands	0	1	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	4	0	5
Ped. Right-Left Flow Rate (p/h)	2	2	0	7
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	10	340	260	10
Veh. RTOR Flow in Walk (v/h)	10	182	57	0
85th percentile speed (mph)	30	40	45	35
Right Corner Area per Ped (sq.ft)	18193.0	4025.1	12107.3	4520.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2318.5	187.2	0.0	824.3
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	51.3	51.3	51.3	51.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.00	2.95	3.19	3.00
Pedestrian Crosswalk LOS	A	C	C	C

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	4411540	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	2390	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	1.00	
Prob of Blocked Lane	0.98	
Delay for adq Gap	4411540.00	
Avg Ped Delay (s)	4411540.00	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	237.9	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	1420	970
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.99	0.95
Prob of Blocked Lane	0.89	0.77
Delay for adq Gap	183.11	60.30
Avg Ped Delay (s)	180.72	57.19

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	2330350
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2280
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	2330350.00
Avg Ped Delay (s)	2330350.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	2330350
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2280
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	2330350.00
Avg Ped Delay (s)	2330350.00

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	26771000
Level of Service	F

Crosswalk	
Length (ft)	80
Lanes Crossed	4
Veh Vol Crossed	2320
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	25.86
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	26771000.00
Avg Ped Delay (s)	26771000.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	2938310
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2320
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	2938310.00
Avg Ped Delay (s)	2938310.00

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.1	69.4	82.0	73.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	0.0	8.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	3	0	27	1
Ped. Right-Left Flow Rate (p/h)	6	0	6	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	90	130	110	40
Veh. RTOR Flow in Walk (v/h)	25	17	0	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	1665.3	72800.0	2128.2	7264.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	761.6	0.0	157.5	0.1
Crosswalk Circulation Code	A	-	A	F
Pedestrian Delay (s/p)	69.4	80.0	72.2	80.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.36	2.53	3.04	3.02
Pedestrian Crosswalk LOS	B	B	C	C

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	20.2
Level of Service	D

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	510
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.82
Prob of Blocked Lane	0.58
Delay for adq Gap	24.64
Avg Ped Delay (s)	20.23

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	21.6
Level of Service	D

Crosswalk	
Length (ft)	33
Lanes Crossed	2
Veh Vol Crossed	510
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.43
Prob of Delayed X-ing	0.83
Prob of Blocked Lane	0.59
Delay for adq Gap	26.05
Avg Ped Delay (s)	21.57

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	61.5	63.1	87.8	85.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	7	7
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	11	16	14
Ped. Right-Left Flow Rate (p/h)	4	27	11	24
Ped. R. Sidewalk Flow Rate (p/h)	0	0	2	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	190	240	80	150
Veh. RTOR Flow in Walk (v/h)	85	52	2	67
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	2259.3	942.9	1078.2	1677.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2977.0	362.2	715.5	469.5
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	24.1	24.1	24.1	24.1
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.73	2.66	3.02	3.13
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.8	36.3	60.2	71.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	75	11	48	0
Ped. Right-Left Flow Rate (p/h)	22	13	80	0
Ped. R. Sidewalk Flow Rate (p/h)	1	0	7	12
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	400	20	30	120
Veh. RTOR Flow in Walk (v/h)	15	2	4	8
85th percentile speed (mph)	30	25	35	25
Right Corner Area per Ped (sq.ft)	304.6	3006.1	425.3	628.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	12.6	400.4	83.0	0.0
Crosswalk Circulation Code	E	A	A	-
Pedestrian Delay (s/p)	46.4	46.4	46.4	55.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.64	2.08	2.71	2.49
Pedestrian Crosswalk LOS	B	B	B	B

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	3.4
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	140
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.38
Prob of Blocked Lane	0.21
Delay for adq Gap	8.97
Avg Ped Delay (s)	3.38

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	3.4
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	140
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.38
Prob of Blocked Lane	0.21
Delay for adq Gap	8.97
Avg Ped Delay (s)	3.38

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	908.3
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	870
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.74
Delay for adq Gap	912.37
Avg Ped Delay (s)	908.34

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	908.3
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	870
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.74
Delay for adq Gap	912.37
Avg Ped Delay (s)	908.34

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	261.3
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	630
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.98
Prob of Blocked Lane	0.63
Delay for adq Gap	266.57
Avg Ped Delay (s)	261.30

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	261.3
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	630
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.98
Prob of Blocked Lane	0.63
Delay for adq Gap	266.57
Avg Ped Delay (s)	261.30

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	24.0	58.1	61.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	4	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	3	3	4	0
Ped. Right-Left Flow Rate (p/h)	1	9	8	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	10
Veh. Perm. R. Flow in Walk (v/h)	50	10	10	0
Veh. RTOR Flow in Walk (v/h)	0	3	0	0
85th percentile speed (mph)	30	25	35	35
Right Corner Area per Ped (sq.ft)	4547.8	6054.7	3025.1	18204.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2165.0	1361.7	1745.4	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	21.7	21.7	21.7	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.65	1.73	2.30	2.49
Pedestrian Crosswalk LOS	A	A	B	B

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	12.1	
Level of Service	C	

Crosswalk		
Length (ft)	29	29
Lanes Crossed	2	2
Veh Vol Crossed	210	300
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	11.29
Prob of Delayed X-ing	0.48	0.61
Prob of Blocked Lane	0.28	0.38
Delay for adq Gap	9.71	12.22
Avg Ped Delay (s)	4.68	7.45

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	146.5
Level of Service	F

Crosswalk	
Length (ft)	69
Lanes Crossed	4
Veh Vol Crossed	510
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.71
Prob of Delayed X-ing	0.96
Prob of Blocked Lane	0.55
Delay for adq Gap	152.63
Avg Ped Delay (s)	146.52

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	119.3	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	480	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	0.95	
Prob of Blocked Lane	0.53	
Delay for adq Gap	125.60	
Avg Ped Delay (s)	119.29	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	11.1	
Level of Service	C	

Crosswalk		
Length (ft)	29	28
Lanes Crossed	2	2
Veh Vol Crossed	300	180
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	11.00
Prob of Delayed X-ing	0.61	0.42
Prob of Blocked Lane	0.38	0.24
Delay for adq Gap	12.22	8.66
Avg Ped Delay (s)	7.45	3.67

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.3	49.8	54.0	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	26	9	5
Ped. Right-Left Flow Rate (p/h)	1	1	3	3
Ped. R. Sidewalk Flow Rate (p/h)	1	1	2	2
Veh. Perm. L. Flow in Walk (v/h)	111	5	5	110
Veh. Perm. R. Flow in Walk (v/h)	5	20	0	210
Veh. RTOR Flow in Walk (v/h)	0	6	0	113
85th percentile speed (mph)	30	30	25	35
Right Corner Area per Ped (sq.ft)	4014.7	2014.4	1733.2	4830.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	838.2	316.3	781.6	198.9
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	50.8	50.8	50.8	50.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.54	2.41	1.75	2.52
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	38.1	72.9	72.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	3	0	0	8
Ped. Right-Left Flow Rate (p/h)	1	2	0	3
Ped. R. Sidewalk Flow Rate (p/h)	0	4	4	0
Veh. Perm. L. Flow in Walk (v/h)	10	140	0	0
Veh. Perm. R. Flow in Walk (v/h)	30	40	80	20
Veh. RTOR Flow in Walk (v/h)	25	3	21	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18213.6	4261.4	12150.0	4841.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2856.5	3069.9	0.0	1292.5
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	36.5	36.5	45.0	36.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.04	2.27	3.00	2.92
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.7	23.9	60.0	72.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	6	7	1	11
Ped. Right-Left Flow Rate (p/h)	3	8	3	6
Ped. R. Sidewalk Flow Rate (p/h)	4	5	0	0
Veh. Perm. L. Flow in Walk (v/h)	30	30	90	10
Veh. Perm. R. Flow in Walk (v/h)	80	5	190	710
Veh. RTOR Flow in Walk (v/h)	50	4	0	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	4282.6	1957.9	3824.2	2792.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1527.4	1102.9	3978.4	452.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	19.2	19.2	19.2	19.2
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.32	1.90	3.03	3.02
Pedestrian Crosswalk LOS	B	A	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	23.9	35.9	59.9	61.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	5	1	0
Ped. Right-Left Flow Rate (p/h)	1	14	0	3
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	9
Veh. Perm. L. Flow in Walk (v/h)	110	10	0	0
Veh. Perm. R. Flow in Walk (v/h)	10	550	50	150
Veh. RTOR Flow in Walk (v/h)	0	4	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	36429.0	3300.3	3639.7	5602.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	13973.9	44.7	24303.7	7270.1
Crosswalk Circulation Code	A	B	A	A
Pedestrian Delay (s/p)	16.8	16.8	16.8	16.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.00	2.19	2.70	2.88
Pedestrian Crosswalk LOS	B	B	B	C

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	19.9	
Level of Service	C	

Crosswalk		
Length (ft)	17	17
Lanes Crossed	1	1
Veh Vol Crossed	550	770
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	7.86	7.86
Prob of Delayed X-ing	0.70	0.81
Prob of Blocked Lane	0.70	0.81
Delay for adq Gap	10.50	15.44
Avg Ped Delay (s)	7.34	12.57

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	43.6	
Level of Service	E	

Crosswalk		
Length (ft)	29	17
Lanes Crossed	1	2
Veh Vol Crossed	770	550
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	7.86
Prob of Delayed X-ing	0.91	0.70
Prob of Blocked Lane	0.91	0.45
Delay for adq Gap	39.86	10.50
Avg Ped Delay (s)	36.30	7.34

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	28.5	
Level of Service	D	

Crosswalk		
Length (ft)	29	17
Lanes Crossed	2	1
Veh Vol Crossed	580	570
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	7.86
Prob of Delayed X-ing	0.84	0.71
Prob of Blocked Lane	0.60	0.71
Delay for adq Gap	24.77	10.87
Avg Ped Delay (s)	20.75	7.74

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	1331.6
Level of Service	F

Crosswalk	
Length (ft)	56
Lanes Crossed	3
Veh Vol Crossed	1150
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	19.00
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.87
Delay for adq Gap	1334.68
Avg Ped Delay (s)	1331.59

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	137.3
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	830
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.83
Delay for adq Gap	141.16
Avg Ped Delay (s)	137.26

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	137.3
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	830
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.83
Delay for adq Gap	141.16
Avg Ped Delay (s)	137.26

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	32.5	60.1	59.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	10.0	10.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	6	15	3	11
Ped. Right-Left Flow Rate (p/h)	1	18	16	12
Ped. R. Sidewalk Flow Rate (p/h)	4	14	3	1
Veh. Perm. L. Flow in Walk (v/h)	50	20	10	30
Veh. Perm. R. Flow in Walk (v/h)	20	120	30	20
Veh. RTOR Flow in Walk (v/h)	10	36	5	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	2426.6	1030.9	1311.1	2336.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2941.3	506.7	1191.3	972.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	20.8	20.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.09	1.95	2.63	2.68
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	36.0	61.3	60.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	7.0	7.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	11	13	6	8
Ped. Right-Left Flow Rate (p/h)	17	15	43	8
Ped. R. Sidewalk Flow Rate (p/h)	0	0	2	0
Veh. Perm. L. Flow in Walk (v/h)	80	10	16	0
Veh. Perm. R. Flow in Walk (v/h)	60	30	30	50
Veh. RTOR Flow in Walk (v/h)	13	14	0	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	939.0	1643.0	902.7	1645.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	732.5	775.7	313.9	955.1
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	23.4	23.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.31	2.00	2.62	2.60
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	48.0	61.2	60.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	18	19	46	37
Ped. Right-Left Flow Rate (p/h)	29	14	42	29
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	30	130	5	145
Veh. Perm. R. Flow in Walk (v/h)	30	140	140	50
Veh. RTOR Flow in Walk (v/h)	19	81	32	3
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	525.4	722.7	589.1	634.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	489.1	497.8	199.3	245.9
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	21.7	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.25	2.58	2.62	2.78
Pedestrian Crosswalk LOS	B	B	B	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	36.0	48.0	60.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Pretimed	Pretimed
Corresponding Signal Phase	2	6	0	4
Effective Walk Time (s)	13.0	13.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	11	14	20	17
Ped. Right-Left Flow Rate (p/h)	21	9	30	43
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	3
Veh. Perm. L. Flow in Walk (v/h)	0	30	50	0
Veh. Perm. R. Flow in Walk (v/h)	0	60	0	350
Veh. RTOR Flow in Walk (v/h)	0	44	0	101
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	874.0	870.7	965.6	753.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	872.8	1043.9	0.0	279.6
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	18.4	18.4	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.20	2.15	2.49	2.61
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.0	60.1	35.9	38.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	8	4	6	2
Effective Walk Time (s)	8.0	8.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	3	5	5
Ped. Right-Left Flow Rate (p/h)	3	3	12	13
Ped. R. Sidewalk Flow Rate (p/h)	3	0	1	2
Veh. Perm. L. Flow in Walk (v/h)	0	0	120	20
Veh. Perm. R. Flow in Walk (v/h)	90	10	130	20
Veh. RTOR Flow in Walk (v/h)	8	5	26	5
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	2689.1	3025.3	3014.7	2677.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1671.1	2487.0	318.3	779.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	29.9	29.9	29.0	29.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.35	2.48	2.40	2.09
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.1	48.1	38.1	38.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	6	6	21	9
Ped. Right-Left Flow Rate (p/h)	4	12	3	5
Ped. R. Sidewalk Flow Rate (p/h)	6	0	2	4
Veh. Perm. L. Flow in Walk (v/h)	0	0	30	20
Veh. Perm. R. Flow in Walk (v/h)	30	30	200	100
Veh. RTOR Flow in Walk (v/h)	9	0	31	18
85th percentile speed (mph)	30	30	25	25
Right Corner Area per Ped (sq.ft)	1796.4	2250.7	1648.3	2587.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1235.0	685.1	163.2	583.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	33.4	33.4	33.4	33.4
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.38	2.43	2.34	2.24
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	37.4	36.1	36.0	48.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	4	8	0	2
Effective Walk Time (s)	11.0	11.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	108	87	161	182
Ped. Right-Left Flow Rate (p/h)	72	88	187	175
Ped. R. Sidewalk Flow Rate (p/h)	1	30	18	0
Veh. Perm. L. Flow in Walk (v/h)	0	80	60	0
Veh. Perm. R. Flow in Walk (v/h)	0	70	0	180
Veh. RTOR Flow in Walk (v/h)	0	5	0	13
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	123.0	117.7	117.8	122.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	128.2	97.8	0.0	52.3
Crosswalk Circulation Code	A	A	F	B
Pedestrian Delay (s/p)	20.0	20.0	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.31	2.37	2.18	2.13
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.0	36.0	24.0	36.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	126	69	85	267
Ped. Right-Left Flow Rate (p/h)	121	121	156	170
Ped. R. Sidewalk Flow Rate (p/h)	3	18	16	9
Veh. Perm. L. Flow in Walk (v/h)	0	50	60	0
Veh. Perm. R. Flow in Walk (v/h)	0	40	0	70
Veh. RTOR Flow in Walk (v/h)	0	4	0	10
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	135.3	96.7	145.8	93.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	76.1	79.9	0.0	35.3
Crosswalk Circulation Code	A	A	F	C
Pedestrian Delay (s/p)	21.7	21.7	30.0	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.27	2.31	1.92	2.01
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.0	23.9	24.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	4
Effective Walk Time (s)	12.0	12.0	0.0	17.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	53	39	80	34
Ped. Right-Left Flow Rate (p/h)	43	34	96	59
Ped. R. Sidewalk Flow Rate (p/h)	5	4	0	3
Veh. Perm. L. Flow in Walk (v/h)	0	70	90	0
Veh. Perm. R. Flow in Walk (v/h)	0	40	0	60
Veh. RTOR Flow in Walk (v/h)	0	4	0	11
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	248.6	420.2	274.6	367.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	262.4	287.4	0.0	305.2
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	19.2	19.2	30.0	15.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.24	2.32	2.06	1.90
Pedestrian Crosswalk LOS	B	B	B	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	38.5	34.2	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	0
Effective Walk Time (s)	11.0	11.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	22	14	17	0
Ped. Right-Left Flow Rate (p/h)	2	8	16	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	520	0	0	110
Veh. Perm. R. Flow in Walk (v/h)	30	0	40	0
Veh. RTOR Flow in Walk (v/h)	6	0	15	0
85th percentile speed (mph)	25	30	25	25
Right Corner Area per Ped (sq.ft)	1270.6	3304.5	1311.8	2782.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	71.8	1077.7	646.3	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	20.0	20.0	20.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.91	2.07	2.05	2.57
Pedestrian Crosswalk LOS	C	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.1	26.0	38.0	37.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	9	9	2	2
Ped. Right-Left Flow Rate (p/h)	3	7	1	11
Ped. R. Sidewalk Flow Rate (p/h)	1	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	10	120	10	40
Veh. Perm. R. Flow in Walk (v/h)	10	10	190	10
Veh. RTOR Flow in Walk (v/h)	8	5	27	0
85th percentile speed (mph)	25	25	25	30
Right Corner Area per Ped (sq.ft)	4547.4	2505.1	3822.0	2782.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1202.9	561.4	3223.8	1176.3
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	22.5	22.5	22.5	22.5
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.79	2.09	2.31	2.28
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.2	24.2	37.6	25.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	2	3	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	0	2	0
Effective Walk Time (s)	11.0	0.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	6	1	1	2
Ped. Right-Left Flow Rate (p/h)	3	0	4	3
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	5
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	160	0	480	450
Veh. RTOR Flow in Walk (v/h)	7	0	10	0
85th percentile speed (mph)	30	30	30	45
Right Corner Area per Ped (sq.ft)	5194.8	12131.5	12110.8	3814.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1378.5	0.4	0.1	0.1
Crosswalk Circulation Code	A	F	F	F
Pedestrian Delay (s/p)	34.2	44.5	36.0	44.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.49	2.24	2.41	2.37
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	30.8	36.2	39.5	37.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	3	5	1	5
Ped. Right-Left Flow Rate (p/h)	2	4	0	6
Ped. R. Sidewalk Flow Rate (p/h)	0	2	0	1
Veh. Perm. L. Flow in Walk (v/h)	20	60	10	5
Veh. Perm. R. Flow in Walk (v/h)	10	10	20	10
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	12134.8	3300.9	7275.4	4271.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3740.9	2021.4	14477.7	1347.3
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	23.4	23.4	26.0	26.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.76	2.05	2.45	2.42
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	62.5	37.1	87.1	73.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	7	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	4.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	6	9	0
Ped. Right-Left Flow Rate (p/h)	5	1	4	3
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	320	20	510	50
Veh. RTOR Flow in Walk (v/h)	122	3	166	10
85th percentile speed (mph)	40	30	35	30
Right Corner Area per Ped (sq.ft)	4019.4	7286.1	3625.3	7276.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1593.3	1951.2	549.1	2081.6
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	31.5	31.5	31.5	36.1
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.83	2.46	3.37	2.63
Pedestrian Crosswalk LOS	C	B	C	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	86.6	84.9	48.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	7	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	9.0	0.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	0	1	0
Ped. Right-Left Flow Rate (p/h)	1	0	3	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	3
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	120	10	200	10
Veh. RTOR Flow in Walk (v/h)	13	0	31	6
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	12134.2	0.0	18189.4	14570.5
Right Corner Quality of Service	A	-	A	A
Ped. Circulation Area (sq.ft)	6124.3	0.0	1748.1	0.0
Crosswalk Circulation Code	A	-	A	-
Pedestrian Delay (s/p)	37.9	46.5	37.9	37.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.17	3.08	2.50	2.17
Pedestrian Crosswalk LOS	C	C	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	91.2	92.6	38.8	35.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	6	4	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	Actuated	Actuated	None
Corresponding Signal Phase	0	8	2	6
Effective Walk Time (s)	0.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	2	0
Ped. Right-Left Flow Rate (p/h)	0	1	1	1
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	170	120	0
Veh. RTOR Flow in Walk (v/h)	0	53	61	0
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	24268.4	36426.3	18213.1	72841.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	11592.7	2701.2	0.3
Crosswalk Circulation Code	-	A	A	F
Pedestrian Delay (s/p)	46.5	37.9	37.9	46.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.01	2.90	1.97	2.09
Pedestrian Crosswalk LOS	C	C	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	14.8	24.0	60.2	73.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	Actuated	Actuated
Corresponding Signal Phase	2	6	0	8
Effective Walk Time (s)	0.0	0.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	2	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	300	0	650
Veh. RTOR Flow in Walk (v/h)	0	87	0	0
85th percentile speed (mph)	30	30	35	35
Right Corner Area per Ped (sq.ft)	72900.0	36389.4	36450.0	72839.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.5	0.2	0.0	0.0
Crosswalk Circulation Code	F	F	-	-
Pedestrian Delay (s/p)	48.5	48.5	48.5	39.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.18	2.12	2.91	3.09
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	56.1	62.9	81.6	80.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	5	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	8.0	8.0	9.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	9	0	13
Ped. Right-Left Flow Rate (p/h)	2	4	1	15
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	30	400	260	10
Veh. RTOR Flow in Walk (v/h)	23	176	67	0
85th percentile speed (mph)	30	40	45	35
Right Corner Area per Ped (sq.ft)	14554.9	1752.0	5162.3	2176.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2215.1	0.0	6299.1	358.7
Crosswalk Circulation Code	A	F	A	A
Pedestrian Delay (s/p)	50.3	50.3	49.3	50.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.05	3.00	3.36	3.11
Pedestrian Crosswalk LOS	B	C	C	C

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	23961600	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	2680	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	1.00	
Prob of Blocked Lane	0.98	
Delay for adq Gap	23961600.00	
Avg Ped Delay (s)	23961600.00	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	298.5	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	1280	1400
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.98	0.99
Prob of Blocked Lane	0.86	0.88
Delay for adq Gap	129.27	174.19
Avg Ped Delay (s)	126.68	171.78

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	36117600
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2750
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	36117600.00
Avg Ped Delay (s)	36117600.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	36117600
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2750
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	36117600.00
Avg Ped Delay (s)	36117600.00

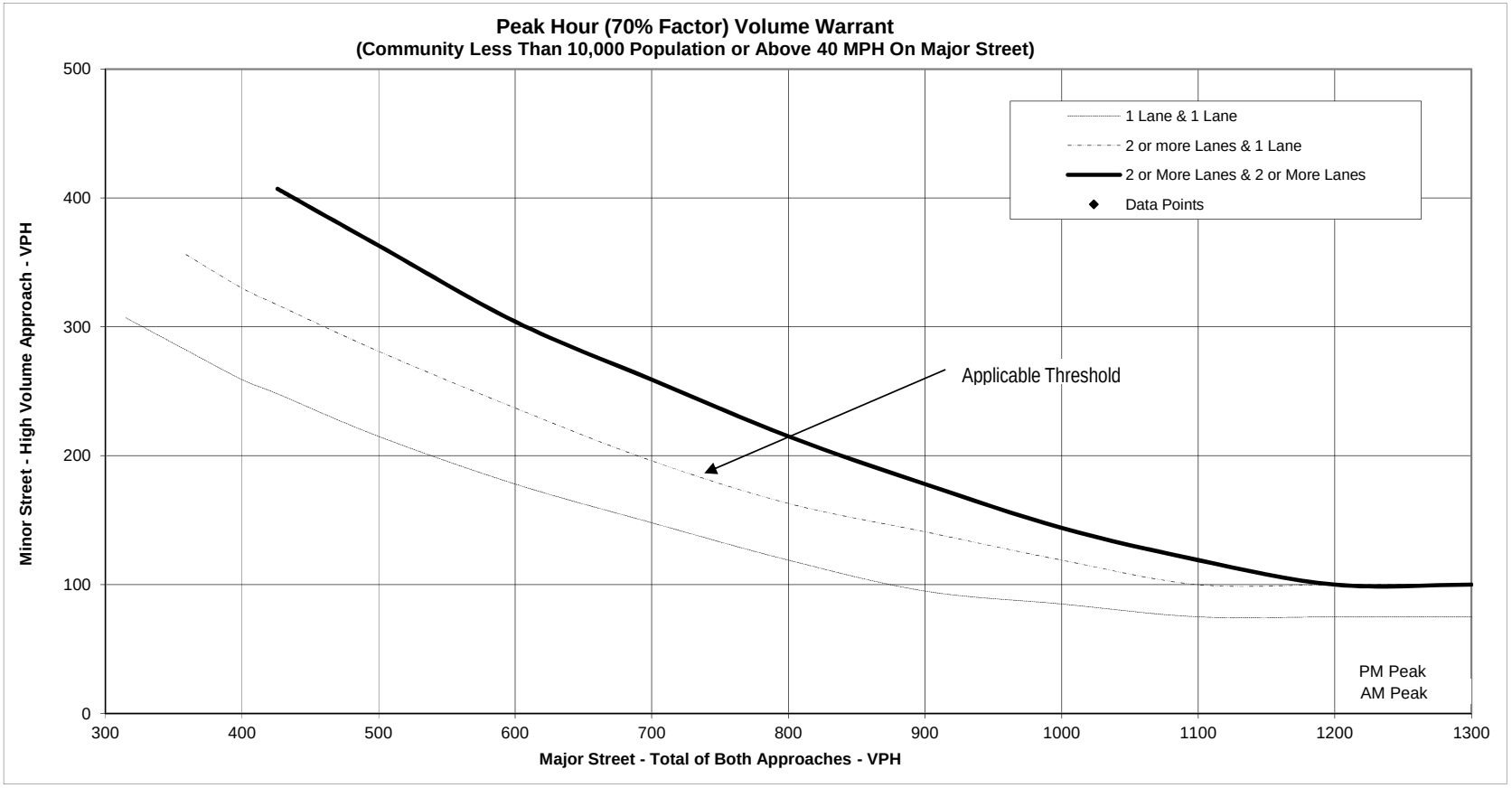
Appendix D.4

Intersection Peak Hour Signal Warrant Worksheets for 2021 Near-Term No Project Conditions

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2021 No Project
Intersection: Hwy 1/Stenner Creek Rd
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Hwy 1
Major Street (Orientation): North-South
Minor Street (Name): Stenner Creek Rd.
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	15	15	1360	1170	2,530	No
PM Peak	0	40	40	1335	1000	2,335	No

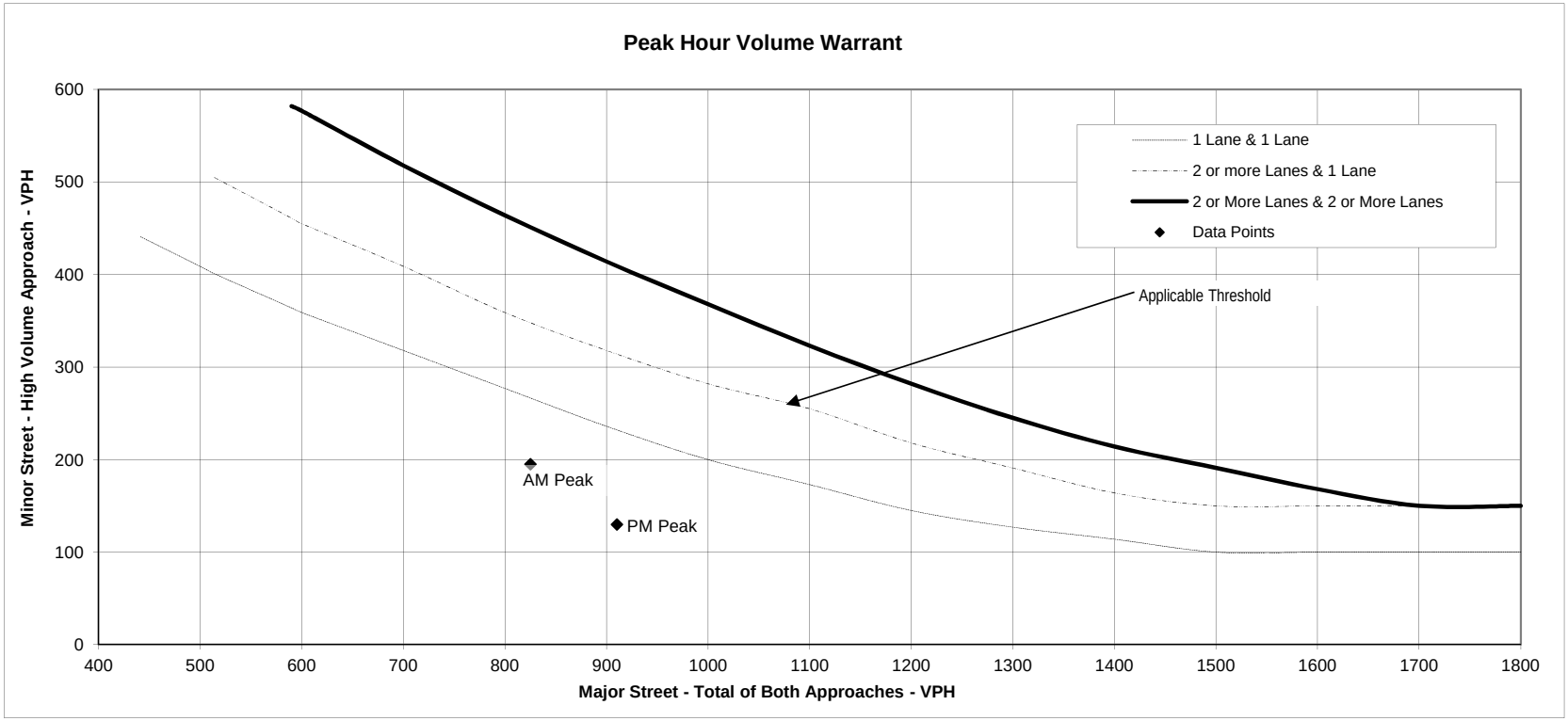


Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

PEAK HOUR VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2021 No Project
Intersection: Grand Ave/Slack St
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Grand Ave
Major Street (Orientation): North-South
Minor Street (Name): Slack St
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	195	25	195	705	120	825	No
PM Peak	130	25	130	320	590	910	No

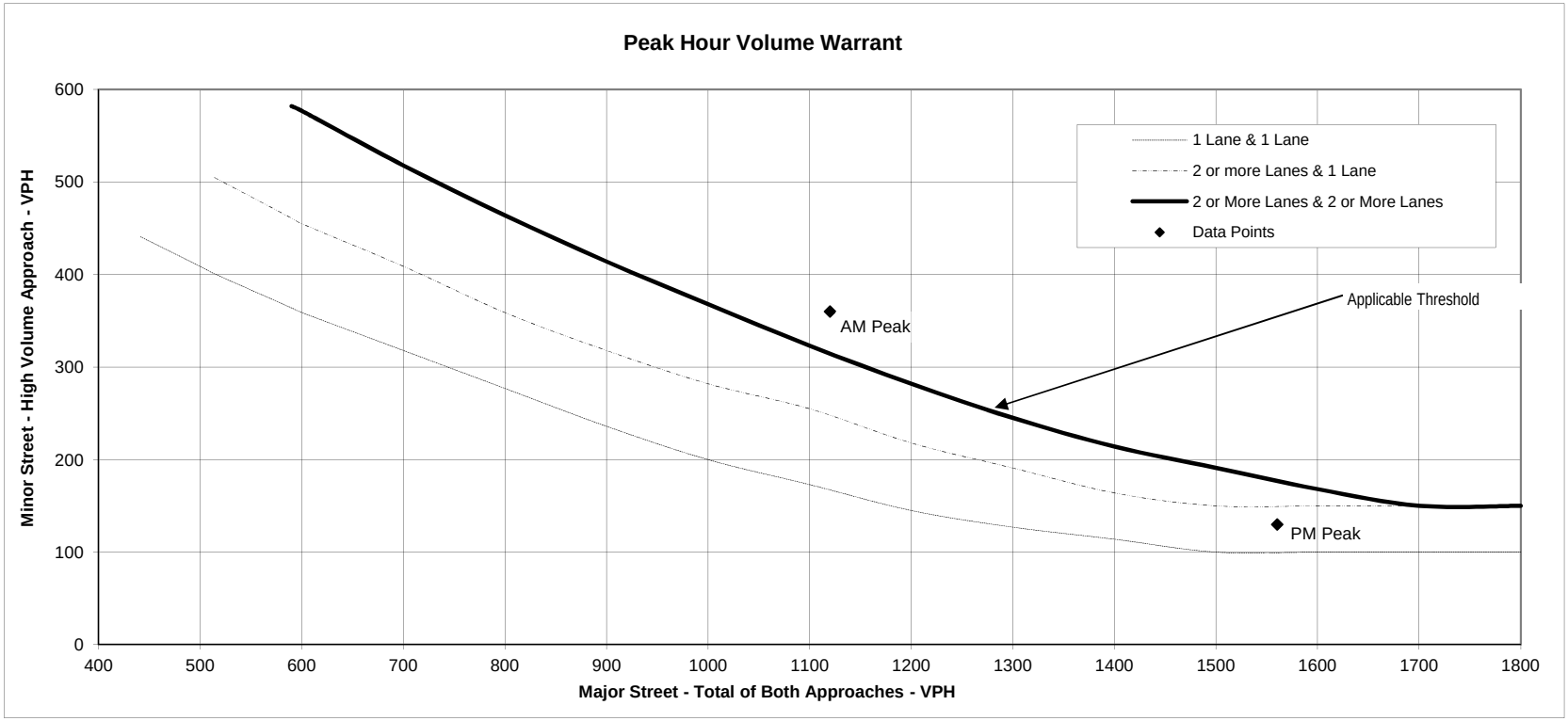


Note: 150 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 100 VPH as the threshold for a minor street approach with one lane

PEAK HOUR VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2021 No Project
Intersection: California Blvd/Taft St
Approach Type: 2 or More Lanes & 2 or More Lanes
Major Street (Name): California Blvd
Major Street (Orientation): North-South
Minor Street (Name): Taft St
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	360	360	780	340	1,120	Yes
PM Peak	0	130	130	780	780	1,560	No

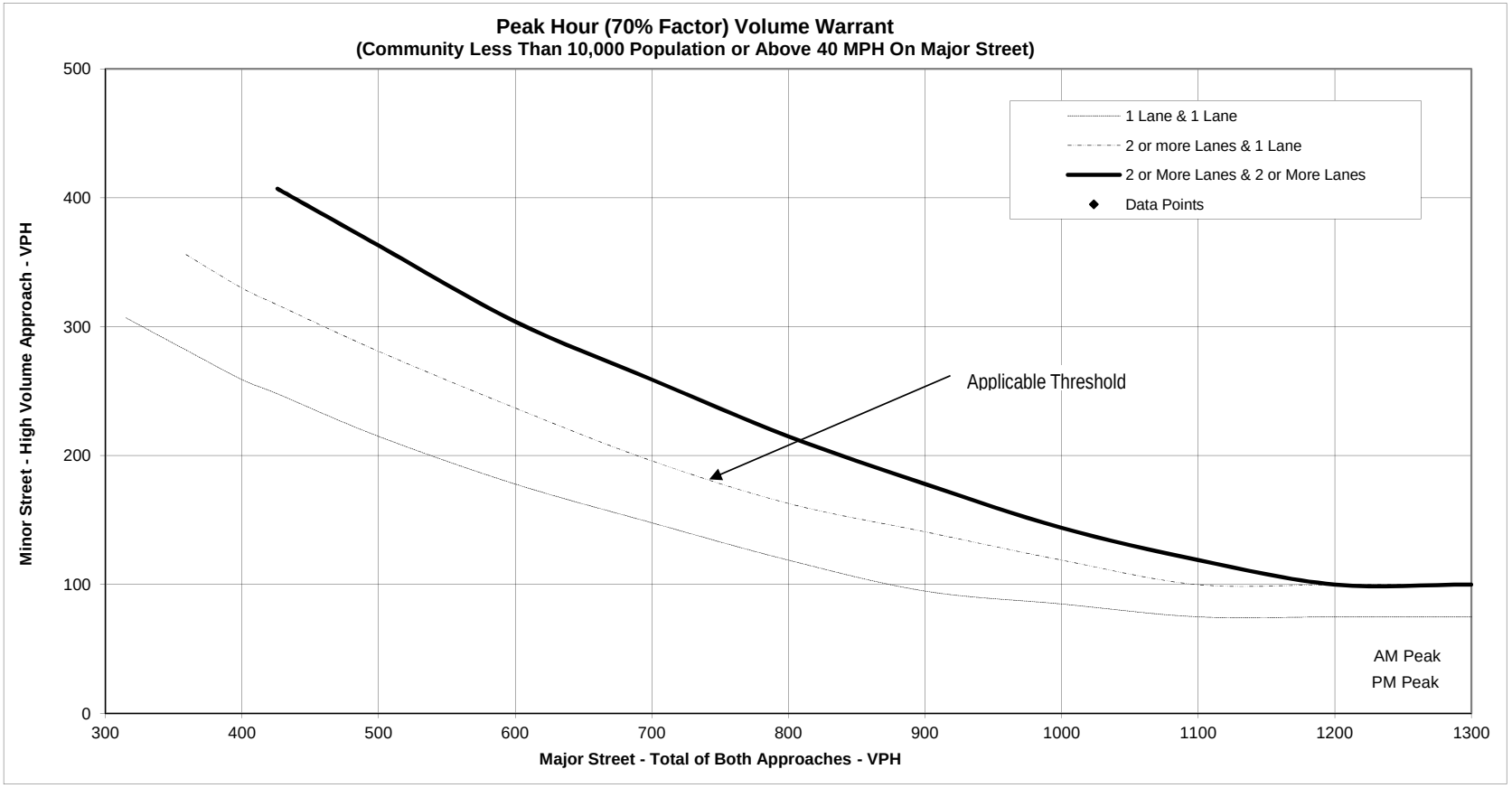


Note: 150 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 100 VPH as the threshold for a minor street approach with one lane

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2021 No Project
Intersection: Broad St/Rockview Pl
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Broad St
Major Street (Orientation): North-South
Minor Street (Name): Rockview Pl
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	50	0	50	1000	1430	2,430	No
PM Peak	30	0	30	1450	1290	2,740	No

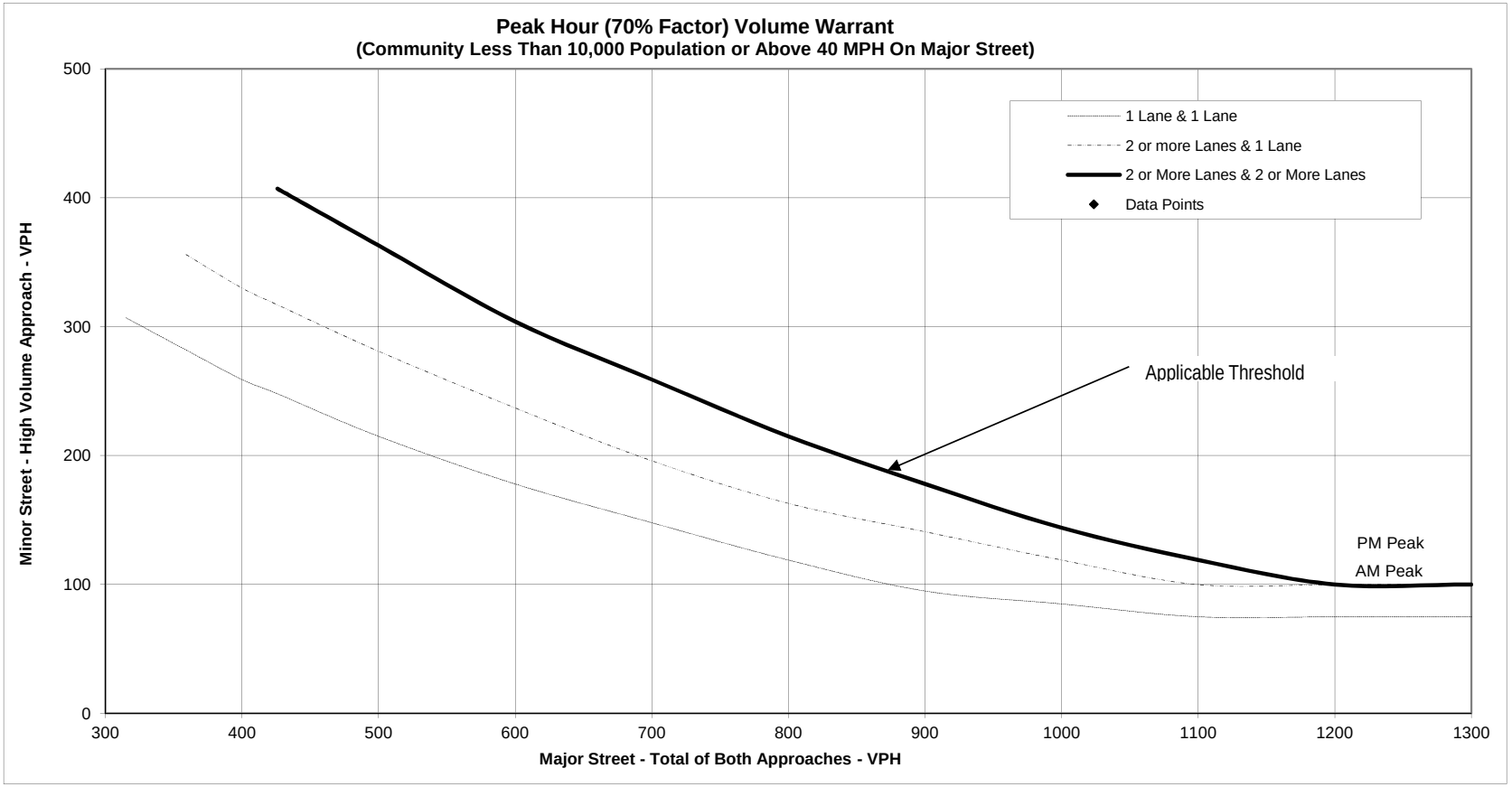


Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2021 No Project
Intersection: Broad St/Capitolio Wy
Approach Type: 2 or More Lanes & 2 or More Lanes
Major Street (Name): Broad St
Major Street (Orientation): North-South
Minor Street (Name): Capitolio Wy
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	110	110	990	1480	2,470	Yes
PM Peak	0	130	130	1500	1380	2,880	Yes



Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

Appendix D.5

Freeway LOS Worksheets for 2021 Near-Term No Project Conditions

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 1_2016_AM_Peak_US-101_NB_Marsh_St_to_Broad_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Direction:	US-101 NB
From/To:	Marsh St to Broad St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	2990	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	787	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1645	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1645	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	64.1	mi/h
Number of lanes, N	2	
Density, D	25.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 1_2016_PM_Peak_US-101_NB_Marsh_St_to_Broad_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Direction:	US-101 NB
From/To:	Marsh St to Broad St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	3800	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1000	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2090	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	2090	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	58.2	mi/h
Number of lanes, N	2	
Density, D	35.9	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 10_2016_AM_Peak_US-101_SB_Broad_St_to_Marsh_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Direction:	US-101 SB
From/To:	Broad St to Marsh St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	2950	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	776	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1623	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1623	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	64.3	mi/h
Number of lanes, N	2	
Density, D	25.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 10_2016_PM_Peak_US-101_SB_Broad_St_to_Marsh_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Direction:	US-101 SB
From/To:	Broad St to Marsh St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	3470	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	913	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1909	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1909	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	61.3	mi/h
Number of lanes, N	2	
Density, D	31.1	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.3

File Name: 2_2016_AM_Peak_US-101_NB_Broad_St_to_Osos_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Broad St to Osos St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	640	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1991	189	669	21	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	524	50	176	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2190	201	711	22	pc/h

Volume ratio, VR 0.292

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	912	lc/h
Weaving lane changes, LCW	1055	lc/h
Non-weaving vehicle index, INW	241	
Non-weaving lane change, LCNW	225	lc/h
Total lane changes, LCALL	1280	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.391	
Average weaving speed, SW	51.0	mi/h
Average non-weaving speed, SNW	53.4	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.7	mi/h
Weaving segment density, D	19.8	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.532	
Weaving segment flow rate, v	3124	pc/h
Weaving segment capacity, cW	5678	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5498	640	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1978	c
		Maximum	Analyzed	
v/c ratio		1.00	0.532	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 2_2016_PM_Peak_US-101_NB_Broad_St_to_Osos_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Broad St to Osos St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	640	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2933	207	567	23	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	772	54	149	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3226	220	603	24	pc/h

Volume ratio, VR 0.202

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	823	lc/h
Weaving lane changes, LCW	966	lc/h
Non-weaving vehicle index, INW	354	
Non-weaving lane change, LCNW	439	lc/h
Total lane changes, LCALL	1405	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.420	
Average weaving speed, SW	50.2	mi/h
Average non-weaving speed, SNW	52.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.1	mi/h
Weaving segment density, D	26.1	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.667	
Weaving segment flow rate, v	4073	pc/h
Weaving segment capacity, cW	5885	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4557	640	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2050	c
		Maximum	Analyzed	
v/c ratio		1.00	0.667	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 3_2016_AM_Peak_US-101_NB_Osos_St_to_Toro_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Osos St to Toro St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	510	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1644	126	536	14	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	433	33	141	4	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1808	134	570	15	pc/h

Volume ratio, VR 0.279

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	704	lc/h
Weaving lane changes, LCW	817	lc/h
Non-weaving vehicle index, INW	158	
Non-weaving lane change, LCNW	74	lc/h
Total lane changes, LCALL	891	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.351	
Average weaving speed, SW	52.0	mi/h
Average non-weaving speed, SNW	55.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.8	mi/h
Weaving segment density, D	15.4	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.430	
Weaving segment flow rate, v	2527	pc/h
Weaving segment capacity, cW	5681	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5355	510	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1979	c
		Maximum	Analyzed	
v/c ratio		1.00	0.430	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 3_2016_PM_Peak_US-101_NB_Osos_St_to_Toro_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Osos St to Toro St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	510	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2698	252	442	28	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	710	66	116	7	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2968	268	470	30	pc/h

Volume ratio, VR 0.198

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	738	lc/h
Weaving lane changes, LCW	851	lc/h
Non-weaving vehicle index, INW	260	
Non-weaving lane change, LCNW	316	lc/h
Total lane changes, LCALL	1167	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.434	
Average weaving speed, SW	49.9	mi/h
Average non-weaving speed, SNW	53.7	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.9	mi/h
Weaving segment density, D	23.5	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.613	
Weaving segment flow rate, v	3736	pc/h
Weaving segment capacity, cW	5868	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4511	510	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2044	c
		Maximum	Analyzed	
v/c ratio		1.00	0.613	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 4_2016_AM_Peak_US-101_NB_Toro_St_to_California_Blvd.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Toro St to California Blvd
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	740	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1309	261	451	29	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	344	69	119	8	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1440	277	479	31	pc/h

Volume ratio, VR 0.339

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	756	lc/h
Weaving lane changes, LCW	919	lc/h
Non-weaving vehicle index, INW	185	
Non-weaving lane change, LCNW	126	lc/h
Total lane changes, LCALL	1045	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.297	
Average weaving speed, SW	53.6	mi/h
Average non-weaving speed, SNW	56.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	55.1	mi/h
Weaving segment density, D	13.5	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.386	
Weaving segment flow rate, v	2227	pc/h
Weaving segment capacity, cW	5589	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6011	740	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1947	c
		Maximum	Analyzed	
v/c ratio		1.00	0.386	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 4_2016_PM_Peak_US-101_NB_Toro_St_to_California_Blvd.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Toro St to California Blvd
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	740	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2637	153	313	17	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	694	40	82	4	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2901	163	333	18	pc/h

Volume ratio, VR 0.145

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	496	lc/h
Weaving lane changes, LCW	659	lc/h
Non-weaving vehicle index, INW	367	
Non-weaving lane change, LCNW	425	lc/h
Total lane changes, LCALL	1084	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.305	
Average weaving speed, SW	53.3	mi/h
Average non-weaving speed, SNW	56.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	55.6	mi/h
Weaving segment density, D	20.5	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.544	
Weaving segment flow rate, v	3415	pc/h
Weaving segment capacity, cW	6034	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	3984	740	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2102	c
		Maximum	Analyzed	
v/c ratio		1.00	0.544	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 5_2016_AM_Peak_US-101_NB_California_Blvd_to_Grand_Ave.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	California Blvd to Grand Ave
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	530	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1100	90	470	10	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	289	24	124	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1210	96	500	11	pc/h

Volume ratio, VR 0.328

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	596	lc/h
Weaving lane changes, LCW	696	lc/h
Non-weaving vehicle index, INW	78	
Non-weaving lane change, LCNW	0	lc/h
Total lane changes, LCALL	696	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.280	
Average weaving speed, SW	54.1	mi/h
Average non-weaving speed, SNW	57.8	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	56.5	mi/h
Weaving segment density, D	10.7	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.316	
Weaving segment flow rate, v	1817	pc/h
Weaving segment capacity, cW	5569	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5886	530	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1940	c
		Maximum	Analyzed	
v/c ratio		1.00	0.316	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 5_2016_PM_Peak_US-101_NB_California_Blvd_to_Grand_Ave.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	California Blvd to Grand Ave
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	530	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2620	350	180	20	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	689	92	47	5	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2882	372	191	21	pc/h

Volume ratio, VR 0.162

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	563	lc/h
Weaving lane changes, LCW	663	lc/h
Non-weaving vehicle index, INW	185	
Non-weaving lane change, LCNW	307	lc/h
Total lane changes, LCALL	970	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.364	
Average weaving speed, SW	51.7	mi/h
Average non-weaving speed, SNW	55.4	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.8	mi/h
Weaving segment density, D	21.1	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.561	
Weaving segment flow rate, v	3466	pc/h
Weaving segment capacity, cW	5951	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4156	530	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2073	c
		Maximum	Analyzed	
v/c ratio		1.00	0.561	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 6_2016_AM_Peak_US-101_SB_Grand_Ave_to_Taft_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Grand Ave to Taft St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	670	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2097	243	393	27	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	552	64	103	7	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2307	258	418	29	pc/h

Volume ratio, VR 0.224

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	676	lc/h
Weaving lane changes, LCW	803	lc/h
Non-weaving vehicle index, INW	188	
Non-weaving lane change, LCNW	267	lc/h
Total lane changes, LCALL	1070	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.327	
Average weaving speed, SW	52.7	mi/h
Average non-weaving speed, SNW	55.3	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.7	mi/h
Weaving segment density, D	18.4	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.497	
Weaving segment flow rate, v	3012	pc/h
Weaving segment capacity, cW	5842	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4788	670	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2035	c
		Maximum	Analyzed	
v/c ratio		1.00	0.497	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 6_2016_PM_Peak_US-101_SB_Grand_Ave_to_Taft_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Grand Ave to Taft St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	670	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1075	375	135	15	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	283	99	36	4	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1183	399	144	16	pc/h

Volume ratio, VR 0.312

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	543	lc/h
Weaving lane changes, LCW	670	lc/h
Non-weaving vehicle index, INW	96	
Non-weaving lane change, LCNW	32	lc/h
Total lane changes, LCALL	702	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.234	
Average weaving speed, SW	55.5	mi/h
Average non-weaving speed, SNW	58.3	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	57.4	mi/h
Weaving segment density, D	10.1	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.299	
Weaving segment flow rate, v	1742	pc/h
Weaving segment capacity, cW	5638	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5710	670	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1964	c
		Maximum	Analyzed	
v/c ratio		1.00	0.299	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 7_2016_AM_Peak_US-101_SB_Taft_St_to_Montalban_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Taft St to Montalban St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	390	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2131	189	209	21	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	561	50	55	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2344	201	222	22	pc/h

Volume ratio, VR 0.152

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	423	lc/h
Weaving lane changes, LCW	497	lc/h
Non-weaving vehicle index, INW	157	
Non-weaving lane change, LCNW	121	lc/h
Total lane changes, LCALL	618	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.325	
Average weaving speed, SW	52.7	mi/h
Average non-weaving speed, SNW	57.5	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	56.7	mi/h
Weaving segment density, D	16.4	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.452	
Weaving segment flow rate, v	2789	pc/h
Weaving segment capacity, cW	5943	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4048	390	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2070	c
		Maximum	Analyzed	
v/c ratio		1.00	0.452	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 7_2016_PM_Peak_US-101_SB_Taft_St_to_Montalban_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Taft St to Montalban St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	390	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1360	810	90	10	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	358	213	24	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1496	861	96	11	pc/h

Volume ratio, VR 0.388

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	957	lc/h
Weaving lane changes, LCW	1031	lc/h
Non-weaving vehicle index, INW	100	
Non-weaving lane change, LCNW	0	lc/h
Total lane changes, LCALL	1031	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.487	
Average weaving speed, SW	48.6	mi/h
Average non-weaving speed, SNW	54.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	51.9	mi/h
Weaving segment density, D	15.8	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.443	
Weaving segment flow rate, v	2464	pc/h
Weaving segment capacity, cW	5394	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6551	390	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1879	c
		Maximum	Analyzed	
v/c ratio		1.00	0.443	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 8_2016_AM_Peak_US-101_SB_Lemon_St_to_Olive_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Lemon St to Olive St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	360	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2132	318	198	22	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	561	84	52	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2345	338	211	23	pc/h

Volume ratio, VR 0.188

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	549	lc/h
Weaving lane changes, LCW	609	lc/h
Non-weaving vehicle index, INW	145	
Non-weaving lane change, LCNW	105	lc/h
Total lane changes, LCALL	714	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.388	
Average weaving speed, SW	51.0	mi/h
Average non-weaving speed, SNW	56.4	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	55.3	mi/h
Weaving segment density, D	17.6	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.480	
Weaving segment flow rate, v	2917	pc/h
Weaving segment capacity, cW	5856	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4416	360	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2040	c
		Maximum	Analyzed	
v/c ratio		1.00	0.480	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 8_2016_PM_Peak_US-101_SB_Lemon_St_to_Olive_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Lemon St to Olive St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	360	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2081	669	99	11	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	548	176	26	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2289	711	105	12	pc/h

Volume ratio, VR 0.262

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	816	lc/h
Weaving lane changes, LCW	876	lc/h
Non-weaving vehicle index, INW	141	
Non-weaving lane change, LCNW	91	lc/h
Total lane changes, LCALL	967	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.493	
Average weaving speed, SW	48.5	mi/h
Average non-weaving speed, SNW	54.1	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.5	mi/h
Weaving segment density, D	19.8	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.529	
Weaving segment flow rate, v	3117	pc/h
Weaving segment capacity, cW	5687	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5178	360	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1981	c
		Maximum	Analyzed	
v/c ratio		1.00	0.529	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 9_2016_AM_Peak_US-101_SB_Olive_St_to_Broad_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Olive St to Broad St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	540	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2216	404	234	26	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.95	
Peak 15-min volume, v15	589	107	62	7	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2464	434	251	28	pc/h

Volume ratio, VR 0.216

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	685	lc/h
Weaving lane changes, LCW	840	lc/h
Non-weaving vehicle index, INW	363	
Non-weaving lane change, LCNW	228	lc/h
Total lane changes, LCALL	1068	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.387	
Average weaving speed, SW	51.0	mi/h
Average non-weaving speed, SNW	55.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.1	mi/h
Weaving segment density, D	19.6	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.525	
Weaving segment flow rate, v	3177	pc/h
Weaving segment capacity, cW	5833	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4696	540	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2032	c
		Maximum	Analyzed	
v/c ratio		1.00	0.525	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 9_2016_PM_Peak_US-101_SB_Olive_St_to_Broad_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Olive St to Broad St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	540	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2569	611	171	19	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.95	
Peak 15-min volume, v15	683	163	45	5	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2856	657	184	20	pc/h

Volume ratio, VR 0.226

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	841	lc/h
Weaving lane changes, LCW	996	lc/h
Non-weaving vehicle index, INW	419	
Non-weaving lane change, LCNW	307	lc/h
Total lane changes, LCALL	1303	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.453	
Average weaving speed, SW	49.4	mi/h
Average non-weaving speed, SNW	53.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.1	mi/h
Weaving segment density, D	23.8	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.617	
Weaving segment flow rate, v	3717	pc/h
Weaving segment capacity, cW	5811	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4806	540	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2024	c
		Maximum	Analyzed	
v/c ratio		1.00	0.617	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Appendix E

Analysis Worksheets for 2021 Near-Term Plus Project Conditions

Appendix E.1

Intersection Auto LOS Worksheets for 2021 Near-Term Plus Project Conditions

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	5	1370	20	20	1140
Future Vol, veh/h	10	5	1370	20	20	1140
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	67	67	90	90	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	7	1522	22	23	1295

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2216	762	0	0	1523	0
Stage 1	1523	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	37	347	-	-	434	-
Stage 1	166	-	-	-	-	-
Stage 2	457	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	35	347	-	-	434	-
Mov Cap-2 Maneuver	122	-	-	-	-	-
Stage 1	166	-	-	-	-	-
Stage 2	433	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	31.9	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	156	434	-
HCM Lane V/C Ratio	-	-	0.144	0.052	-
HCM Control Delay (s)	-	-	31.9	13.8	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	220	90	40	30	30	60	1300	150	100	1130	50
Future Volume (veh/h)	120	220	90	40	30	30	60	1300	150	100	1130	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1976	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	152	278	96	46	49	35	75	1625	178	116	1314	58
Adj No. of Lanes	1	2	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.79	0.79	0.79	0.76	0.76	0.76	0.80	0.80	0.80	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	357	514	169	140	147	121	96	1774	781	142	1865	807
Arrive On Green	0.20	0.20	0.20	0.08	0.08	0.08	0.05	0.50	0.50	0.08	0.53	0.53
Sat Flow, veh/h	1774	2558	841	1774	1863	1542	1774	3539	1558	1774	3539	1532
Grp Volume(v), veh/h	152	199	175	46	49	35	75	1625	178	116	1314	58
Grp Sat Flow(s),veh/h/ln	1774	1863	1536	1774	1863	1542	1774	1770	1558	1774	1770	1532
Q Serve(g_s), s	9.4	12.0	13.0	3.1	3.1	2.7	5.3	53.2	8.1	8.1	35.1	2.3
Cycle Q Clear(g_c), s	9.4	12.0	13.0	3.1	3.1	2.7	5.3	53.2	8.1	8.1	35.1	2.3
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	357	375	309	140	147	121	96	1774	781	142	1865	807
V/C Ratio(X)	0.43	0.53	0.57	0.33	0.33	0.29	0.78	0.92	0.23	0.82	0.70	0.07
Avail Cap(c_a), veh/h	451	474	391	296	311	258	282	1970	867	254	1970	853
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	44.9	45.3	54.8	54.8	54.6	58.7	28.9	17.7	57.0	22.4	14.6
Incr Delay (d2), s/veh	0.3	0.4	0.6	0.5	0.5	0.5	5.1	6.4	0.1	4.4	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	6.2	5.6	1.5	1.6	1.2	2.7	27.5	3.5	4.1	17.4	1.0
LnGrp Delay(d),s/veh	44.2	45.4	45.9	55.3	55.3	55.1	63.9	35.3	17.7	61.4	23.3	14.6
LnGrp LOS	D	D	D	E	E	E	E	D	B	E	C	B
Approach Vol, veh/h		526			130			1878			1488	
Approach Delay, s/veh		45.2			55.3			34.8			25.9	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.5	69.0		29.3	10.3	72.3		13.9
Change Period (Y+Rc), s	3.5	6.0		4.0	3.5	6.0		4.0
Max Green Setting (Gmax), s	18.0	70.0		32.0	20.0	70.0		21.0
Max Q Clear Time (g_c+I1), s	10.1	55.2		15.0	7.3	37.1		5.1
Green Ext Time (p_c), s	0.1	7.8		1.8	0.1	10.6		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	33.5
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	390	90	70	40	10
Future Vol, veh/h	50	390	90	70	40	10
Conflicting Peds, #/hr	0	0	0	16	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	68	68	69	69	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	74	574	130	101	50	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	248	0	-	0	918	198
Stage 1	-	-	-	-	197	-
Stage 2	-	-	-	-	721	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1318	-	-	-	302	843
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	482	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1317	-	-	-	269	829
Mov Cap-2 Maneuver	-	-	-	-	269	-
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	436	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	19
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1317	-	-	-	269	829
HCM Lane V/C Ratio	0.056	-	-	-	0.186	0.015
HCM Control Delay (s)	7.9	0	-	-	21.4	9.4
HCM Lane LOS	A	A	-	-	C	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.7	0

Intersection	
Intersection Delay, s/veh	13.7
Intersection LOS	B

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Lane Configurations									
Traffic Vol, veh/h	0	370	100	0	50	100	0	50	260
Future Vol, veh/h	0	370	100	0	50	100	0	50	260
Peak Hour Factor	0.92	0.80	0.80	0.92	0.64	0.64	0.92	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	463	125	0	78	156	0	60	313
Number of Lanes	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay	14.2	11.5	14.2
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	55%	0%	100%
Vol Right, %	0%	100%	0%	45%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	50	260	247	223	50	100
LT Vol	50	0	0	0	50	0
Through Vol	0	0	247	123	0	100
RT Vol	0	260	0	100	0	0
Lane Flow Rate	60	313	308	279	78	156
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.119	0.514	0.519	0.445	0.152	0.282
Departure Headway (Hd)	7.121	5.906	6.057	5.739	7.002	6.492
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	503	608	595	625	511	552
Service Time	4.873	3.658	3.803	3.484	4.76	4.25
HCM Lane V/C Ratio	0.119	0.515	0.518	0.446	0.153	0.283
HCM Control Delay	10.8	14.8	15.2	13	11	11.8
HCM Lane LOS	B	B	C	B	B	B
HCM 95th-tile Q	0.4	2.9	3	2.3	0.5	1.2

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	10	30	0	340	190	0	30	110
Future Vol, veh/h	0	10	30	0	340	190	0	30	110
Peak Hour Factor	0.92	0.88	0.88	0.92	0.90	0.90	0.92	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	11	34	0	378	211	0	35	129
Number of Lanes	0	1	0	0	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	8.4	10.6	9
HCM LOS	A	B	A

Lane	NBLn1	NBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	25%	21%
Vol Thru, %	100%	0%	0%	79%
Vol Right, %	0%	100%	75%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	340	190	40	140
LT Vol	0	0	10	30
Through Vol	340	0	0	110
RT Vol	0	190	30	0
Lane Flow Rate	378	211	45	165
Geometry Grp	7	7	2	5
Degree of Util (X)	0.493	0.234	0.064	0.216
Departure Headway (Hd)	4.696	3.995	5.03	4.712
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	759	885	715	764
Service Time	2.487	1.785	3.043	2.723
HCM Lane V/C Ratio	0.498	0.238	0.063	0.216
HCM Control Delay	12.1	8	8.4	9
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2.8	0.9	0.2	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	490	250	50	220	330	250	1050	40	240	1070	50
Future Volume (veh/h)	140	490	250	50	220	330	250	1050	40	240	1070	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.95	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	167	583	225	56	244	354	291	1221	47	258	1151	51
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	557	440	70	436	372	371	1143	488	318	1089	485
Arrive On Green	0.09	0.30	0.30	0.04	0.25	0.25	0.11	0.32	0.32	0.09	0.31	0.31
Sat Flow, veh/h	1774	1863	1474	1774	1770	1509	3442	3539	1509	3442	3539	1576
Grp Volume(v), veh/h	167	583	225	56	244	354	291	1221	47	258	1151	51
Grp Sat Flow(s),veh/h/ln	1774	1863	1474	1774	1770	1509	1721	1770	1509	1721	1770	1576
Q Serve(g_s), s	6.0	19.4	8.2	2.0	7.8	15.0	5.4	21.0	1.4	4.8	20.0	1.5
Cycle Q Clear(g_c), s	6.0	19.4	8.2	2.0	7.8	15.0	5.4	21.0	1.4	4.8	20.0	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	557	440	70	436	372	371	1143	488	318	1089	485
V/C Ratio(X)	1.02	1.05	0.51	0.80	0.56	0.95	0.79	1.07	0.10	0.81	1.06	0.11
Avail Cap(c_a), veh/h	164	557	440	164	436	372	371	1143	488	318	1089	485
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	22.8	18.9	30.9	21.4	24.1	28.3	22.0	15.4	28.9	22.5	16.1
Incr Delay (d2), s/veh	75.6	51.2	1.0	18.0	1.6	34.5	10.6	46.7	0.4	14.7	43.6	0.4
Initial Q Delay(d3),s/veh	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	17.8	3.5	1.3	4.0	9.8	3.1	17.6	0.6	2.9	16.3	0.7
LnGrp Delay(d),s/veh	105.3	74.0	19.9	48.9	23.0	58.6	38.9	68.7	15.8	43.7	66.1	16.5
LnGrp LOS	F	F	B	D	C	E	D	F	B	D	F	B
Approach Vol, veh/h		975			654			1559			1460	
Approach Delay, s/veh		66.8			44.5			61.5			60.4	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.0	6.6	23.4	11.0	24.0	10.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	21.0	6.0	16.0	7.0	20.0	6.0	16.0
Max Q Clear Time (g_c+I1), s	8.0	23.0	4.0	21.4	7.4	22.0	8.0	17.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	59.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	240	310	40	100	5	450	480	30	10	60	40
Future Volume (veh/h)	190	240	310	40	100	5	450	480	30	10	60	40
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.77	1.00		0.98	1.00		0.92	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	260	329	385	44	111	3	542	578	30	15	92	51
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	1	1
Peak Hour Factor	0.73	0.73	0.73	0.90	0.90	0.90	0.83	0.83	0.83	0.65	0.65	0.65
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	493	518	641	152	155	4	654	1440	75	24	458	772
Arrive On Green	0.28	0.28	0.28	0.09	0.09	0.09	0.19	0.42	0.42	0.01	0.25	0.25
Sat Flow, veh/h	1774	1863	1223	1774	1804	49	3442	3406	176	1774	1863	1348
Grp Volume(v), veh/h	260	329	385	44	0	114	542	300	308	15	92	51
Grp Sat Flow(s),veh/h/ln	1774	1863	1223	1774	0	1853	1721	1770	1813	1774	1863	1348
Q Serve(g_s), s	12.4	15.5	24.4	2.3	0.0	6.0	15.2	11.8	11.8	0.8	3.9	1.9
Cycle Q Clear(g_c), s	12.4	15.5	24.4	2.3	0.0	6.0	15.2	11.8	11.8	0.8	3.9	1.9
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	493	518	641	152	0	159	654	748	766	24	458	772
V/C Ratio(X)	0.53	0.64	0.60	0.29	0.00	0.72	0.83	0.40	0.40	0.62	0.20	0.07
Avail Cap(c_a), veh/h	514	540	655	461	0	481	928	778	797	390	688	938
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	31.7	20.7	42.9	0.0	44.6	39.0	20.1	20.1	49.1	29.9	11.8
Incr Delay (d2), s/veh	0.9	2.3	1.5	1.0	0.0	5.9	4.4	0.3	0.3	23.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	8.3	8.4	1.2	0.0	3.3	7.6	5.8	6.0	0.6	2.0	1.1
LnGrp Delay(d),s/veh	31.5	34.0	22.1	43.9	0.0	50.5	43.3	20.4	20.5	72.3	30.1	11.8
LnGrp LOS	C	C	C	D		D	D	C	C	E	C	B
Approach Vol, veh/h		974			158			1150			158	
Approach Delay, s/veh		28.6			48.6			31.2			28.2	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	29.6		13.6	6.4	47.3		32.8
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	27.0	37.0		26.0	22.0	44.0		29.0
Max Q Clear Time (g_c+I1), s	17.2	5.9		8.0	2.8	13.8		26.4
Green Ext Time (p_c), s	1.9	5.1		0.7	0.0	5.1		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	31.1
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	40	210	20	50	100	40
Future Vol, veh/h	40	210	20	50	100	40
Conflicting Peds, #/hr	0	129	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	82	82	71	71
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	269	24	61	141	56

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	450	0	425	315
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	110	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1110	-	586	725
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	915	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1110	-	503	636
Mov Cap-2 Maneuver	-	-	-	-	503	-
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	895	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	15.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	535	-	-	1110	-
HCM Lane V/C Ratio	0.369	-	-	0.022	-
HCM Control Delay (s)	15.6	-	-	8.3	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.7	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	26.2
Intersection LOS	D

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	100	5	80	0	10	5	5	0	80	520	5
Future Vol, veh/h	0	100	5	80	0	10	5	5	0	80	520	5
Peak Hour Factor	0.92	0.86	0.86	0.86	0.92	0.50	0.50	0.50	0.92	0.66	0.66	0.66
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	116	6	93	0	20	10	10	0	121	788	8
Number of Lanes	0	0	1	0	0	0	1	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	1
HCM Control Delay	17.2	12.2	34.9
HCM LOS	C	B	D

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	54%	50%	9%	0%	0%
Vol Thru, %	0%	100%	97%	3%	25%	91%	100%	0%
Vol Right, %	0%	0%	3%	43%	25%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	80	347	178	185	20	117	213	50
LT Vol	80	0	0	100	10	10	0	0
Through Vol	0	347	173	5	5	107	213	0
RT Vol	0	0	5	80	5	0	0	50
Lane Flow Rate	121	525	270	215	40	154	281	66
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.235	0.944	0.484	0.465	0.095	0.299	0.543	0.114
Departure Headway (Hd)	6.981	6.47	6.45	7.79	8.531	7.013	6.969	6.252
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	518	562	562	463	420	513	516	573
Service Time	4.681	4.17	4.15	5.529	6.28	4.753	4.709	3.992
HCM Lane V/C Ratio	0.234	0.934	0.48	0.464	0.095	0.3	0.545	0.115
HCM Control Delay	11.8	50.5	15.1	17.2	12.2	12.7	17.7	9.8
HCM Lane LOS	B	F	C	C	B	B	C	A
HCM 95th-tile Q	0.9	12.2	2.6	2.4	0.3	1.2	3.2	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	10	320	50
Future Vol, veh/h	0	10	320	50
Peak Hour Factor	0.92	0.76	0.76	0.76
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	13	421	66
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	15.1
HCM LOS	C

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	30	40	670	500	10
Future Vol, veh/h	10	30	40	670	500	10
Conflicting Peds, #/hr	0	1	0	0	0	12
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	80	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	33	50	838	676	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1213	358	701	0	-	0
Stage 1	694	-	-	-	-	-
Stage 2	519	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	174	638	892	-	-	-
Stage 1	457	-	-	-	-	-
Stage 2	562	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	161	630	891	-	-	-
Mov Cap-2 Maneuver	294	-	-	-	-	-
Stage 1	452	-	-	-	-	-
Stage 2	524	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	891	-	490	-	-
HCM Lane V/C Ratio	0.056	-	0.091	-	-
HCM Control Delay (s)	9.3	-	13.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	5	40	110	70	550	10	30	270	270
Future Vol, veh/h	0	0	0	5	40	110	70	550	10	30	270	270
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	0	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	93	93	93	74	74	74	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	5	43	118	95	743	14	46	415	415

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	1242	1875	381	841	0	0	760	0	0
Stage 1	942	942	-	-	-	-	-	-	-
Stage 2	300	933	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	167	71	617	790	-	-	848	-	-
Stage 1	340	340	-	-	-	-	-	-	-
Stage 2	725	343	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	139	0	615	790	-	-	848	-	-
Mov Cap-2 Maneuver	139	0	-	-	-	-	-	-	-
Stage 1	298	0	-	-	-	-	-	-	-
Stage 2	686	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.7	1.1	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	790	-	-	535	848	-	-
HCM Lane V/C Ratio	0.12	-	-	0.312	0.054	-	-
HCM Control Delay (s)	10.2	-	-	14.7	9.5	-	-
HCM Lane LOS	B	-	-	B	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1.3	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	380	10	50	5	0	10	0	300	10	5	270	0
Future Volume (veh/h)	380	10	50	5	0	10	0	300	10	5	270	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.93	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	500	13	66	13	0	21	0	380	13	7	370	0
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	1	2	0
Peak Hour Factor	0.76	0.76	0.76	0.39	0.39	0.39	0.79	0.79	0.79	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	587	15	78	20	0	33	0	886	30	355	900	0
Arrive On Green	0.39	0.39	0.39	0.03	0.00	0.03	0.00	0.25	0.25	0.25	0.25	0.00
Sat Flow, veh/h	1511	39	199	631	0	1020	0	3576	119	980	3632	0
Grp Volume(v), veh/h	579	0	0	34	0	0	0	193	200	7	370	0
Grp Sat Flow(s),veh/h/ln	1750	0	0	1651	0	0	0	1770	1832	980	1770	0
Q Serve(g_s), s	11.2	0.0	0.0	0.8	0.0	0.0	0.0	3.4	3.4	0.2	3.2	0.0
Cycle Q Clear(g_c), s	11.2	0.0	0.0	0.8	0.0	0.0	0.0	3.4	3.4	3.6	3.2	0.0
Prop In Lane	0.86		0.11	0.38		0.62	0.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h	680	0	0	53	0	0	0	450	466	355	900	0
V/C Ratio(X)	0.85	0.00	0.00	0.65	0.00	0.00	0.00	0.43	0.43	0.02	0.41	0.00
Avail Cap(c_a), veh/h	758	0	0	716	0	0	0	767	794	530	1534	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.3	0.0	0.0	17.7	0.0	0.0	0.0	11.5	11.5	13.0	11.5	0.0
Incr Delay (d2), s/veh	8.5	0.0	0.0	12.5	0.0	0.0	0.0	0.6	0.6	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	0.0	0.0	0.5	0.0	0.0	0.0	1.7	1.8	0.1	1.6	0.0
LnGrp Delay(d),s/veh	18.8	0.0	0.0	30.1	0.0	0.0	0.0	12.2	12.2	13.1	11.8	0.0
LnGrp LOS	B			C				B	B	B	B	
Approach Vol, veh/h		579			34			393			377	
Approach Delay, s/veh		18.8			30.1			12.2			11.8	
Approach LOS		B			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		13.4		18.3		13.4		5.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		5.4		13.2		5.6		2.8
Green Ext Time (p_c), s		3.5		1.1		3.5		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	15.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	0	20	0	5	5	20	270	0	5	250	40
Future Vol, veh/h	20	0	20	0	5	5	20	270	0	5	250	40
Conflicting Peds, #/hr	0	0	14	0	0	3	0	0	0	0	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	50	50	50	75	75	75	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	0	25	0	10	10	27	360	0	6	294	47

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	580	752	195	586	776	183	351	0	0	360	0	0
Stage 1	339	339	-	413	413	-	-	-	-	-	-	-
Stage 2	241	413	-	173	363	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	398	338	814	394	327	828	1204	-	-	1195	-	-
Stage 1	649	638	-	587	592	-	-	-	-	-	-	-
Stage 2	741	592	-	812	623	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	371	325	795	368	315	826	1188	-	-	1192	-	-
Mov Cap-2 Maneuver	371	325	-	368	315	-	-	-	-	-	-	-
Stage 1	628	628	-	574	579	-	-	-	-	-	-	-
Stage 2	701	579	-	771	613	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.9	13.3	0.6	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1188	-	-	506	-	456	1192	-	-
HCM Lane V/C Ratio	0.022	-	-	0.099	-	0.044	0.005	-	-
HCM Control Delay (s)	8.1	-	-	12.9	0	13.3	8	0	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	-	0.1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	180	10	0	450	60	5	5	0	40	5	220
Future Volume (veh/h)	230	180	10	0	450	60	5	5	0	40	5	220
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.99		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	284	222	12	0	489	56	13	13	0	47	6	163
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.81	0.81	0.81	0.92	0.92	0.92	0.38	0.38	0.38	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	597	1140	62	169	779	661	189	144	0	453	10	279
Arrive On Green	0.14	0.65	0.65	0.00	0.42	0.42	0.18	0.18	0.00	0.18	0.18	0.18
Sat Flow, veh/h	1774	1750	95	1142	1863	1581	340	782	0	1393	56	1511
Grp Volume(v), veh/h	284	0	234	0	489	56	26	0	0	47	0	169
Grp Sat Flow(s),veh/h/ln	1774	0	1845	1142	1863	1581	1122	0	0	1393	0	1567
Q Serve(g_s), s	3.2	0.0	2.2	0.0	8.8	0.9	0.0	0.0	0.0	0.0	0.0	4.2
Cycle Q Clear(g_c), s	3.2	0.0	2.2	0.0	8.8	0.9	4.3	0.0	0.0	1.0	0.0	4.2
Prop In Lane	1.00		0.05	1.00		1.00	0.50		0.00	1.00		0.96
Lane Grp Cap(c), veh/h	597	0	1202	169	779	661	334	0	0	453	0	289
V/C Ratio(X)	0.48	0.00	0.19	0.00	0.63	0.08	0.08	0.00	0.00	0.10	0.00	0.58
Avail Cap(c_a), veh/h	1139	0	2462	1215	2486	2111	1089	0	0	978	0	880
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.0	0.0	3.0	0.0	9.8	7.5	14.5	0.0	0.0	14.6	0.0	15.9
Incr Delay (d2), s/veh	0.6	0.0	0.1	0.0	0.8	0.1	0.1	0.0	0.0	0.1	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	1.1	0.0	4.7	0.4	0.3	0.0	0.0	0.5	0.0	1.9
LnGrp Delay(d),s/veh	6.6	0.0	3.1	0.0	10.6	7.5	14.6	0.0	0.0	14.7	0.0	17.8
LnGrp LOS	A		A		B	A	B			B		B
Approach Vol, veh/h		518			545			26			216	
Approach Delay, s/veh		5.0			10.3			14.6			17.1	
Approach LOS		A			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		31.3		11.4	10.0	21.4		11.4
Change Period (Y+Rc), s		3.5		3.5	4.0	3.5		3.5
Max Green Setting (Gmax), s		57.0		24.0	19.0	57.0		30.0
Max Q Clear Time (g_c+I1), s		4.2		6.2	5.2	10.8		6.3
Green Ext Time (p_c), s		6.0		1.2	1.0	5.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	9.4
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	20	60	10	30	30	1330	150	40	1320	10
Future Volume (veh/h)	10	20	20	60	10	30	30	1330	150	40	1320	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	12	24	7	75	12	29	33	1446	127	42	1389	11
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.83	0.83	0.83	0.80	0.80	0.80	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	109	459	100	9	464	48	1629	142	57	1804	14
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.03	0.50	0.50	0.03	0.50	0.50
Sat Flow, veh/h	2	370	1557	5	31	1574	1774	3282	286	1774	3598	28
Grp Volume(v), veh/h	36	0	7	87	0	29	33	775	798	42	683	717
Grp Sat Flow(s),veh/h/ln	372	0	1557	35	0	1574	1774	1770	1799	1774	1770	1857
Q Serve(g_s), s	0.1	0.0	0.2	0.1	0.0	0.9	1.3	26.6	27.2	1.6	21.3	21.3
Cycle Q Clear(g_c), s	20.0	0.0	0.2	20.0	0.0	0.9	1.3	26.6	27.2	1.6	21.3	21.3
Prop In Lane	0.33		1.00	0.86		1.00	1.00		0.16	1.00		0.02
Lane Grp Cap(c), veh/h	180	0	459	109	0	464	48	878	893	57	887	931
V/C Ratio(X)	0.20	0.00	0.02	0.80	0.00	0.06	0.68	0.88	0.89	0.74	0.77	0.77
Avail Cap(c_a), veh/h	180	0	459	110	0	464	105	878	893	131	887	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	0.0	17.0	31.9	0.0	17.2	32.7	15.3	15.5	32.5	13.7	13.7
Incr Delay (d2), s/veh	0.5	0.0	0.0	32.2	0.0	0.1	15.6	12.4	13.3	16.6	6.4	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.1	2.6	0.0	0.4	0.8	15.9	16.6	1.0	11.8	12.3
LnGrp Delay(d),s/veh	19.6	0.0	17.0	64.1	0.0	17.3	48.3	27.7	28.8	49.1	20.1	19.9
LnGrp LOS	B		B	E		B	D	C	C	D	C	B
Approach Vol, veh/h		43			116			1606			1442	
Approach Delay, s/veh		19.2			52.4			28.7			20.8	
Approach LOS		B			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	37.7		24.0	5.9	38.0		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	33.0		16.0	4.0	34.0		20.0
Max Q Clear Time (g_c+I1), s	3.6	29.2		22.0	3.3	23.3		22.0
Green Ext Time (p_c), s	0.0	3.6		0.0	0.0	10.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	25.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	5	210	30	10	10	40	1320	60	5	870	490
Future Volume (veh/h)	30	5	210	30	10	10	40	1320	60	5	870	490
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	41	7	110	55	18	13	49	1610	73	5	935	527
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.74	0.74	0.74	0.55	0.55	0.55	0.82	0.82	0.82	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	30	171	265	81	39	355	2307	104	266	2372	1035
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.67	0.67	0.67	0.67	0.67	0.67
Sat Flow, veh/h	283	193	1090	875	519	248	361	3442	155	292	3539	1545
Grp Volume(v), veh/h	158	0	0	86	0	0	49	824	859	5	935	527
Grp Sat Flow(s),veh/h/ln	1566	0	0	1642	0	0	361	1770	1828	292	1770	1545
Q Serve(g_s), s	2.2	0.0	0.0	0.0	0.0	0.0	3.3	13.3	13.5	0.5	5.5	7.9
Cycle Q Clear(g_c), s	4.3	0.0	0.0	1.9	0.0	0.0	8.7	13.3	13.5	14.0	5.5	7.9
Prop In Lane	0.26		0.70	0.64		0.15	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	344	0	0	385	0	0	355	1186	1225	266	2372	1035
V/C Ratio(X)	0.46	0.00	0.00	0.22	0.00	0.00	0.14	0.69	0.70	0.02	0.39	0.51
Avail Cap(c_a), veh/h	633	0	0	651	0	0	355	1186	1225	266	2372	1035
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	0.0	17.3	0.0	0.0	5.4	4.7	4.7	9.1	3.4	3.8
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.3	0.0	0.0	0.8	3.4	3.4	0.1	0.5	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	1.0	0.0	0.0	0.4	7.3	7.6	0.0	2.8	3.7
LnGrp Delay(d),s/veh	19.2	0.0	0.0	17.5	0.0	0.0	6.2	8.1	8.1	9.2	3.9	5.6
LnGrp LOS	B			B			A	A	A	A	A	A
Approach Vol, veh/h		158			86			1732			1467	
Approach Delay, s/veh		19.2			17.5			8.0			4.5	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		11.3		35.0		11.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		16.0		31.0		16.0
Max Q Clear Time (g_c+I1), s		15.5		6.3		16.0		3.9
Green Ext Time (p_c), s		14.6		1.0		14.1		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	5	20	10	5	650	10	650	20	10	1000	100
Future Volume (veh/h)	90	5	20	10	5	650	10	650	20	10	1000	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	148	8	33	12	6	510	11	730	20	11	1149	115
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.61	0.61	0.61	0.84	0.84	0.84	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	415	33	65	494	222	583	20	1245	34	20	1149	115
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.01	0.35	0.35	0.01	0.35	0.35
Sat Flow, veh/h	741	90	176	981	602	1582	1774	3513	96	1774	3241	324
Grp Volume(v), veh/h	189	0	0	18	0	510	11	368	382	11	627	637
Grp Sat Flow(s),veh/h/ln	1006	0	0	1583	0	1582	1774	1770	1840	1774	1770	1795
Q Serve(g_s), s	5.7	0.0	0.0	0.0	0.0	13.6	0.3	7.6	7.6	0.3	16.0	16.0
Cycle Q Clear(g_c), s	6.2	0.0	0.0	0.3	0.0	13.6	0.3	7.6	7.6	0.3	16.0	16.0
Prop In Lane	0.78		0.17	0.67		1.00	1.00		0.05	1.00		0.18
Lane Grp Cap(c), veh/h	513	0	0	716	0	583	20	627	652	20	627	636
V/C Ratio(X)	0.37	0.00	0.00	0.03	0.00	0.88	0.54	0.59	0.59	0.54	1.00	1.00
Avail Cap(c_a), veh/h	543	0	0	762	0	631	157	627	652	157	627	636
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.8	0.0	0.0	9.1	0.0	13.3	22.2	11.9	11.9	22.2	14.6	14.6
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.0	0.0	12.4	20.7	4.0	3.8	20.7	35.6	36.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	0.1	0.0	7.9	0.3	4.4	4.5	0.3	13.9	14.2
LnGrp Delay(d),s/veh	11.3	0.0	0.0	9.1	0.0	25.7	42.9	15.8	15.7	42.9	50.2	50.8
LnGrp LOS	B			A		C	D	B	B	D	D	F
Approach Vol, veh/h		189			528			761			1275	
Approach Delay, s/veh		11.3			25.2			16.2			50.4	
Approach LOS		B			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	20.0		20.6	4.5	20.0		20.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	16.0		18.0	4.0	16.0		18.0
Max Q Clear Time (g_c+I1), s	2.3	9.6		8.2	2.3	18.0		15.6
Green Ext Time (p_c), s	0.0	5.3		3.1	0.0	0.0		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	33.4
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	20	910	80	50	370
Future Vol, veh/h	10	20	910	80	50	370
Conflicting Peds, #/hr	0	0	0	2	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	0	25	-	0	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	86	86	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	37	1058	93	52	385

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1548	1058	0	-	1058	0
Stage 1	1058	-	-	-	-	-
Stage 2	490	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	126	273	-	0	658	-
Stage 1	334	-	-	0	-	-
Stage 2	616	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	116	273	-	-	658	-
Mov Cap-2 Maneuver	116	-	-	-	-	-
Stage 1	334	-	-	-	-	-
Stage 2	567	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.4	0	1.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	116	273	658	-
HCM Lane V/C Ratio	-	0.16	0.136	0.079	-
HCM Control Delay (s)	-	41.8	20.2	10.9	-
HCM Lane LOS	-	E	C	B	-
HCM 95th %tile Q(veh)	-	0.5	0.5	0.3	-

Intersection	
Int Delay, s/veh	7.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	300	660	110	60	290
Future Vol, veh/h	70	300	660	110	60	290
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	80	80	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	80	345	825	138	65	315

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1340	481	0	0	963	0
Stage 1	894	-	-	-	-	-
Stage 2	446	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	156	532	-	-	713	-
Stage 1	361	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	142	532	-	-	713	-
Mov Cap-2 Maneuver	142	-	-	-	-	-
Stage 1	361	-	-	-	-	-
Stage 2	585	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30.2	0	1.8
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	142	532	713	-
HCM Lane V/C Ratio	-	-	0.567	0.648	0.091	-
HCM Control Delay (s)	-	-	59.2	23.4	10.6	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	2.9	4.6	0.3	-

Intersection	
Int Delay, s/veh	4.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	140	350	440	10	100	280
Future Vol, veh/h	140	350	440	10	100	280
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	0	0	-	150	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	83	83	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	173	432	530	12	119	333

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1101	-	0	-	530	0
Stage 1	530	-	-	-	-	-
Stage 2	571	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	235	0	-	0	1037	-
Stage 1	590	0	-	0	-	-
Stage 2	565	0	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	208	-	-	-	1037	-
Mov Cap-2 Maneuver	341	-	-	-	-	-
Stage 1	590	-	-	-	-	-
Stage 2	500	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.9	0	2.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	341	-	1037	-
HCM Lane V/C Ratio	-	0.507	-	0.115	-
HCM Control Delay (s)	-	25.9	0	8.9	-
HCM Lane LOS	-	D	A	A	-
HCM 95th %tile Q(veh)	-	2.7	-	0.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	40	10	20	60	90	20	600	20	60	910	60
Future Volume (veh/h)	10	40	10	20	60	90	20	600	20	60	910	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	0.97		0.97	1.00		0.95	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	45	6	24	73	61	23	698	21	71	1071	65
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82	0.86	0.86	0.86	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	354	288	38	94	159	116	362	2286	69	593	2209	134
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	1.00	1.00	1.00	0.65	0.65	0.65
Sat Flow, veh/h	1235	1597	213	140	882	643	493	3502	105	725	3384	205
Grp Volume(v), veh/h	11	0	51	158	0	0	23	353	366	71	560	576
Grp Sat Flow(s),veh/h/ln	1235	0	1810	1665	0	0	493	1770	1838	725	1770	1819
Q Serve(g_s), s	0.0	0.0	1.4	0.3	0.0	0.0	0.7	0.0	0.0	2.3	9.6	9.7
Cycle Q Clear(g_c), s	0.4	0.0	1.4	5.0	0.0	0.0	10.4	0.0	0.0	2.3	9.6	9.7
Prop In Lane	1.00		0.12	0.15		0.39	1.00		0.06	1.00		0.11
Lane Grp Cap(c), veh/h	354	0	327	370	0	0	362	1155	1200	593	1155	1188
V/C Ratio(X)	0.03	0.00	0.16	0.43	0.00	0.00	0.06	0.31	0.31	0.12	0.48	0.48
Avail Cap(c_a), veh/h	563	0	634	645	0	0	362	1155	1200	593	1155	1188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.98	0.98	0.98	0.15	0.15	0.15
Uniform Delay (d), s/veh	20.3	0.0	20.7	22.2	0.0	0.0	1.3	0.0	0.0	4.0	5.3	5.3
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.8	0.0	0.0	0.3	0.7	0.6	0.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.7	2.5	0.0	0.0	0.1	0.2	0.2	0.5	4.7	4.9
LnGrp Delay(d),s/veh	20.3	0.0	21.0	23.0	0.0	0.0	1.6	0.7	0.6	4.1	5.5	5.5
LnGrp LOS	C		C	C			A	A	A	A	A	A
Approach Vol, veh/h		62			158			742			1207	
Approach Delay, s/veh		20.8			23.0			0.7			5.4	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.2		15.8		44.2		15.8
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		29.0		21.0		29.0		21.0
Max Q Clear Time (g_c+I1), s		12.4		3.4		11.7		7.0
Green Ext Time (p_c), s		12.1		1.2		12.6		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	30	40	5	30	20	20	550	10	30	830	70
Future Volume (veh/h)	60	30	40	5	30	20	20	550	10	30	830	70
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.90	0.92		0.98	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	87	43	46	10	58	30	22	598	11	35	976	78
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.69	0.69	0.69	0.52	0.52	0.52	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	357	420	319	368	259	134	471	2160	40	501	1570	125
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.09	0.81	0.81	0.95	0.95	0.95
Sat Flow, veh/h	1286	1863	1418	1200	1150	595	1774	3552	65	804	3308	264
Grp Volume(v), veh/h	87	43	46	10	0	88	22	298	311	35	522	532
Grp Sat Flow(s),veh/h/ln	1286	1863	1418	1200	0	1745	1774	1770	1848	804	1770	1802
Q Serve(g_s), s	3.6	1.1	1.6	0.4	0.0	2.5	0.3	2.5	2.5	0.1	2.2	2.2
Cycle Q Clear(g_c), s	6.0	1.1	1.6	1.5	0.0	2.5	0.3	2.5	2.5	0.1	2.2	2.2
Prop In Lane	1.00		1.00	1.00		0.34	1.00		0.04	1.00		0.15
Lane Grp Cap(c), veh/h	357	420	319	368	0	393	471	1076	1124	501	840	856
V/C Ratio(X)	0.24	0.10	0.14	0.03	0.00	0.22	0.05	0.28	0.28	0.07	0.62	0.62
Avail Cap(c_a), veh/h	453	559	426	458	0	524	471	1076	1124	501	840	856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.95	0.95	0.95	0.87	0.87	0.87
Uniform Delay (d), s/veh	21.4	18.4	18.6	19.0	0.0	19.0	5.5	2.5	2.5	0.8	0.9	0.9
Incr Delay (d2), s/veh	0.4	0.1	0.2	0.0	0.0	0.3	0.2	0.6	0.6	0.2	3.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.6	0.6	0.1	0.0	1.2	0.2	1.3	1.3	0.1	1.3	1.3
LnGrp Delay(d),s/veh	21.8	18.5	18.8	19.1	0.0	19.2	5.7	3.1	3.1	1.0	3.9	3.8
LnGrp LOS	C	B	B	B		B	A	A	A	A	A	A
Approach Vol, veh/h		176			98			631			1089	
Approach Delay, s/veh		20.2			19.2			3.2			3.7	
Approach LOS		C			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	8.0	33.5		18.5		41.5		18.5
Change Period (Y+Rc), s	4.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	4.0	24.0		18.0		32.0		18.0
Max Q Clear Time (g_c+I1), s	2.3	4.2		4.5		4.5		8.0
Green Ext Time (p_c), s	0.0	8.3		1.2		9.4		1.0

Intersection Summary		
HCM 2010 Ctrl Delay		5.8
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	60	20	120	110	140	10	410	80	130	690	50
Future Volume (veh/h)	20	60	20	120	110	140	10	410	80	130	690	50
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.92	0.95		0.93	0.99		0.96	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	25	76	10	133	122	67	12	488	68	162	862	45
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.79	0.79	0.79	0.90	0.90	0.90	0.84	0.84	0.84	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	477	375	398	477	376	411	1377	191	590	1700	89
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.89	0.89	0.13	1.00	1.00
Sat Flow, veh/h	1139	1863	1464	1237	1863	1467	1774	3103	430	1774	3412	178
Grp Volume(v), veh/h	25	76	10	133	122	67	12	277	279	162	447	460
Grp Sat Flow(s),veh/h/ln	1139	1863	1464	1237	1863	1467	1774	1770	1764	1774	1770	1820
Q Serve(g_s), s	1.1	1.9	0.3	5.6	3.1	2.1	0.2	1.5	1.6	2.9	0.1	0.1
Cycle Q Clear(g_c), s	4.2	1.9	0.3	7.5	3.1	2.1	0.2	1.5	1.6	2.9	0.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		0.10
Lane Grp Cap(c), veh/h	353	477	375	398	477	376	411	785	783	590	882	907
V/C Ratio(X)	0.07	0.16	0.03	0.33	0.26	0.18	0.03	0.35	0.36	0.27	0.51	0.51
Avail Cap(c_a), veh/h	383	528	415	431	528	416	507	785	783	590	882	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.63	0.63	0.63
Uniform Delay (d), s/veh	19.4	17.3	16.7	20.2	17.8	17.4	8.8	2.0	2.0	6.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.5	0.3	0.2	0.0	1.2	1.2	0.2	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.0	0.1	2.0	1.6	0.9	0.1	0.9	0.9	1.3	0.3	0.3
LnGrp Delay(d),s/veh	19.5	17.5	16.7	20.7	18.0	17.6	8.9	3.2	3.2	7.0	1.4	1.3
LnGrp LOS	B	B	B	C	B	B	A	A	A	A	A	A
Approach Vol, veh/h		111			322			568			1069	
Approach Delay, s/veh		17.9			19.1			3.3			2.2	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	34.9		20.4	8.0	31.6		20.4
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	25.0		17.0	4.0	25.0		17.0
Max Q Clear Time (g_c+I1), s	2.2	2.1		9.5	4.9	3.6		6.2
Green Ext Time (p_c), s	0.0	11.2		1.4	0.0	10.8		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	6.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	10	130	40	40	460	0	0	480	340
Future Volume (veh/h)	0	0	0	10	130	40	40	460	0	0	480	340
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.91	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				14	183	17	45	523	0	0	552	337
Adj No. of Lanes				0	3	0	1	2	0	0	1	1
Peak Hour Factor				0.71	0.71	0.71	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				50	687	64	543	2413	0	0	1270	1054
Arrive On Green				0.15	0.15	0.15	0.68	0.68	0.00	0.00	1.00	1.00
Sat Flow, veh/h				329	4532	421	621	3632	0	0	1863	1546
Grp Volume(v), veh/h				79	65	70	45	523	0	0	552	337
Grp Sat Flow(s),veh/h/ln				1846	1695	1741	621	1770	0	0	1863	1546
Q Serve(g_s), s				2.3	2.0	2.1	1.5	3.3	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				2.3	2.0	2.1	1.5	3.3	0.0	0.0	0.0	0.0
Prop In Lane				0.18		0.24	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				280	257	264	543	2413	0	0	1270	1054
V/C Ratio(X)				0.28	0.25	0.27	0.08	0.22	0.00	0.00	0.43	0.32
Avail Cap(c_a), veh/h				677	622	638	543	2413	0	0	1270	1054
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.89	0.89
Uniform Delay (d), s/veh				22.6	22.5	22.5	3.3	3.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.5	0.5	0.5	0.3	0.2	0.0	0.0	1.0	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	1.0	1.1	0.3	1.7	0.0	0.0	0.3	0.2
LnGrp Delay(d),s/veh				23.1	23.0	23.0	3.6	3.8	0.0	0.0	1.0	0.7
LnGrp LOS				C	C	C	A	A			A	A
Approach Vol, veh/h					214			568			889	
Approach Delay, s/veh					23.0			3.8			0.9	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		45.9		14.1		45.9		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		28.0		22.0		28.0		
Max Q Clear Time (g_c+I1), s		2.0		4.3		5.3		
Green Ext Time (p_c), s		8.4		0.9		8.1		

Intersection Summary		
HCM 2010 Ctrl Delay		4.7
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	170	90	230	300	10	110	180	130	10	140	10
Future Volume (veh/h)	10	170	90	230	300	10	110	180	130	10	140	10
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	0.99		0.97	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	12	198	76	280	366	3	159	261	145	15	215	7
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.82	0.82	0.82	0.69	0.69	0.69	0.65	0.65	0.65
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	425	458	366	610	729	599	462	392	218	309	629	20
Arrive On Green	0.01	0.25	0.25	0.16	0.39	0.39	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1774	1863	1488	1774	1863	1531	1148	1115	619	970	1792	58
Grp Volume(v), veh/h	12	198	76	280	366	3	159	0	406	15	0	222
Grp Sat Flow(s),veh/h/ln	1774	1863	1488	1774	1863	1531	1148	0	1735	970	0	1850
Q Serve(g_s), s	0.2	4.0	1.8	4.6	6.7	0.1	5.3	0.0	8.9	0.6	0.0	4.0
Cycle Q Clear(g_c), s	0.2	4.0	1.8	4.6	6.7	0.1	9.3	0.0	8.9	9.5	0.0	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.36	1.00		0.03
Lane Grp Cap(c), veh/h	425	458	366	610	729	599	462	0	609	309	0	650
V/C Ratio(X)	0.03	0.43	0.21	0.46	0.50	0.01	0.34	0.00	0.67	0.05	0.00	0.34
Avail Cap(c_a), veh/h	957	1204	962	884	1204	990	545	0	735	422	0	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	14.3	13.4	8.7	10.3	8.3	14.2	0.0	12.3	16.3	0.0	10.7
Incr Delay (d2), s/veh	0.0	0.6	0.3	0.5	0.5	0.0	0.4	0.0	1.7	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.1	0.8	2.3	3.5	0.0	1.7	0.0	4.5	0.2	0.0	2.1
LnGrp Delay(d),s/veh	12.4	14.9	13.7	9.2	10.9	8.3	14.6	0.0	14.1	16.4	0.0	11.0
LnGrp LOS	B	B	B	A	B	A	B		B	B		B
Approach Vol, veh/h		286			649			565			237	
Approach Delay, s/veh		14.5			10.1			14.2			11.4	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	3.6	21.5		19.7	10.1	15.0		19.7
Change Period (Y+Rc), s	3.0	4.0		4.0	3.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	29.0		19.0	14.0	29.0		21.0
Max Q Clear Time (g_c+I1), s	2.2	8.7		11.3	6.6	6.0		11.5
Green Ext Time (p_c), s	0.0	3.9		3.1	0.7	4.1		3.5

Intersection Summary	
HCM 2010 Ctrl Delay	12.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	240	20	190	450	20	40	310	130	30	190	40
Future Volume (veh/h)	70	240	20	190	450	20	40	310	130	30	190	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.94	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	104	358	26	200	474	21	45	348	115	36	229	37
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.67	0.67	0.67	0.95	0.95	0.95	0.89	0.89	0.89	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	746	609	250	864	716	325	423	140	171	500	81
Arrive On Green	0.08	0.40	0.40	0.14	0.46	0.46	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1774	1863	1522	1774	1863	1544	1107	1318	436	923	1557	252
Grp Volume(v), veh/h	104	358	26	200	474	21	45	0	463	36	0	266
Grp Sat Flow(s),veh/h/ln	1774	1863	1522	1774	1863	1544	1107	0	1754	923	0	1808
Q Serve(g_s), s	4.2	10.3	0.8	7.9	13.3	0.5	2.4	0.0	17.7	2.7	0.0	8.5
Cycle Q Clear(g_c), s	4.2	10.3	0.8	7.9	13.3	0.5	10.9	0.0	17.7	20.4	0.0	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.14
Lane Grp Cap(c), veh/h	137	746	609	250	864	716	325	0	563	171	0	580
V/C Ratio(X)	0.76	0.48	0.04	0.80	0.55	0.03	0.14	0.00	0.82	0.21	0.00	0.46
Avail Cap(c_a), veh/h	465	746	609	465	864	716	337	0	581	180	0	599
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.7	16.1	13.3	30.1	14.0	10.6	23.9	0.0	22.7	32.1	0.0	19.6
Incr Delay (d2), s/veh	8.2	2.2	0.1	5.9	2.5	0.1	0.2	0.0	9.1	0.6	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	5.7	0.3	4.3	7.3	0.2	0.8	0.0	9.9	0.7	0.0	4.3
LnGrp Delay(d),s/veh	40.9	18.3	13.4	36.0	16.5	10.6	24.1	0.0	31.8	32.7	0.0	20.2
LnGrp LOS	D	B	B	D	B	B	C		C	C		C
Approach Vol, veh/h		488			695			508			302	
Approach Delay, s/veh		22.9			21.9			31.1			21.6	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.2	32.5		26.7	8.6	37.1		26.7
Change Period (Y+Rc), s	3.0	3.5		3.5	3.0	3.5		3.5
Max Green Setting (Gmax), s	10.0	29.0		24.0	19.0	29.0		24.0
Max Q Clear Time (g_c+I1), s	10.9	12.3		22.4	6.2	15.3		19.7
Green Ext Time (p_c), s	0.5	5.3		0.9	0.2	4.8		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	24.5
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations			↕				↕				↕				↕	
Traffic Vol, veh/h	0	10	20	5	0	60	40	10	0	5	10	10	0	60	90	30
Future Vol, veh/h	0	10	20	5	0	60	40	10	0	5	10	10	0	60	90	30
Peak Hour Factor	0.92	0.70	0.70	0.70	0.92	0.85	0.85	0.85	0.92	0.75	0.75	0.75	0.92	0.59	0.59	0.59
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	29	7	0	71	47	12	0	7	13	13	0	102	153	51
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.2	8.9	7.7	10
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	29%	55%	33%
Vol Thru, %	40%	57%	36%	50%
Vol Right, %	40%	14%	9%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	25	35	110	180
LT Vol	5	10	60	60
Through Vol	10	20	40	90
RT Vol	10	5	10	30
Lane Flow Rate	33	50	129	305
Geometry Grp	1	1	1	1
Degree of Util (X)	0.042	0.067	0.174	0.371
Departure Headway (Hd)	4.515	4.847	4.827	4.382
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	792	738	743	821
Service Time	2.549	2.883	2.857	2.405
HCM Lane V/C Ratio	0.042	0.068	0.174	0.371
HCM Control Delay	7.7	8.2	8.9	10
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.6	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	40	340	30	20	160	0	0	140	120
Future Volume (veh/h)	0	0	0	40	340	30	20	160	0	0	140	120
Number				5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.90	0.96		1.00	1.00		0.91
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				48	410	32	23	182	0	0	163	92
Adj No. of Lanes				0	3	0	1	1	0	0	1	1
Peak Hour Factor				0.83	0.83	0.83	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				229	2075	164	430	683	0	0	683	530
Arrive On Green				0.47	0.47	0.47	0.73	0.73	0.00	0.00	0.12	0.12
Sat Flow, veh/h				490	4447	352	1079	1863	0	0	1863	1445
Grp Volume(v), veh/h				180	150	160	23	182	0	0	163	92
Grp Sat Flow(s),veh/h/ln				1838	1695	1755	1079	1863	0	0	1863	1445
Q Serve(g_s), s				3.5	3.1	3.2	0.6	1.9	0.0	0.0	4.8	3.4
Cycle Q Clear(g_c), s				3.5	3.1	3.2	5.3	1.9	0.0	0.0	4.8	3.4
Prop In Lane				0.27		0.20	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				858	791	819	430	683	0	0	683	530
V/C Ratio(X)				0.21	0.19	0.19	0.05	0.27	0.00	0.00	0.24	0.17
Avail Cap(c_a), veh/h				858	791	819	430	683	0	0	683	530
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				9.5	9.4	9.4	6.8	5.3	0.0	0.0	18.8	18.2
Incr Delay (d2), s/veh				0.6	0.5	0.5	0.2	1.0	0.0	0.0	0.8	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.9	1.6	1.7	0.2	1.1	0.0	0.0	2.6	1.5
LnGrp Delay(d),s/veh				10.0	9.9	9.9	7.1	6.3	0.0	0.0	19.6	18.9
LnGrp LOS				B	A	A	A	A			B	B
Approach Vol, veh/h					490			205			255	
Approach Delay, s/veh					9.9			6.4			19.4	
Approach LOS					A			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		28.0		22.0				22.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary		
HCM 2010 Ctrl Delay		11.7
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	40	380	20	30	60	0	0	30	30
Future Volume (veh/h)	0	0	0	40	380	20	30	60	0	0	30	30
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.82	0.97		1.00	1.00		0.95
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1863
Adj Flow Rate, veh/h				44	422	21	41	82	0	0	45	36
Adj No. of Lanes				0	3	0	0	1	0	0	1	1
Peak Hour Factor				0.90	0.90	0.90	0.73	0.73	0.73	0.66	0.66	0.66
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				143	1460	74	322	608	0	0	962	781
Arrive On Green				0.10	0.10	0.10	0.52	0.52	0.00	0.00	0.52	0.52
Sat Flow, veh/h				453	4612	233	469	1178	0	0	1863	1511
Grp Volume(v), veh/h				179	149	159	123	0	0	0	45	36
Grp Sat Flow(s),veh/h/ln				1840	1695	1762	1646	0	0	0	1863	1511
Q Serve(g_s), s				5.4	4.9	5.0	0.0	0.0	0.0	0.0	0.7	0.7
Cycle Q Clear(g_c), s				5.4	4.9	5.0	2.1	0.0	0.0	0.0	0.7	0.7
Prop In Lane				0.25		0.13	0.33		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				583	537	558	931	0	0	0	962	781
V/C Ratio(X)				0.31	0.28	0.28	0.13	0.00	0.00	0.00	0.05	0.05
Avail Cap(c_a), veh/h				583	537	558	931	0	0	0	962	781
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				20.8	20.5	20.6	7.5	0.0	0.0	0.0	7.2	7.2
Incr Delay (d2), s/veh				1.4	1.3	1.3	0.3	0.0	0.0	0.0	0.1	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.0	2.5	2.6	1.1	0.0	0.0	0.0	0.4	0.3
LnGrp Delay(d),s/veh				22.1	21.8	21.9	7.8	0.0	0.0	0.0	7.3	7.3
LnGrp LOS				C	C	C	A				A	A
Approach Vol, veh/h					487			123			81	
Approach Delay, s/veh					22.0			7.8			7.3	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		36.0				36.0		24.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		31.0				31.0		19.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		17.7
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	100	340	30	60	120	0	0	90	40
Future Volume (veh/h)	0	0	0	100	340	30	60	120	0	0	90	40
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.92	0.97		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				116	395	30	65	130	0	0	105	37
Adj No. of Lanes				0	3	0	0	1	0	0	1	0
Peak Hour Factor				0.86	0.86	0.86	0.92	0.92	0.92	0.86	0.86	0.86
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				479	1764	135	247	456	0	0	495	174
Arrive On Green				0.45	0.45	0.45	0.38	0.38	0.00	0.00	0.38	0.38
Sat Flow, veh/h				1065	3920	301	435	1190	0	0	1292	455
Grp Volume(v), veh/h				197	166	178	195	0	0	0	0	142
Grp Sat Flow(s),veh/h/ln				1810	1695	1781	1625	0	0	0	0	1747
Q Serve(g_s), s				4.0	3.6	3.7	0.4	0.0	0.0	0.0	0.0	3.3
Cycle Q Clear(g_c), s				4.0	3.6	3.7	4.4	0.0	0.0	0.0	0.0	3.3
Prop In Lane				0.59		0.17	0.33		0.00	0.00		0.26
Lane Grp Cap(c), veh/h				814	763	801	703	0	0	0	0	670
V/C Ratio(X)				0.24	0.22	0.22	0.28	0.00	0.00	0.00	0.00	0.21
Avail Cap(c_a), veh/h				814	763	801	703	0	0	0	0	670
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				10.2	10.1	10.1	12.7	0.0	0.0	0.0	0.0	12.4
Incr Delay (d2), s/veh				0.7	0.7	0.6	1.0	0.0	0.0	0.0	0.0	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.1	1.8	1.9	2.4	0.0	0.0	0.0	0.0	1.7
LnGrp Delay(d),s/veh				10.9	10.7	10.7	13.7	0.0	0.0	0.0	0.0	13.1
LnGrp LOS				B	B	B	B					B
Approach Vol, veh/h					541			195			142	
Approach Delay, s/veh					10.8			13.7			13.1	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.0		32.0		28.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		23.0		27.0		23.0		
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		
Green Ext Time (p_c), s		0.0		0.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		11.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	300	30	0	0	0	0	210	20	140	350	0
Future Volume (veh/h)	290	300	30	0	0	0	0	210	20	140	350	0
Number	5	2	12				3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	269	553	31				0	216	12	173	432	0
Adj No. of Lanes	1	2	0				0	1	0	1	1	0
Peak Hour Factor	0.76	0.76	0.76				0.97	0.97	0.97	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	898	1765	99				0	571	32	385	609	0
Arrive On Green	0.51	0.51	0.51				0.00	0.33	0.33	0.33	0.33	0.00
Sat Flow, veh/h	1774	3486	195				0	1746	97	1143	1863	0
Grp Volume(v), veh/h	269	295	289				0	0	228	173	432	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1819				0	0	1843	1143	1863	0
Q Serve(g_s), s	5.3	5.6	5.6				0.0	0.0	5.7	8.2	12.2	0.0
Cycle Q Clear(g_c), s	5.3	5.6	5.6				0.0	0.0	5.7	13.9	12.2	0.0
Prop In Lane	1.00		0.11				0.00		0.05	1.00		0.00
Lane Grp Cap(c), veh/h	898	943	921				0	0	603	385	609	0
V/C Ratio(X)	0.30	0.31	0.31				0.00	0.00	0.38	0.45	0.71	0.00
Avail Cap(c_a), veh/h	898	943	921				0	0	768	488	776	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.6	8.7	8.7				0.0	0.0	15.5	20.8	17.7	0.0
Incr Delay (d2), s/veh	0.9	0.9	0.9				0.0	0.0	0.4	0.8	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	3.1	3.0				0.0	0.0	2.9	2.7	6.6	0.0
LnGrp Delay(d),s/veh	9.5	9.6	9.6				0.0	0.0	15.9	21.7	19.8	0.0
LnGrp LOS	A	A	A						B	C	B	
Approach Vol, veh/h		853						228			605	
Approach Delay, s/veh		9.5						15.9			20.4	
Approach LOS		A						B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		35.4		24.6				24.6
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		25.0		25.0				25.0
Max Q Clear Time (g_c+I1), s		7.6		15.9				7.7
Green Ext Time (p_c), s		4.9		3.6				5.2

Intersection Summary	
HCM 2010 Ctrl Delay	14.3
HCM 2010 LOS	B

Notes

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Vol, veh/h	0	0	0	0	0	20	150	20	0	10	200	0	0	0	240	130
Future Vol, veh/h	0	0	0	0	0	20	150	20	0	10	200	0	0	0	240	130
Peak Hour Factor	0.92	1.00	1.00	1.00	0.92	0.80	0.80	0.80	0.92	0.93	0.93	0.93	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	25	188	25	0	11	215	0	0	0	273	148
Number of Lanes	0	0	0	0	0	0	2	0	0	0	1	0	0	0	1	1

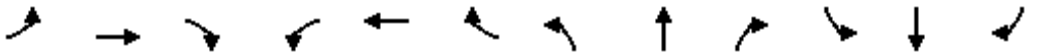
Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	10.4	12.1	10.9
HCM LOS	B	B	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	5%	21%	0%	0%	0%
Vol Thru, %	95%	79%	79%	100%	0%
Vol Right, %	0%	0%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	210	95	95	240	130
LT Vol	10	20	0	0	0
Through Vol	200	75	75	240	0
RT Vol	0	0	20	0	130
Lane Flow Rate	226	119	119	273	148
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.363	0.207	0.199	0.414	0.195
Departure Headway (Hd)	5.789	6.282	6.027	5.567	4.86
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	625	574	599	652	743
Service Time	3.789	3.992	3.736	3.267	2.56
HCM Lane V/C Ratio	0.362	0.207	0.199	0.419	0.199
HCM Control Delay	12.1	10.6	10.2	12.1	8.7
HCM Lane LOS	B	B	B	B	A
HCM 95th-tile Q	1.7	0.8	0.7	2	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	40	20	150	20	5	5	370	170	10	300	5
Future Volume (veh/h)	10	40	20	150	20	5	5	370	170	10	300	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.99	1.00		0.96	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	13	51	13	231	31	3	6	435	169	12	366	6
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.78	0.78	0.78	0.65	0.65	0.65	0.85	0.85	0.85	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	540	122	662	80	7	437	525	204	263	760	12
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	156	1351	306	1234	201	16	1003	1311	509	808	1899	31
Grp Volume(v), veh/h	77	0	0	265	0	0	6	0	604	12	0	372
Grp Sat Flow(s),veh/h/ln	1813	0	0	1452	0	0	1003	0	1821	808	0	1931
Q Serve(g_s), s	0.0	0.0	0.0	4.1	0.0	0.0	0.2	0.0	11.9	0.5	0.0	5.7
Cycle Q Clear(g_c), s	1.0	0.0	0.0	5.1	0.0	0.0	5.9	0.0	11.9	12.5	0.0	5.7
Prop In Lane	0.17		0.17	0.87		0.01	1.00		0.28	1.00		0.02
Lane Grp Cap(c), veh/h	831	0	0	749	0	0	437	0	728	263	0	772
V/C Ratio(X)	0.09	0.00	0.00	0.35	0.00	0.00	0.01	0.00	0.83	0.05	0.00	0.48
Avail Cap(c_a), veh/h	831	0	0	749	0	0	437	0	728	263	0	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.5	0.0	0.0	8.6	0.0	0.0	11.1	0.0	10.8	16.4	0.0	8.9
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.3	0.0	0.0	0.1	0.0	10.6	0.3	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	2.3	0.0	0.0	0.1	0.0	8.0	0.1	0.0	3.5
LnGrp Delay(d),s/veh	7.7	0.0	0.0	9.9	0.0	0.0	11.2	0.0	21.3	16.7	0.0	11.1
LnGrp LOS	A			A			B		C	B		B
Approach Vol, veh/h		77			265			610			384	
Approach Delay, s/veh		7.7			9.9			21.2			11.2	
Approach LOS		A			A			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		20.0		20.0		20.0		20.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		13.9		3.0		14.5		7.1
Green Ext Time (p_c), s		1.3		1.2		1.0		1.0

Intersection Summary		
HCM 2010 Ctrl Delay		15.3
HCM 2010 LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	570	280	0	0	0	120	0	280	0	270	190
Future Volume (vph)	0	570	280	0	0	0	120	0	280	0	270	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5				4.2		4.2		4.2	4.5
Lane Util. Factor		0.95	1.00				1.00		1.00		1.00	1.00
Frpb, ped/bikes		1.00	1.00				1.00		0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00				1.00		1.00		1.00	1.00
Frt		1.00	0.85				1.00		0.85		1.00	0.85
Flt Protected		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (prot)		3539	1583				1770		1558		1863	1571
Flt Permitted		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (perm)		3539	1583				1770		1558		1863	1571
Peak-hour factor, PHF	0.83	0.83	0.83	1.00	1.00	1.00	0.81	0.81	0.81	0.87	0.87	0.87
Adj. Flow (vph)	0	687	337	0	0	0	148	0	346	0	310	218
RTOR Reduction (vph)	0	0	86	0	0	0	0	0	251	0	0	79
Lane Group Flow (vph)	0	687	251	0	0	0	148	0	95	0	310	139
Confl. Peds. (#/hr)						3			6			4
Confl. Bikes (#/hr)												9
Turn Type		NA	Perm				Prot		Perm		NA	custom
Protected Phases		2					3				4	2
Permitted Phases			2						4			4
Actuated Green, G (s)		24.9	24.9				11.9		18.7		18.7	43.6
Effective Green, g (s)		24.9	24.9				11.9		18.7		18.7	43.6
Actuated g/C Ratio		0.36	0.36				0.17		0.27		0.27	0.64
Clearance Time (s)		4.5	4.5				4.2		4.2		4.2	4.5
Vehicle Extension (s)		3.0	3.0				3.0		3.0		3.0	3.0
Lane Grp Cap (vph)		1288	576				307		425		509	1001
v/s Ratio Prot		c0.19					c0.08				c0.17	0.05
v/s Ratio Perm			0.16						0.06			0.04
v/c Ratio		0.53	0.43				0.48		0.22		0.61	0.14
Uniform Delay, d1		17.2	16.4				25.5		19.2		21.7	4.9
Progression Factor		1.00	1.00				1.00		1.00		1.00	1.00
Incremental Delay, d2		0.4	0.5				1.2		0.3		2.1	0.1
Delay (s)		17.6	17.0				26.7		19.5		23.7	5.0
Level of Service		B	B				C		B		C	A
Approach Delay (s)		17.4			0.0			21.6			16.0	
Approach LOS		B			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	18.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	68.4	Sum of lost time (s)	12.9
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	10	5	30	10	5	5	540	20	5	510	10
Future Volume (veh/h)	30	10	5	30	10	5	5	540	20	5	510	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.97	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	14	7	48	16	8	6	675	25	7	699	14
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.70	0.70	0.70	0.63	0.63	0.63	0.80	0.80	0.80	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	373	115	45	422	123	411	360	1004	37	367	1024	21
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	914	420	164	1071	449	1500	734	1783	66	742	1819	36
Grp Volume(v), veh/h	64	0	0	64	0	8	6	0	700	7	0	713
Grp Sat Flow(s),veh/h/ln	1497	0	0	1520	0	1500	734	0	1849	742	0	1855
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.2	0.3	0.0	13.1	0.3	0.0	13.4
Cycle Q Clear(g_c), s	1.7	0.0	0.0	1.3	0.0	0.2	13.7	0.0	13.1	13.4	0.0	13.4
Prop In Lane	0.67		0.11	0.75		1.00	1.00		0.04	1.00		0.02
Lane Grp Cap(c), veh/h	533	0	0	545	0	411	360	0	1041	367	0	1045
V/C Ratio(X)	0.12	0.00	0.00	0.12	0.00	0.02	0.02	0.00	0.67	0.02	0.00	0.68
Avail Cap(c_a), veh/h	671	0	0	710	0	579	543	0	1503	552	0	1508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.5	0.0	0.0	13.4	0.0	13.0	12.5	0.0	7.6	12.3	0.0	7.6
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.7	0.0	0.1	0.1	0.0	6.6	0.1	0.0	7.0
LnGrp Delay(d),s/veh	13.6	0.0	0.0	13.5	0.0	13.0	12.5	0.0	8.3	12.3	0.0	8.4
LnGrp LOS	B			B		B	B		A	B		A
Approach Vol, veh/h		64			72			706			720	
Approach Delay, s/veh		13.6			13.5			8.3			8.5	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.7		17.5		31.7		17.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		18.0		40.0		19.0
Max Q Clear Time (g_c+I1), s		15.7		3.7		15.4		3.3
Green Ext Time (p_c), s		12.0		0.6		12.1		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	8.8
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	170	420	420	110	10	250	350	390	20	570	40
Future Volume (veh/h)	70	170	420	420	110	10	250	350	390	20	570	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	75	183	252	306	364	11	281	393	262	23	655	38
Adj No. of Lanes	1	1	1	1	1	0	2	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	381	467	388	394	12	338	1367	939	28	1033	60
Arrive On Green	0.20	0.20	0.20	0.22	0.22	0.22	0.10	0.39	0.39	0.02	0.30	0.30
Sat Flow, veh/h	1774	1863	1522	1774	1797	54	3442	3539	1532	1774	3396	197
Grp Volume(v), veh/h	75	183	252	306	0	375	281	393	262	23	341	352
Grp Sat Flow(s),veh/h/ln	1774	1863	1522	1774	0	1851	1721	1770	1532	1774	1770	1824
Q Serve(g_s), s	4.6	11.4	18.3	21.5	0.0	26.2	10.6	10.1	10.8	1.7	21.9	22.0
Cycle Q Clear(g_c), s	4.6	11.4	18.3	21.5	0.0	26.2	10.6	10.1	10.8	1.7	21.9	22.0
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	363	381	467	388	0	405	338	1367	939	28	538	554
V/C Ratio(X)	0.21	0.48	0.54	0.79	0.00	0.92	0.83	0.29	0.28	0.81	0.63	0.63
Avail Cap(c_a), veh/h	363	381	467	403	0	421	417	1367	939	67	538	554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.6	46.3	38.5	48.7	0.0	50.5	58.4	28.0	12.4	64.8	39.6	39.6
Incr Delay (d2), s/veh	1.3	4.3	4.4	9.7	0.0	25.8	11.1	0.5	0.7	39.8	2.4	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.4	8.3	11.6	0.0	16.3	5.6	5.1	7.3	1.2	11.1	11.4
LnGrp Delay(d),s/veh	44.9	50.6	42.9	58.4	0.0	76.3	69.6	28.5	13.1	104.6	42.0	42.0
LnGrp LOS	D	D	D	E		E	E	C	B	F	D	D
Approach Vol, veh/h		510			681			936			716	
Approach Delay, s/veh		46.0			68.2			36.5			44.0	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	57.0		33.0	18.0	46.1		34.9
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0
Max Green Setting (Gmax), s	5.0	51.0		27.0	16.0	40.0		30.0
Max Q Clear Time (g_c+I1), s	13.7	12.8		20.3	12.6	24.0		28.2
Green Ext Time (p_c), s	0.0	10.9		1.4	0.4	7.7		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	47.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	940	60	120	430	20	360	10	500	10	10	10
Future Volume (veh/h)	20	940	60	120	430	20	360	10	500	10	10	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	22	1022	52	135	483	20	477	0	585	16	16	6
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.77	0.77	0.77	0.62	0.62	0.62
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	33	1917	97	171	2328	96	610	0	421	305	320	271
Arrive On Green	0.02	0.39	0.39	0.10	0.47	0.47	0.17	0.00	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1774	4943	251	1774	5005	206	3548	0	1562	1774	1863	1578
Grp Volume(v), veh/h	22	700	374	135	326	177	477	0	585	16	16	6
Grp Sat Flow(s),veh/h/ln	1774	1695	1804	1774	1695	1821	1774	0	1562	1774	1863	1578
Q Serve(g_s), s	1.1	14.8	14.9	6.9	5.3	5.4	12.0	0.0	16.0	0.7	0.7	0.3
Cycle Q Clear(g_c), s	1.1	14.8	14.9	6.9	5.3	5.4	12.0	0.0	16.0	0.7	0.7	0.3
Prop In Lane	1.00		0.14	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	33	1315	700	171	1577	847	610	0	421	305	320	271
V/C Ratio(X)	0.67	0.53	0.53	0.79	0.21	0.21	0.78	0.00	1.39	0.05	0.05	0.02
Avail Cap(c_a), veh/h	95	1315	700	382	1577	847	610	0	421	305	320	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	22.0	22.0	41.1	14.7	14.7	36.8	0.0	34.1	32.2	32.2	32.0
Incr Delay (d2), s/veh	20.5	1.6	2.9	8.0	0.3	0.6	9.6	0.0	189.4	0.3	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	7.2	7.9	3.8	2.5	2.8	6.6	0.0	32.9	0.4	0.4	0.1
LnGrp Delay(d),s/veh	65.9	23.5	24.9	49.1	15.0	15.3	46.4	0.0	223.5	32.5	32.4	32.1
LnGrp LOS	E	C	C	D	B	B	D		F	C	C	C
Approach Vol, veh/h		1096			638			1062			38	
Approach Delay, s/veh		24.8			22.3			144.0			32.4	
Approach LOS		C			C			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.9	40.1		20.0	5.7	47.3		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	20.0	25.0		16.0	5.0	40.0		16.0
Max Q Clear Time (g_c+I1), s	8.9	16.9		2.7	3.1	7.4		18.0
Green Ext Time (p_c), s	0.3	5.5		0.1	0.0	13.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	69.0
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	410	1020	0	0	490	130	80	5	170	0	0	0
Future Volume (veh/h)	410	1020	0	0	490	130	80	5	170	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900			
Adj Flow Rate, veh/h	519	1291	0	0	563	118	91	6	150			
Adj No. of Lanes	2	2	0	0	2	0	1	1	0			
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.88	0.88	0.88			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	1360	2769	0	0	1000	209	234	8	198			
Arrive On Green	0.40	0.78	0.00	0.00	0.34	0.34	0.13	0.13	0.13			
Sat Flow, veh/h	3442	3632	0	0	3000	607	1774	60	1504			
Grp Volume(v), veh/h	519	1291	0	0	342	339	91	0	156			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1745	1774	0	1564			
Q Serve(g_s), s	10.0	11.6	0.0	0.0	14.6	14.7	4.4	0.0	8.9			
Cycle Q Clear(g_c), s	10.0	11.6	0.0	0.0	14.6	14.7	4.4	0.0	8.9			
Prop In Lane	1.00		0.00	0.00		0.35	1.00		0.96			
Lane Grp Cap(c), veh/h	1360	2769	0	0	609	600	234	0	206			
V/C Ratio(X)	0.38	0.47	0.00	0.00	0.56	0.56	0.39	0.00	0.76			
Avail Cap(c_a), veh/h	1360	2769	0	0	609	600	401	0	353			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.95	0.95	1.00	0.00	1.00			
Uniform Delay (d), s/veh	20.0	3.5	0.0	0.0	24.8	24.8	37.0	0.0	38.9			
Incr Delay (d2), s/veh	0.2	0.6	0.0	0.0	3.5	3.6	1.1	0.0	5.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.8	5.8	0.0	0.0	7.7	7.7	2.2	0.0	4.2			
LnGrp Delay(d),s/veh	20.2	4.0	0.0	0.0	28.3	28.4	38.0	0.0	44.5			
LnGrp LOS	C	A			C	C	D		D			
Approach Vol, veh/h		1810			681			247				
Approach Delay, s/veh		8.7			28.4			42.1				
Approach LOS		A			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		76.8			40.8	36.0		16.2
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		64.0			28.0	32.0		21.0
Max Q Clear Time (g_c+I1), s		13.6			12.0	16.7		10.9
Green Ext Time (p_c), s		18.6			10.3	3.7		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	16.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	400	5	240	30	770	0	0	630	390
Future Volume (veh/h)	0	0	0	400	5	240	30	770	0	0	630	390
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				488	6	170	36	917	0	0	700	433
Adj No. of Lanes				0	1	1	1	2	0	0	2	1
Peak Hour Factor				0.82	0.82	0.82	0.84	0.84	0.84	0.90	0.90	0.90
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				554	7	500	387	2089	0	0	1138	496
Arrive On Green				0.32	0.32	0.32	0.22	0.59	0.00	0.00	0.32	0.32
Sat Flow, veh/h				1754	22	1583	1774	3632	0	0	3632	1544
Grp Volume(v), veh/h				494	0	170	36	917	0	0	700	433
Grp Sat Flow(s),veh/h/ln				1775	0	1583	1774	1770	0	0	1770	1544
Q Serve(g_s), s				25.6	0.0	8.0	1.6	13.9	0.0	0.0	16.2	25.6
Cycle Q Clear(g_c), s				25.6	0.0	8.0	1.6	13.9	0.0	0.0	16.2	25.6
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				561	0	500	387	2089	0	0	1138	496
V/C Ratio(X)				0.88	0.00	0.34	0.09	0.44	0.00	0.00	0.62	0.87
Avail Cap(c_a), veh/h				692	0	617	387	2089	0	0	1244	543
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.84	0.84	0.00	0.00	0.95	0.95
Uniform Delay (d), s/veh				31.5	0.0	25.4	30.2	11.0	0.0	0.0	27.8	31.0
Incr Delay (d2), s/veh				10.9	0.0	0.4	0.1	0.6	0.0	0.0	2.4	17.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.2	0.0	3.5	0.8	6.9	0.0	0.0	8.2	13.4
LnGrp Delay(d),s/veh				42.4	0.0	25.8	30.3	11.5	0.0	0.0	30.2	48.9
LnGrp LOS				D		C	C	B			C	D
Approach Vol, veh/h					664			953			1133	
Approach Delay, s/veh					38.1			12.3			37.4	
Approach LOS					D			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	36.1	36.1				62.2		34.8
Change Period (Y+Rc), s	4.9	* 4.9				4.9		4.2
Max Green Setting (Gmax), s	12.5	* 34				50.1		37.8
Max Q Clear Time (g_c+I1), s	13.6	27.6				15.9		27.6
Green Ext Time (p_c), s	4.2	3.5				8.0		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	330	10	330	20	650	260	360	1110	10
Future Volume (veh/h)	10	10	10	330	10	330	20	650	260	360	1110	10
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	14	14	0	367	0	161	24	774	242	404	1247	11
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	2	2	0
Peak Hour Factor	0.70	0.70	0.70	0.92	0.92	0.92	0.84	0.84	0.84	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	20	34	585	0	485	9	1613	971	501	2106	19
Arrive On Green	0.02	0.02	0.00	0.16	0.00	0.16	0.01	0.46	0.46	0.15	0.59	0.59
Sat Flow, veh/h	909	909	1583	3548	0	1546	1774	3539	1557	3442	3594	32
Grp Volume(v), veh/h	28	0	0	367	0	161	24	774	242	404	614	644
Grp Sat Flow(s),veh/h/ln	1817	0	1583	1774	0	1546	1774	1770	1557	1721	1770	1856
Q Serve(g_s), s	1.5	0.0	0.0	9.5	0.0	7.9	0.5	15.1	6.9	11.2	21.8	21.8
Cycle Q Clear(g_c), s	1.5	0.0	0.0	9.5	0.0	7.9	0.5	15.1	6.9	11.2	21.8	21.8
Prop In Lane	0.50		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	39	0	34	585	0	485	9	1613	971	501	1037	1087
V/C Ratio(X)	0.71	0.00	0.00	0.63	0.00	0.33	2.54	0.48	0.25	0.81	0.59	0.59
Avail Cap(c_a), veh/h	73	0	64	1075	0	699	90	1613	971	730	1037	1087
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	0.0	0.0	38.5	0.0	26.3	49.2	18.8	8.4	40.9	13.0	13.0
Incr Delay (d2), s/veh	20.8	0.0	0.0	1.1	0.0	0.4	753.0	1.0	0.6	4.3	2.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	4.8	0.0	3.4	2.2	7.5	4.4	5.6	11.3	11.8
LnGrp Delay(d),s/veh	68.9	0.0	0.0	39.6	0.0	26.7	802.3	19.8	9.0	45.2	15.5	15.4
LnGrp LOS	E			D		C	F	B	A	D	B	B
Approach Vol, veh/h		28			528			1040			1662	
Approach Delay, s/veh		68.9			35.7			35.3			22.7	
Approach LOS		E			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	64.0		21.3	19.4	51.1		7.1
Change Period (Y+Rc), s	6.0	* 6		5.0	5.0	6.0		5.0
Max Green Setting (Gmax), s	5.0	* 58		30.0	21.0	42.0		4.0
Max Q Clear Time (g_c+I1), s	2.5	23.8		11.5	13.2	17.1		3.5
Green Ext Time (p_c), s	0.0	10.9		2.2	1.2	6.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.2
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	40	30	960	1430	10
Future Vol, veh/h	10	40	30	960	1430	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	180	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	94	94	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	61	32	1021	1682	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2262	847	1694	0	-	0
Stage 1	1688	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	35	305	373	-	-	-
Stage 1	135	-	-	-	-	-
Stage 2	527	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	32	305	373	-	-	-
Mov Cap-2 Maneuver	32	-	-	-	-	-
Stage 1	135	-	-	-	-	-
Stage 2	482	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	85.6	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	373	-	113	-	-
HCM Lane V/C Ratio	0.086	-	0.67	-	-
HCM Control Delay (s)	15.6	-	85.6	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	3.5	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	40	70	910	70	110	1370
Future Vol, veh/h	40	70	910	70	110	1370
Conflicting Peds, #/hr	0	0	0	14	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	89	89	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	88	1022	79	115	1427

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2019	565	0	0	1115	0
Stage 1	1076	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	51	468	-	-	622	-
Stage 1	289	-	-	-	-	-
Stage 2	339	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 41	462	-	-	622	-
Mov Cap-2 Maneuver	147	-	-	-	-	-
Stage 1	285	-	-	-	-	-
Stage 2	276	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.4	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	147	462	622	-
HCM Lane V/C Ratio	-	-	0.34	0.189	0.184	-
HCM Control Delay (s)	-	-	41.6	14.6	12.1	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	1.4	0.7	0.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

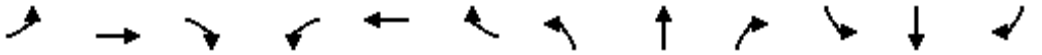
Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	40	1310	5	10	1000
Future Vol, veh/h	20	40	1310	5	10	1000
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	53	1456	6	13	1250

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2106	728	0	0	1456	0
Stage 1	1456	-	-	-	-	-
Stage 2	650	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	44	366	-	-	461	-
Stage 1	181	-	-	-	-	-
Stage 2	481	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	43	366	-	-	461	-
Mov Cap-2 Maneuver	134	-	-	-	-	-
Stage 1	181	-	-	-	-	-
Stage 2	467	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.5	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	232	461	-
HCM Lane V/C Ratio	-	-	0.345	0.027	-
HCM Control Delay (s)	-	-	28.5	13	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	1.5	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	100	100	190	110	100	80	1230	110	30	1160	40
Future Volume (veh/h)	100	100	100	190	110	100	80	1230	110	30	1160	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.89	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1976	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	124	151	101	192	213	106	86	1323	118	41	1568	53
Adj No. of Lanes	1	2	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.74	0.74	0.74	0.78	0.78	0.78	0.93	0.93	0.93	0.74	0.74	0.74
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	351	212	238	250	189	103	1953	863	47	1841	799
Arrive On Green	0.17	0.17	0.17	0.13	0.13	0.13	0.06	0.55	0.55	0.03	0.52	0.52
Sat Flow, veh/h	1774	2094	1266	1774	1863	1407	1774	3539	1564	1774	3539	1536
Grp Volume(v), veh/h	124	133	119	192	213	106	86	1323	118	41	1568	53
Grp Sat Flow(s),veh/h/ln	1774	1863	1497	1774	1863	1407	1774	1770	1564	1774	1770	1536
Q Serve(g_s), s	8.3	8.5	9.6	14.0	14.9	9.4	6.4	35.7	4.9	3.1	50.9	2.3
Cycle Q Clear(g_c), s	8.3	8.5	9.6	14.0	14.9	9.4	6.4	35.7	4.9	3.1	50.9	2.3
Prop In Lane	1.00		0.85	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	297	312	251	238	250	189	103	1953	863	47	1841	799
V/C Ratio(X)	0.42	0.42	0.48	0.81	0.85	0.56	0.84	0.68	0.14	0.88	0.85	0.07
Avail Cap(c_a), veh/h	425	447	359	279	293	221	259	1953	863	233	1910	829
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	49.8	50.2	56.0	56.4	54.1	62.2	21.4	14.5	64.7	27.6	15.9
Incr Delay (d2), s/veh	0.9	0.9	1.4	13.7	18.4	2.6	16.0	1.0	0.1	36.2	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.5	4.1	7.8	9.0	3.8	3.6	17.5	2.1	2.0	25.8	1.0
LnGrp Delay(d),s/veh	50.6	50.7	51.6	69.8	74.8	56.6	78.2	22.3	14.6	100.9	31.4	15.9
LnGrp LOS	D	D	D	E	E	E	E	C	B	F	C	B
Approach Vol, veh/h		376			511			1527			1662	
Approach Delay, s/veh		51.0			69.2			24.9			32.6	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	77.6		26.3	11.7	73.4		21.9
Change Period (Y+Rc), s	3.5	6.0		4.0	3.5	6.0		4.0
Max Green Setting (Gmax), s	18.0	70.0		32.0	20.0	70.0		21.0
Max Q Clear Time (g_c+I1), s	5.1	37.7		11.6	8.4	52.9		16.9
Green Ext Time (p_c), s	0.1	28.6		2.0	0.2	14.5		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.0
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	210	250	50	70	50
Future Vol, veh/h	10	210	250	50	70	50
Conflicting Peds, #/hr	0	0	0	38	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	62	62	85	85	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	339	294	59	81	58

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	391	0	-	0	733	364
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	371	-
Critical Hdwy	4.12	-	-	-	7.12	6.22
Critical Hdwy Stg 1	-	-	-	-	6.12	-
Critical Hdwy Stg 2	-	-	-	-	6.12	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1168	-	-	-	336	681
Stage 1	-	-	-	-	657	-
Stage 2	-	-	-	-	649	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1166	-	-	-	320	655
Mov Cap-2 Maneuver	-	-	-	-	320	-
Stage 1	-	-	-	-	622	-
Stage 2	-	-	-	-	638	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	16.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1166	-	-	-	320	655
HCM Lane V/C Ratio	0.014	-	-	-	0.254	0.089
HCM Control Delay (s)	8.1	0	-	-	20	11
HCM Lane LOS	A	A	-	-	C	B
HCM 95th %tile Q(veh)	0	-	-	-	1	0.3

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Lane Configurations									
Traffic Vol, veh/h	0	200	80	0	210	260	0	80	170
Future Vol, veh/h	0	200	80	0	210	260	0	80	170
Peak Hour Factor	0.92	0.64	0.64	0.92	0.94	0.94	0.92	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	313	125	0	223	277	0	107	227
Number of Lanes	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay	12.5	14.4	12.6
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	45%	0%	100%
Vol Right, %	0%	100%	0%	55%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	80	170	133	147	210	260
LT Vol	80	0	0	0	210	0
Through Vol	0	0	133	67	0	260
RT Vol	0	170	0	80	0	0
Lane Flow Rate	107	227	208	229	223	277
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.219	0.389	0.367	0.379	0.417	0.478
Departure Headway (Hd)	7.391	6.172	6.336	5.947	6.723	6.215
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	485	580	567	603	534	578
Service Time	5.149	3.929	4.094	3.705	4.479	3.97
HCM Lane V/C Ratio	0.221	0.391	0.367	0.38	0.418	0.479
HCM Control Delay	12.2	12.8	12.8	12.3	14.2	14.6
HCM Lane LOS	B	B	B	B	B	B
HCM 95th-tile Q	0.8	1.8	1.7	1.8	2	2.6

Intersection	
Intersection Delay, s/veh	12.7
Intersection LOS	B

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	100	40	0	190	110	0	20	350
Future Vol, veh/h	0	100	40	0	190	110	0	20	350
Peak Hour Factor	0.92	0.79	0.79	0.92	0.87	0.87	0.92	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	127	51	0	218	126	0	24	417
Number of Lanes	0	1	0	0	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	11	10.1	15.4
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	71%	5%
Vol Thru, %	100%	0%	0%	95%
Vol Right, %	0%	100%	29%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	190	110	140	370
LT Vol	0	0	100	20
Through Vol	190	0	0	350
RT Vol	0	110	40	0
Lane Flow Rate	218	126	177	440
Geometry Grp	7	7	2	5
Degree of Util (X)	0.336	0.17	0.283	0.604
Departure Headway (Hd)	5.545	4.837	5.753	4.937
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	653	746	627	722
Service Time	3.245	2.537	3.765	3.033
HCM Lane V/C Ratio	0.334	0.169	0.282	0.609
HCM Control Delay	11	8.5	11	15.4
HCM Lane LOS	B	A	B	C
HCM 95th-tile Q	1.5	0.6	1.2	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	300	180	80	390	250	320	1060	80	320	990	150
Future Volume (veh/h)	120	300	180	80	390	250	320	1060	80	320	990	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.89	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	145	361	115	85	415	211	364	1205	89	372	1151	96
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.83	0.83	0.83	0.94	0.94	0.94	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	496	398	109	511	255	377	1163	502	323	1107	486
Arrive On Green	0.09	0.27	0.27	0.06	0.23	0.23	0.11	0.33	0.33	0.09	0.31	0.31
Sat Flow, veh/h	1774	1863	1496	1774	2189	1091	3442	3539	1527	3442	3539	1555
Grp Volume(v), veh/h	145	361	115	85	334	292	364	1205	89	372	1151	96
Grp Sat Flow(s),veh/h/ln	1774	1863	1496	1774	1770	1510	1721	1770	1527	1721	1770	1555
Q Serve(g_s), s	5.2	11.3	3.9	3.0	11.4	11.7	6.7	21.0	2.7	6.0	20.0	2.9
Cycle Q Clear(g_c), s	5.2	11.3	3.9	3.0	11.4	11.7	6.7	21.0	2.7	6.0	20.0	2.9
Prop In Lane	1.00		1.00	1.00		0.72	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	496	398	109	413	353	377	1163	502	323	1107	486
V/C Ratio(X)	0.87	0.73	0.29	0.78	0.81	0.83	0.97	1.04	0.18	1.15	1.04	0.20
Avail Cap(c_a), veh/h	166	496	398	166	443	378	377	1163	502	323	1107	486
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	21.4	18.7	29.6	23.1	23.3	28.3	21.5	15.3	29.0	22.0	16.1
Incr Delay (d2), s/veh	35.9	5.4	0.4	12.2	10.1	13.5	37.3	36.3	0.8	97.8	37.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	6.6	1.6	1.9	6.7	6.2	5.1	16.0	1.2	7.2	15.5	1.3
LnGrp Delay(d),s/veh	64.5	26.7	19.1	41.7	33.2	36.7	65.7	57.8	16.1	126.8	59.9	17.0
LnGrp LOS	E	C	B	D	C	D	E	F	B	F	F	B
Approach Vol, veh/h		621			711			1658			1619	
Approach Delay, s/veh		34.1			35.7			57.3			72.7	
Approach LOS		C			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.0	7.9	21.0	11.0	24.0	10.0	18.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	21.0	6.0	16.0	7.0	20.0	6.0	16.0
Max Q Clear Time (g_c+I1), s	8.0	23.0	5.0	13.3	8.7	22.0	7.2	13.7
Green Ext Time (p_c), s	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	56.2
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	150	430	80	130	20	420	210	30	20	320	90
Future Volume (veh/h)	130	150	430	80	130	20	420	210	30	20	320	90
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.79	0.94		0.97	1.00		0.95	1.00		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	157	181	500	89	144	20	500	250	31	21	333	86
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.84	0.84	0.84	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	431	648	747	283	555	77	676	1508	184	54	582	428
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.34	0.20	0.48	0.47	0.03	0.31	0.31
Sat Flow, veh/h	1217	1863	1254	709	1595	221	3442	3154	386	1774	1863	1370
Grp Volume(v), veh/h	157	181	500	89	0	164	500	139	142	21	333	86
Grp Sat Flow(s),veh/h/ln	1217	1863	1254	709	0	1816	1721	1770	1770	1774	1863	1370
Q Serve(g_s), s	8.9	5.9	25.3	8.7	0.0	5.4	11.4	3.7	3.8	1.0	12.5	3.9
Cycle Q Clear(g_c), s	14.3	5.9	25.3	14.6	0.0	5.4	11.4	3.7	3.8	1.0	12.5	3.9
Prop In Lane	1.00		1.00	1.00		0.12	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	431	648	747	283	0	632	676	846	846	54	582	428
V/C Ratio(X)	0.36	0.28	0.67	0.31	0.00	0.26	0.74	0.16	0.17	0.39	0.57	0.20
Avail Cap(c_a), veh/h	443	667	760	283	0	632	1151	951	951	487	845	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	19.7	14.4	25.0	0.0	19.6	31.6	12.4	12.5	39.8	24.1	21.1
Incr Delay (d2), s/veh	0.5	0.2	2.2	0.6	0.0	0.2	1.6	0.1	0.1	4.5	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	3.1	9.1	1.8	0.0	2.7	5.6	1.8	1.9	0.5	6.5	1.5
LnGrp Delay(d),s/veh	25.2	19.9	16.7	25.6	0.0	19.8	33.3	12.5	12.6	44.4	25.0	21.4
LnGrp LOS	C	B	B	C		B	C	B	B	D	C	C
Approach Vol, veh/h		838			253			781			440	
Approach Delay, s/veh		19.0			21.8			25.8			25.2	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	20.4	30.1		33.1	6.5	44.0		33.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	27.0	37.0		26.0	22.0	44.0		29.0
Max Q Clear Time (g_c+I1), s	13.4	14.5		16.6	3.0	5.8		27.3
Green Ext Time (p_c), s	2.0	4.5		4.7	0.0	5.0		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	5.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	40	180	20	100	120	20
Future Vol, veh/h	40	180	20	100	120	20
Conflicting Peds, #/hr	0	155	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	73	73	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	212	27	137	156	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	414	0	500	310
Stage 1	-	-	-	-	308	-
Stage 2	-	-	-	-	192	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1145	-	530	730
Stage 1	-	-	-	-	745	-
Stage 2	-	-	-	-	841	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1143	-	440	621
Mov Cap-2 Maneuver	-	-	-	-	440	-
Stage 1	-	-	-	-	635	-
Stage 2	-	-	-	-	819	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	17.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	459	-	-	1143	-
HCM Lane V/C Ratio	0.396	-	-	0.024	-
HCM Control Delay (s)	17.9	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.9	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	15.4
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	70	10	70	0	10	10	5	0	100	360	10
Future Vol, veh/h	0	70	10	70	0	10	10	5	0	100	360	10
Peak Hour Factor	0.92	0.79	0.79	0.79	0.92	0.70	0.70	0.70	0.92	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	89	13	89	0	14	14	7	0	118	424	12
Number of Lanes	0	0	1	0	0	0	1	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	1
HCM Control Delay	14.6	11.4	13.4
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	47%	40%	5%	0%	0%
Vol Thru, %	0%	100%	92%	7%	40%	95%	100%	0%
Vol Right, %	0%	0%	8%	47%	20%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	240	130	150	25	190	360	70
LT Vol	100	0	0	70	10	10	0	0
Through Vol	0	240	120	10	10	180	360	0
RT Vol	0	0	10	70	5	0	0	70
Lane Flow Rate	118	282	153	190	36	211	400	78
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.224	0.497	0.267	0.384	0.08	0.365	0.688	0.118
Departure Headway (Hd)	6.851	6.341	6.287	7.274	8.016	6.222	6.195	5.483
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	521	565	567	492	450	574	580	649
Service Time	4.628	4.118	4.063	5.054	5.716	3.994	3.967	3.255
HCM Lane V/C Ratio	0.226	0.499	0.27	0.386	0.08	0.368	0.69	0.12
HCM Control Delay	11.6	15.3	11.4	14.6	11.4	12.6	21.6	9
HCM Lane LOS	B	C	B	B	B	B	C	A
HCM 95th-tile Q	0.9	2.7	1.1	1.8	0.3	1.7	5.3	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	10	540	70
Future Vol, veh/h	0	10	540	70
Peak Hour Factor	0.92	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	11	600	78
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	17.4
HCM LOS	C

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	60	40	450	590	10
Future Vol, veh/h	10	60	40	450	590	10
Conflicting Peds, #/hr	0	3	0	0	0	13
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	80	80	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	71	50	563	728	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1129	386	754	0	-	0
Stage 1	748	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	198	612	852	-	-	-
Stage 1	429	-	-	-	-	-
Stage 2	660	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	182	603	850	-	-	-
Mov Cap-2 Maneuver	308	-	-	-	-	-
Stage 1	424	-	-	-	-	-
Stage 2	613	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	850	-	530	-	-
HCM Lane V/C Ratio	0.059	-	0.155	-	-
HCM Control Delay (s)	9.5	-	13	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	5	20	50	70	440	5	20	350	320
Future Vol, veh/h	0	0	0	5	20	50	70	440	5	20	350	320
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	18	0	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	66	66	66	95	95	95	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	8	30	76	74	463	5	25	432	395

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	896	1519	252	838	0	0	486	0	0
Stage 1	631	631	-	-	-	-	-	-	-
Stage 2	265	888	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	280	118	748	792	-	-	1073	-	-
Stage 1	492	473	-	-	-	-	-	-	-
Stage 2	755	360	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	244	0	735	792	-	-	1073	-	-
Mov Cap-2 Maneuver	244	0	-	-	-	-	-	-	-
Stage 1	438	0	-	-	-	-	-	-	-
Stage 2	737	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	1.4	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	792	-	-	621	1073	-	-
HCM Lane V/C Ratio	0.093	-	-	0.183	0.023	-	-
HCM Control Delay (s)	10	-	-	12.1	8.4	-	-
HCM Lane LOS	B	-	-	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.7	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	10	50	5	0	10	0	230	10	10	320	0
Future Volume (veh/h)	220	10	50	5	0	10	0	230	10	10	320	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.95	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	278	13	63	11	0	15	0	253	11	11	364	0
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	1	2	0
Peak Hour Factor	0.79	0.79	0.79	0.46	0.46	0.46	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	403	19	91	18	0	25	0	935	40	478	960	0
Arrive On Green	0.30	0.30	0.30	0.03	0.00	0.03	0.00	0.27	0.27	0.27	0.27	0.00
Sat Flow, veh/h	1363	64	309	702	0	957	0	3540	149	1094	3632	0
Grp Volume(v), veh/h	354	0	0	26	0	0	0	129	135	11	364	0
Grp Sat Flow(s),veh/h/ln	1735	0	0	1659	0	0	0	1770	1826	1094	1770	0
Q Serve(g_s), s	5.3	0.0	0.0	0.5	0.0	0.0	0.0	1.7	1.7	0.2	2.5	0.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	0.5	0.0	0.0	0.0	1.7	1.7	1.9	2.5	0.0
Prop In Lane	0.79		0.18	0.42		0.58	0.00		0.08	1.00		0.00
Lane Grp Cap(c), veh/h	513	0	0	43	0	0	0	480	495	478	960	0
V/C Ratio(X)	0.69	0.00	0.00	0.60	0.00	0.00	0.00	0.27	0.27	0.02	0.38	0.00
Avail Cap(c_a), veh/h	942	0	0	901	0	0	0	961	992	775	1922	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.2	0.0	0.0	14.2	0.0	0.0	0.0	8.4	8.5	9.2	8.7	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.0	12.7	0.0	0.0	0.0	0.3	0.3	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	0.4	0.0	0.0	0.0	0.9	0.9	0.1	1.2	0.0
LnGrp Delay(d),s/veh	10.9	0.0	0.0	26.9	0.0	0.0	0.0	8.7	8.7	9.2	9.0	0.0
LnGrp LOS	B			C				A	A	A	A	
Approach Vol, veh/h		354			26			264			375	
Approach Delay, s/veh		10.9			26.9			8.7			9.0	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		12.0		12.7		12.0		4.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		3.7		7.3		4.5		2.5
Green Ext Time (p_c), s		3.2		1.5		3.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	10.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	5	30	5	5	10	10	190	5	20	320	20
Future Vol, veh/h	20	5	30	5	5	10	10	190	5	20	320	20
Conflicting Peds, #/hr	0	0	3	0	0	9	0	0	12	0	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	40	40	40	92	92	92	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	6	37	13	13	25	11	207	5	27	432	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	644	750	237	519	761	127	463	0	0	224	0	0
Stage 1	504	504	-	243	243	-	-	-	-	-	-	-
Stage 2	140	246	-	276	518	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	358	339	764	440	334	900	1095	-	-	1342	-	-
Stage 1	518	539	-	739	703	-	-	-	-	-	-	-
Stage 2	849	701	-	707	531	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	324	322	759	395	317	882	1092	-	-	1330	-	-
Mov Cap-2 Maneuver	324	322	-	395	317	-	-	-	-	-	-	-
Stage 1	511	522	-	723	688	-	-	-	-	-	-	-
Stage 2	795	686	-	645	515	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.9	12.6	0.4	0.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1092	-	-	471	395	553	1330	-	-
HCM Lane V/C Ratio	0.01	-	-	0.144	0.032	0.068	0.02	-	-
HCM Control Delay (s)	8.3	-	-	13.9	14.4	12	7.8	0.1	-
HCM Lane LOS	A	-	-	B	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.1	0.2	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	470	5	5	280	20	5	5	0	120	0	230
Future Volume (veh/h)	180	470	5	5	280	20	5	5	0	120	0	230
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	0.99		1.00	0.95		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	207	540	6	5	295	15	7	7	0	158	0	154
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.87	0.87	0.87	0.95	0.95	0.95	0.75	0.75	0.75	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	649	1061	12	485	690	567	237	194	0	512	0	355
Arrive On Green	0.11	0.58	0.59	0.37	0.37	0.37	0.23	0.23	0.00	0.23	0.00	0.25
Sat Flow, veh/h	1774	1838	20	850	1863	1531	467	832	0	1335	0	1519
Grp Volume(v), veh/h	207	0	546	5	295	15	14	0	0	158	0	154
Grp Sat Flow(s),veh/h/ln	1774	0	1858	850	1863	1531	1298	0	0	1335	0	1519
Q Serve(g_s), s	2.6	0.0	7.4	0.2	5.0	0.3	0.0	0.0	0.0	0.0	0.0	3.6
Cycle Q Clear(g_c), s	2.6	0.0	7.4	0.2	5.0	0.3	3.6	0.0	0.0	3.3	0.0	3.6
Prop In Lane	1.00		0.01	1.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	649	0	1073	485	690	567	431	0	0	512	0	355
V/C Ratio(X)	0.32	0.00	0.51	0.01	0.43	0.03	0.03	0.00	0.00	0.31	0.00	0.43
Avail Cap(c_a), veh/h	1247	0	2483	1306	2489	2046	1115	0	0	943	0	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.7	0.0	5.3	8.4	10.0	8.5	12.5	0.0	0.0	13.7	0.0	13.6
Incr Delay (d2), s/veh	0.3	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.3	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	3.8	0.0	2.6	0.1	0.1	0.0	0.0	1.6	0.0	1.6
LnGrp Delay(d),s/veh	6.0	0.0	5.7	8.4	10.4	8.5	12.6	0.0	0.0	14.0	0.0	14.4
LnGrp LOS	A		A	A	B	A	B			B		B
Approach Vol, veh/h		753			315			14			312	
Approach Delay, s/veh		5.8			10.3			12.6			14.2	
Approach LOS		A			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		28.4		13.9	8.8	19.7		13.9
Change Period (Y+Rc), s		3.5		3.5	4.0	3.5		3.5
Max Green Setting (Gmax), s		57.0		24.0	19.0	57.0		30.0
Max Q Clear Time (g_c+I1), s		9.4		5.6	4.6	7.0		5.6
Green Ext Time (p_c), s		7.0		1.6	0.7	7.1		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	8.8
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	30	140	10	40	40	1420	80	30	1280	30
Future Volume (veh/h)	10	10	30	140	10	40	40	1420	80	30	1280	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	13	13	7	192	14	51	43	1527	63	34	1455	33
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.77	0.77	0.77	0.73	0.73	0.73	0.93	0.93	0.93	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	55	457	102	4	450	58	1741	72	49	1762	40
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.03	0.50	0.50	0.03	0.50	0.50
Sat Flow, veh/h	0	186	1561	0	14	1536	1774	3461	142	1774	3535	80
Grp Volume(v), veh/h	26	0	7	206	0	51	43	778	812	34	727	761
Grp Sat Flow(s),veh/h/ln	186	0	1561	14	0	1536	1774	1770	1834	1774	1770	1846
Q Serve(g_s), s	0.0	0.0	0.2	0.0	0.0	1.7	1.6	26.6	26.9	1.3	23.9	24.0
Cycle Q Clear(g_c), s	20.0	0.0	0.2	20.0	0.0	1.7	1.6	26.6	26.9	1.3	23.9	24.0
Prop In Lane	0.50		1.00	0.93		1.00	1.00		0.08	1.00		0.04
Lane Grp Cap(c), veh/h	134	0	457	106	0	450	58	890	923	49	882	920
V/C Ratio(X)	0.19	0.00	0.02	1.94	0.00	0.11	0.74	0.87	0.88	0.69	0.82	0.83
Avail Cap(c_a), veh/h	134	0	457	106	0	450	104	890	923	130	882	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	17.1	33.4	0.0	17.6	32.7	15.0	15.1	32.9	14.6	14.6
Incr Delay (d2), s/veh	0.7	0.0	0.0	457.7	0.0	0.1	16.8	11.7	11.7	15.6	8.7	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.1	15.4	0.0	0.7	1.1	15.6	16.5	0.8	13.6	14.2
LnGrp Delay(d),s/veh	20.4	0.0	17.1	491.0	0.0	17.7	49.6	26.7	26.8	48.5	23.2	23.0
LnGrp LOS	C		B	F		B	D	C	C	D	C	C
Approach Vol, veh/h		33			257			1633			1522	
Approach Delay, s/veh		19.7			397.1			27.4			23.7	
Approach LOS		B			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	38.3		24.0	6.2	38.0		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	33.0		16.0	4.0	34.0		20.0
Max Q Clear Time (g_c+I1), s	3.3	28.9		22.0	3.6	26.0		22.0
Green Ext Time (p_c), s	0.0	4.0		0.0	0.0	7.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	5	80	30	10	5	90	1480	190	10	750	710
Future Volume (veh/h)	30	5	80	30	10	5	90	1480	190	10	750	710
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.99	0.99		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	36	6	35	49	16	1	110	1805	232	11	843	797
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.61	0.61	0.61	0.82	0.82	0.82	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	34	82	259	66	3	348	2211	277	220	2483	1076
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	552	290	702	994	562	24	304	3151	395	207	3539	1533
Grp Volume(v), veh/h	77	0	0	66	0	0	110	992	1045	11	843	797
Grp Sat Flow(s),veh/h/ln	1544	0	0	1580	0	0	304	1770	1776	207	1770	1533
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.0	9.8	16.8	18.8	1.8	4.1	14.3
Cycle Q Clear(g_c), s	1.9	0.0	0.0	1.5	0.0	0.0	13.9	16.8	18.8	20.6	4.1	14.3
Prop In Lane	0.47		0.45	0.74		0.02	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	301	0	0	327	0	0	348	1242	1246	220	2483	1076
V/C Ratio(X)	0.26	0.00	0.00	0.20	0.00	0.00	0.32	0.80	0.84	0.05	0.34	0.74
Avail Cap(c_a), veh/h	660	0	0	682	0	0	348	1242	1246	220	2483	1076
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	0.0	17.9	0.0	0.0	5.3	4.5	4.8	12.2	2.6	4.1
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.3	0.0	0.0	2.4	5.4	6.8	0.4	0.4	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.8	0.0	0.0	1.0	9.6	11.1	0.1	2.1	7.1
LnGrp Delay(d),s/veh	18.5	0.0	0.0	18.2	0.0	0.0	7.7	9.9	11.6	12.7	3.0	8.7
LnGrp LOS	B			B			A	A	B	B	A	A
Approach Vol, veh/h		77			66			2147			1651	
Approach Delay, s/veh		18.5			18.2			10.6			5.8	
Approach LOS		B			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		9.2		35.0		9.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		16.0		31.0		16.0
Max Q Clear Time (g_c+I1), s		20.8		3.9		22.6		3.5
Green Ext Time (p_c), s		10.0		0.6		8.3		0.6

Intersection Summary		
HCM 2010 Ctrl Delay		8.9
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	10	10	10	5	550	5	1080	50	20	690	140
Future Volume (veh/h)	110	10	10	10	5	550	5	1080	50	20	690	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	131	12	12	12	6	658	6	1350	62	22	758	154
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.83	0.83	0.83	0.80	0.80	0.80	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	407	38	25	509	230	605	11	1170	54	38	1036	210
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.01	0.34	0.34	0.02	0.36	0.36
Sat Flow, veh/h	695	98	67	996	601	1580	1774	3437	157	1774	2915	592
Grp Volume(v), veh/h	155	0	0	18	0	658	6	694	718	22	460	452
Grp Sat Flow(s),veh/h/ln	860	0	0	1597	0	1580	1774	1770	1824	1774	1770	1738
Q Serve(g_s), s	5.7	0.0	0.0	0.0	0.0	18.0	0.2	16.0	16.0	0.6	10.6	10.6
Cycle Q Clear(g_c), s	6.0	0.0	0.0	0.3	0.0	18.0	0.2	16.0	16.0	0.6	10.6	10.6
Prop In Lane	0.85		0.08	0.67		1.00	1.00		0.09	1.00		0.34
Lane Grp Cap(c), veh/h	471	0	0	739	0	605	11	602	621	38	629	617
V/C Ratio(X)	0.33	0.00	0.00	0.02	0.00	1.09	0.53	1.15	1.16	0.58	0.73	0.73
Avail Cap(c_a), veh/h	471	0	0	739	0	605	151	602	621	151	629	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.7	0.0	0.0	9.0	0.0	14.5	23.3	15.5	15.5	22.8	13.2	13.2
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.0	0.0	62.7	33.0	86.2	87.6	13.5	7.4	7.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	0.1	0.0	18.3	0.2	22.1	23.0	0.4	6.4	6.3
LnGrp Delay(d),s/veh	11.1	0.0	0.0	9.0	0.0	77.2	56.3	101.7	103.1	36.3	20.6	20.7
LnGrp LOS	B			A		F	E	F	F	D	C	C
Approach Vol, veh/h		155			676			1418			934	
Approach Delay, s/veh		11.1			75.4			102.2			21.0	
Approach LOS		B			E			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	20.0		22.0	4.3	20.7		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	16.0		18.0	4.0	16.0		18.0
Max Q Clear Time (g_c+I1), s	2.6	18.0		8.0	2.2	12.6		20.0
Green Ext Time (p_c), s	0.0	0.0		3.7	0.0	3.1		0.0

Intersection Summary		
HCM 2010 Ctrl Delay	68.2	
HCM 2010 LOS	E	

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	60	550	110	40	770
Future Vol, veh/h	20	60	550	110	40	770
Conflicting Peds, #/hr	0	0	0	9	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	0	25	-	0	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	91	91	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	75	604	121	45	875

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1570	604	0	-	604	0
Stage 1	604	-	-	-	-	-
Stage 2	966	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	122	498	-	0	974	-
Stage 1	546	-	-	0	-	-
Stage 2	369	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	116	498	-	-	974	-
Mov Cap-2 Maneuver	116	-	-	-	-	-
Stage 1	546	-	-	-	-	-
Stage 2	352	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.2	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	116	498	974	-
HCM Lane V/C Ratio	-	0.216	0.151	0.047	-
HCM Control Delay (s)	-	44.4	13.5	8.9	-
HCM Lane LOS	-	E	B	A	-
HCM 95th %tile Q(veh)	-	0.8	0.5	0.1	-

Intersection	
Int Delay, s/veh	5.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	100	570	220	180	590
Future Vol, veh/h	30	100	570	220	180	590
Conflicting Peds, #/hr	0	0	0	5	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	132	626	242	198	648

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1796	439	0	0	873	0
Stage 1	752	-	-	-	-	-
Stage 2	1044	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	79	567	-	-	771	-
Stage 1	427	-	-	-	-	-
Stage 2	338	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	58	564	-	-	771	-
Mov Cap-2 Maneuver	58	-	-	-	-	-
Stage 1	425	-	-	-	-	-
Stage 2	251	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	45	0	2.6
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	58	564	771	-
HCM Lane V/C Ratio	-	-	0.681	0.233	0.257	-
HCM Control Delay (s)	-	-	150.7	13.3	11.3	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	2.9	0.9	1	-

Intersection	
Int Delay, s/veh	5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	260	530	60	320	320
Future Vol, veh/h	70	260	530	60	320	320
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	0	0	-	150	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	88	88	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	289	602	68	333	333

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1602	-	0	-	602	0
Stage 1	602	-	-	-	-	-
Stage 2	1000	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	116	0	-	0	975	-
Stage 1	547	0	-	0	-	-
Stage 2	356	0	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	~ 76	-	-	-	975	-
Mov Cap-2 Maneuver	177	-	-	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	234	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	40.4	0	5.3
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	177	-	975	-
HCM Lane V/C Ratio	-	0.439	-	0.342	-
HCM Control Delay (s)	-	40.4	0	10.6	-
HCM Lane LOS	-	E	A	B	-
HCM 95th %tile Q(veh)	-	2	-	1.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	50	20	20	60	120	10	960	30	30	670	20
Future Volume (veh/h)	50	50	20	20	60	120	10	960	30	30	670	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.95	1.00		0.95	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	81	81	16	29	88	123	12	1143	30	34	770	23
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.62	0.62	0.62	0.68	0.68	0.68	0.84	0.84	0.84	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	388	387	76	96	174	213	459	2142	56	408	2134	64
Arrive On Green	0.26	0.26	0.24	0.26	0.26	0.24	1.00	1.00	1.00	0.61	0.61	0.59
Sat Flow, veh/h	1148	1500	296	112	675	827	680	3518	92	474	3505	105
Grp Volume(v), veh/h	81	0	97	240	0	0	12	575	598	34	389	404
Grp Sat Flow(s),veh/h/ln	1148	0	1797	1614	0	0	680	1770	1841	474	1770	1840
Q Serve(g_s), s	0.0	0.0	2.5	1.2	0.0	0.0	0.2	0.0	0.0	1.8	6.6	6.6
Cycle Q Clear(g_c), s	4.3	0.0	2.5	7.6	0.0	0.0	6.8	0.0	0.0	1.8	6.6	6.6
Prop In Lane	1.00		0.16	0.12		0.51	1.00		0.05	1.00		0.06
Lane Grp Cap(c), veh/h	388	0	463	483	0	0	459	1077	1121	408	1077	1120
V/C Ratio(X)	0.21	0.00	0.21	0.50	0.00	0.00	0.03	0.53	0.53	0.08	0.36	0.36
Avail Cap(c_a), veh/h	513	0	659	655	0	0	459	1077	1121	408	1077	1120
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.91	0.91	0.91	0.66	0.66	0.66
Uniform Delay (d), s/veh	18.1	0.0	17.5	19.6	0.0	0.0	0.6	0.0	0.0	4.9	5.9	5.9
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.8	0.0	0.0	0.1	1.7	1.7	0.3	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.3	3.6	0.0	0.0	0.0	0.5	0.5	0.3	3.3	3.4
LnGrp Delay(d),s/veh	18.4	0.0	17.8	20.3	0.0	0.0	0.7	1.7	1.7	5.2	6.5	6.5
LnGrp LOS	B		B	C			A	A	A	A	A	A
Approach Vol, veh/h		178			240			1185			827	
Approach Delay, s/veh		18.0			20.3			1.7			6.4	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		40.5		19.5		40.5		19.5
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		29.0		21.0		29.0		21.0
Max Q Clear Time (g_c+I1), s		8.8		6.3		8.6		9.6
Green Ext Time (p_c), s		14.5		2.3		14.6		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	6.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	30	60	10	20	30	30	860	30	10	640	40
Future Volume (veh/h)	80	30	60	10	20	30	30	860	30	10	640	40
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.92	0.95		0.98	0.99		0.95	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	108	41	63	17	34	27	36	1036	36	11	711	44
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.74	0.74	0.74	0.59	0.59	0.59	0.83	0.83	0.83	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	386	431	338	380	220	175	577	2213	77	381	1693	105
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.21	0.13	1.00	1.00	1.00	1.00	0.97
Sat Flow, veh/h	1311	1863	1462	1216	952	756	1774	3483	121	521	3373	209
Grp Volume(v), veh/h	108	41	63	17	0	61	36	526	546	11	373	382
Grp Sat Flow(s),veh/h/ln	1311	1863	1462	1216	0	1708	1774	1770	1835	521	1770	1812
Q Serve(g_s), s	4.3	1.0	2.1	0.7	0.0	1.7	0.5	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	6.0	1.0	2.1	1.7	0.0	1.7	0.5	0.0	0.0	0.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		0.44	1.00		0.07	1.00		0.12
Lane Grp Cap(c), veh/h	386	431	338	380	0	395	577	1124	1165	381	888	910
V/C Ratio(X)	0.28	0.10	0.19	0.04	0.00	0.15	0.06	0.47	0.47	0.03	0.42	0.42
Avail Cap(c_a), veh/h	497	590	463	484	0	541	577	1124	1165	381	888	910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.79	0.79	0.79	0.94	0.94	0.94
Uniform Delay (d), s/veh	20.8	18.1	18.5	18.8	0.0	18.6	4.9	0.0	0.0	0.0	0.0	0.1
Incr Delay (d2), s/veh	0.4	0.1	0.3	0.0	0.0	0.2	0.2	1.1	1.1	0.1	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.5	0.9	0.2	0.0	0.8	0.2	0.3	0.3	0.0	0.3	0.4
LnGrp Delay(d),s/veh	21.2	18.2	18.8	18.8	0.0	18.7	5.1	1.1	1.1	0.1	1.4	1.4
LnGrp LOS	C	B	B	B		B	A	A	A	A	A	A
Approach Vol, veh/h		212			78			1108			766	
Approach Delay, s/veh		19.9			18.8			1.2			1.4	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	8.0	34.1		17.9		42.1		17.9
Change Period (Y+Rc), s	4.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	4.0	24.0		18.0		32.0		18.0
Max Q Clear Time (g_c+I1), s	2.5	2.1		3.7		2.0		8.0
Green Ext Time (p_c), s	0.0	9.5		1.2		10.7		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	3.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	70	30	130	130	150	10	730	140	160	520	50
Future Volume (veh/h)	40	70	30	130	130	150	10	730	140	160	520	50
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.89	0.92		0.91	0.98		0.94	0.99		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	48	84	13	143	143	76	11	830	123	172	559	51
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.83	0.83	0.83	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	366	526	400	416	526	409	482	1382	205	454	1649	150
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.02	0.90	0.87	0.13	1.00	0.98
Sat Flow, veh/h	1102	1863	1415	1192	1863	1447	1774	3065	454	1774	3258	296
Grp Volume(v), veh/h	48	84	13	143	143	76	11	479	474	172	303	307
Grp Sat Flow(s),veh/h/ln	1102	1863	1415	1192	1863	1447	1774	1770	1750	1774	1770	1784
Q Serve(g_s), s	2.1	2.0	0.4	6.1	3.6	2.4	0.2	3.5	3.8	3.2	0.0	0.1
Cycle Q Clear(g_c), s	5.7	2.0	0.4	8.2	3.6	2.4	0.2	3.5	3.8	3.2	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		0.17
Lane Grp Cap(c), veh/h	366	526	400	416	526	409	482	798	789	454	896	903
V/C Ratio(X)	0.13	0.16	0.03	0.34	0.27	0.19	0.02	0.60	0.60	0.38	0.34	0.34
Avail Cap(c_a), veh/h	385	559	425	437	559	434	581	798	789	454	896	903
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93	0.87	0.87	0.87
Uniform Delay (d), s/veh	18.9	16.2	15.6	19.2	16.7	16.3	9.2	1.8	2.0	7.3	0.0	0.1
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.5	0.3	0.2	0.0	3.1	3.1	0.5	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.1	0.2	2.1	1.9	1.0	0.1	2.0	2.1	1.5	0.2	0.2
LnGrp Delay(d),s/veh	19.1	16.3	15.6	19.7	17.0	16.5	9.2	4.9	5.1	7.8	0.9	0.9
LnGrp LOS	B	B	B	B	B	B	A	A	A	A	A	A
Approach Vol, veh/h		145			362			964			782	
Approach Delay, s/veh		17.2			18.0			5.1			2.4	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	34.4		21.0	8.0	31.0		21.0
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	25.0		17.0	4.0	25.0		17.0
Max Q Clear Time (g_c+I1), s	2.2	2.1		10.2	5.2	5.8		7.7
Green Ext Time (p_c), s	0.0	12.2		1.6	0.0	11.0		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	30	150	60	50	870	0	0	380	350
Future Volume (veh/h)	0	0	0	30	150	60	50	870	0	0	380	350
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.89	0.99		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				34	172	18	54	946	0	0	400	262
Adj No. of Lanes				0	3	0	1	2	0	0	1	1
Peak Hour Factor				0.87	0.87	0.87	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				141	757	79	615	2291	0	0	1206	995
Arrive On Green				0.20	0.19	0.19	0.65	0.65	0.00	0.00	1.00	1.00
Sat Flow, veh/h				756	4068	423	765	3632	0	0	1863	1538
Grp Volume(v), veh/h				82	68	74	54	946	0	0	400	262
Grp Sat Flow(s),veh/h/ln				1825	1695	1726	765	1770	0	0	1863	1538
Q Serve(g_s), s				2.3	2.1	2.2	1.6	7.7	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				2.3	2.1	2.2	1.6	7.7	0.0	0.0	0.0	0.0
Prop In Lane				0.41		0.24	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				340	315	321	615	2291	0	0	1206	995
V/C Ratio(X)				0.24	0.22	0.23	0.09	0.41	0.00	0.00	0.33	0.26
Avail Cap(c_a), veh/h				669	622	633	615	2291	0	0	1206	995
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.96	0.96
Uniform Delay (d), s/veh				20.6	20.7	20.8	4.0	5.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.4	0.3	0.4	0.3	0.6	0.0	0.0	0.7	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	1.0	1.1	0.4	3.9	0.0	0.0	0.2	0.2
LnGrp Delay(d),s/veh				21.0	21.0	21.1	4.3	5.6	0.0	0.0	0.7	0.6
LnGrp LOS				C	C	C	A	A			A	A
Approach Vol, veh/h					224			1000			662	
Approach Delay, s/veh					21.1			5.6			0.7	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		43.8		16.2		43.8		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		28.0		22.0		28.0		
Max Q Clear Time (g_c+I1), s		0.0		4.3		0.0		
Green Ext Time (p_c), s		0.0		1.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		5.7
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	270	90	120	300	10	120	140	130	20	120	20
Future Volume (veh/h)	10	270	90	120	300	10	120	140	130	20	120	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		0.95	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	284	87	140	349	6	130	152	113	25	152	19
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.86	0.86	0.86	0.92	0.92	0.92	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	428	599	485	471	741	597	463	299	222	383	487	61
Arrive On Green	0.00	0.32	0.32	0.06	0.40	0.40	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1774	1863	1507	1774	1863	1501	1198	991	737	1106	1617	202
Grp Volume(v), veh/h	11	284	87	140	349	6	130	0	265	25	0	171
Grp Sat Flow(s),veh/h/ln	1774	1863	1507	1774	1863	1501	1198	0	1728	1106	0	1819
Q Serve(g_s), s	0.1	4.6	1.6	2.0	5.3	0.1	3.6	0.0	4.8	0.7	0.0	2.8
Cycle Q Clear(g_c), s	0.1	4.6	1.6	2.0	5.3	0.1	6.3	0.0	4.8	5.5	0.0	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.43	1.00		0.11
Lane Grp Cap(c), veh/h	428	599	485	471	741	597	463	0	521	383	0	548
V/C Ratio(X)	0.03	0.47	0.18	0.30	0.47	0.01	0.28	0.00	0.51	0.07	0.00	0.31
Avail Cap(c_a), veh/h	1029	1419	1148	968	1419	1144	700	0	863	660	0	1004
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.2	10.3	9.3	8.4	8.5	6.9	12.7	0.0	11.0	13.3	0.0	10.3
Incr Delay (d2), s/veh	0.0	0.6	0.2	0.3	0.5	0.0	0.3	0.0	0.8	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.5	0.7	1.0	2.8	0.0	1.2	0.0	2.4	0.2	0.0	1.4
LnGrp Delay(d),s/veh	10.2	10.9	9.5	8.7	8.9	6.9	13.0	0.0	11.7	13.3	0.0	10.6
LnGrp LOS	B	B	A	A	A	A	B		B	B		B
Approach Vol, veh/h		382			495			395			196	
Approach Delay, s/veh		10.6			8.9			12.2			10.9	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	3.4	19.1		15.5	6.3	16.2		15.5
Change Period (Y+Rc), s	3.0	4.0		4.0	3.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	29.0		19.0	14.0	29.0		21.0
Max Q Clear Time (g_c+I1), s	2.1	7.3		8.3	4.0	6.6		7.5
Green Ext Time (p_c), s	0.0	4.6		2.6	0.3	4.6		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	400	30	190	280	50	30	350	220	20	260	100
Future Volume (veh/h)	90	400	30	190	280	50	30	350	220	20	260	100
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	96	426	22	224	329	59	33	385	208	22	286	90
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.85	0.85	0.85	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	711	572	253	867	708	225	351	190	96	422	133
Arrive On Green	0.06	0.38	0.38	0.14	0.47	0.47	0.31	0.31	0.32	0.31	0.31	0.32
Sat Flow, veh/h	1774	1863	1498	1774	1863	1520	1000	1115	602	821	1339	421
Grp Volume(v), veh/h	96	426	22	224	329	59	33	0	593	22	0	376
Grp Sat Flow(s),veh/h/ln	1774	1863	1498	1774	1863	1520	1000	0	1718	821	0	1760
Q Serve(g_s), s	4.0	13.7	0.7	9.2	8.6	1.6	2.2	0.0	23.5	0.0	0.0	13.9
Cycle Q Clear(g_c), s	4.0	13.7	0.7	9.2	8.6	1.6	16.1	0.0	23.5	23.5	0.0	13.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.35	1.00		0.24
Lane Grp Cap(c), veh/h	104	711	572	253	867	708	225	0	541	96	0	554
V/C Ratio(X)	0.92	0.60	0.04	0.89	0.38	0.08	0.15	0.00	1.10	0.23	0.00	0.68
Avail Cap(c_a), veh/h	428	711	572	428	867	708	225	0	541	96	0	554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.0	18.5	14.5	31.4	12.9	11.1	29.3	0.0	25.5	37.3	0.0	22.2
Incr Delay (d2), s/veh	25.4	3.7	0.1	11.4	1.3	0.2	0.3	0.0	67.7	1.2	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	7.7	0.3	5.3	4.7	0.7	0.6	0.0	21.1	0.5	0.0	7.2
LnGrp Delay(d),s/veh	60.3	22.2	14.6	42.8	14.2	11.3	29.6	0.0	93.2	38.5	0.0	25.5
LnGrp LOS	E	C	B	D	B	B	C		F	D		C
Approach Vol, veh/h		544			612			626			398	
Approach Delay, s/veh		28.6			24.4			89.8			26.3	
Approach LOS		C			C			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.6	32.5		27.5	8.4	38.8		27.5
Change Period (Y+Rc), s	3.0	3.5		3.5	3.0	3.5		3.5
Max Green Setting (Gmax), s	19.0	29.0		24.0	19.0	29.0		24.0
Max Q Clear Time (g_c+I1), s	11.2	15.7		25.5	6.0	10.6		25.5
Green Ext Time (p_c), s	0.5	4.4		0.0	0.2	5.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	44.6
HCM 2010 LOS	D

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Vol, veh/h	0	10	50	10	0	70	110	20	0	10	70	80	0	40	40	50
Future Vol, veh/h	0	10	50	10	0	70	110	20	0	10	70	80	0	40	40	50
Peak Hour Factor	0.92	0.81	0.81	0.81	0.92	0.86	0.86	0.86	0.92	0.90	0.90	0.90	0.92	0.71	0.71	0.71
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	12	62	12	0	81	128	23	0	11	78	89	0	56	56	70
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.8	10.2	9.1	9.4
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	14%	35%	31%
Vol Thru, %	44%	71%	55%	31%
Vol Right, %	50%	14%	10%	38%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	160	70	200	130
LT Vol	10	10	70	40
Through Vol	70	50	110	40
RT Vol	80	10	20	50
Lane Flow Rate	178	86	233	183
Geometry Grp	1	1	1	1
Degree of Util (X)	0.23	0.121	0.316	0.243
Departure Headway (Hd)	4.665	5.03	4.898	4.772
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	763	706	728	747
Service Time	2.732	3.11	2.965	2.837
HCM Lane V/C Ratio	0.233	0.122	0.32	0.245
HCM Control Delay	9.1	8.8	10.2	9.4
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.9	0.4	1.4	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	80	510	70	60	240	0	0	130	180
Future Volume (veh/h)	0	0	0	80	510	70	60	240	0	0	130	180
Number				5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.59	0.86		1.00	1.00		0.74
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				83	531	68	73	293	0	0	141	182
Adj No. of Lanes				0	3	0	1	1	0	0	1	1
Peak Hour Factor				0.96	0.96	0.96	0.82	0.82	0.82	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				278	1864	233	407	714	0	0	714	446
Arrive On Green				0.48	0.48	0.47	0.77	0.77	0.00	0.00	0.13	0.13
Sat Flow, veh/h				575	3856	482	909	1863	0	0	1863	1164
Grp Volume(v), veh/h				265	222	195	73	293	0	0	141	182
Grp Sat Flow(s),veh/h/ln				1834	1695	1383	909	1863	0	0	1863	1164
Q Serve(g_s), s				5.2	4.7	5.1	2.1	3.2	0.0	0.0	4.1	8.6
Cycle Q Clear(g_c), s				5.2	4.7	5.1	6.2	3.2	0.0	0.0	4.1	8.6
Prop In Lane				0.31		0.35	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				886	819	669	407	714	0	0	714	446
V/C Ratio(X)				0.30	0.27	0.29	0.18	0.41	0.00	0.00	0.20	0.41
Avail Cap(c_a), veh/h				886	819	669	407	714	0	0	714	446
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				9.4	9.2	9.4	5.9	4.7	0.0	0.0	17.9	19.9
Incr Delay (d2), s/veh				0.9	0.8	1.1	1.0	1.7	0.0	0.0	0.6	2.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.9	2.3	2.1	0.6	1.8	0.0	0.0	2.2	3.1
LnGrp Delay(d),s/veh				10.2	10.0	10.5	6.9	6.4	0.0	0.0	18.6	22.7
LnGrp LOS				B	B	B	A	A			B	C
Approach Vol, veh/h					682			366			323	
Approach Delay, s/veh					10.3			6.5			20.9	
Approach LOS					B			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		28.0		22.0				22.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary		
HCM 2010 Ctrl Delay		11.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	50	520	40	60	100	0	0	50	70
Future Volume (veh/h)	0	0	0	50	520	40	60	100	0	0	50	70
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.44	0.88		1.00	1.00		0.85
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1863
Adj Flow Rate, veh/h				53	553	39	76	127	0	0	57	69
Adj No. of Lanes				0	3	0	0	1	0	0	1	1
Peak Hour Factor				0.94	0.94	0.94	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				130	1413	97	348	548	0	0	993	715
Arrive On Green				0.11	0.11	0.10	0.53	0.53	0.00	0.00	0.53	0.53
Sat Flow, veh/h				390	4239	291	499	1027	0	0	1863	1340
Grp Volume(v), veh/h				251	209	185	203	0	0	0	57	69
Grp Sat Flow(s),veh/h/ln				1843	1695	1382	1526	0	0	0	1863	1340
Q Serve(g_s), s				7.6	6.9	7.5	0.1	0.0	0.0	0.0	0.9	1.5
Cycle Q Clear(g_c), s				7.6	6.9	7.5	3.4	0.0	0.0	0.0	0.9	1.5
Prop In Lane				0.21		0.21	0.37		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				614	565	461	896	0	0	0	993	715
V/C Ratio(X)				0.41	0.37	0.40	0.23	0.00	0.00	0.00	0.06	0.10
Avail Cap(c_a), veh/h				614	565	461	896	0	0	0	993	715
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				21.2	20.9	21.2	7.3	0.0	0.0	0.0	6.7	6.9
Incr Delay (d2), s/veh				2.0	1.9	2.6	0.6	0.0	0.0	0.0	0.1	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.2	3.5	3.2	1.9	0.0	0.0	0.0	0.5	0.6
LnGrp Delay(d),s/veh				23.2	22.7	23.8	7.9	0.0	0.0	0.0	6.8	7.2
LnGrp LOS				C	C	C	A				A	A
Approach Vol, veh/h					645			203			126	
Approach Delay, s/veh					23.2			7.9			7.0	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		36.0				36.0		24.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		31.0				31.0		19.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		17.9
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	70	470	40	90	250	0	0	90	60
Future Volume (veh/h)	0	0	0	70	470	40	90	250	0	0	90	60
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.87	0.92		1.00	1.00		0.85
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				73	490	38	103	287	0	0	117	64
Adj No. of Lanes				0	3	0	0	1	0	0	1	0
Peak Hour Factor				0.96	0.96	0.96	0.87	0.87	0.87	0.77	0.77	0.77
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				282	2019	159	208	521	0	0	425	232
Arrive On Green				0.47	0.47	0.45	0.40	0.40	0.00	0.00	0.40	0.38
Sat Flow, veh/h				605	4327	340	331	1301	0	0	1062	581
Grp Volume(v), veh/h				221	185	195	390	0	0	0	0	181
Grp Sat Flow(s),veh/h/ln				1832	1695	1744	1633	0	0	0	0	1643
Q Serve(g_s), s				4.4	3.9	4.0	5.8	0.0	0.0	0.0	0.0	4.5
Cycle Q Clear(g_c), s				4.4	3.9	4.0	10.7	0.0	0.0	0.0	0.0	4.5
Prop In Lane				0.33		0.20	0.26		0.00	0.00		0.35
Lane Grp Cap(c), veh/h				855	791	814	729	0	0	0	0	657
V/C Ratio(X)				0.26	0.23	0.24	0.54	0.00	0.00	0.00	0.00	0.28
Avail Cap(c_a), veh/h				855	791	814	729	0	0	0	0	657
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				9.7	9.6	9.7	13.8	0.0	0.0	0.0	0.0	12.3
Incr Delay (d2), s/veh				0.7	0.7	0.7	2.8	0.0	0.0	0.0	0.0	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.4	2.0	2.1	5.6	0.0	0.0	0.0	0.0	2.2
LnGrp Delay(d),s/veh				10.4	10.3	10.4	16.6	0.0	0.0	0.0	0.0	13.3
LnGrp LOS				B	B	B	B					B
Approach Vol, veh/h					601			390			181	
Approach Delay, s/veh					10.4			16.6			13.3	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.0		32.0		28.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		23.0		27.0		23.0		
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		
Green Ext Time (p_c), s		0.0		0.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		12.9
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	290	30	0	0	0	0	310	40	110	320	0
Future Volume (veh/h)	520	290	30	0	0	0	0	310	40	110	320	0
Number	5	2	12				3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94				1.00		0.97	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	592	242	26				0	378	31	124	360	0
Adj No. of Lanes	2	1	0				0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95				0.82	0.82	0.82	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1699	786	84				0	657	54	325	722	0
Arrive On Green	0.48	0.48	0.48				0.00	0.39	0.37	0.39	0.39	0.00
Sat Flow, veh/h	3548	1642	176				0	1694	139	966	1863	0
Grp Volume(v), veh/h	592	0	268				0	0	409	124	360	0
Grp Sat Flow(s),veh/h/ln	1774	0	1819				0	0	1833	966	1863	0
Q Serve(g_s), s	6.3	0.0	5.4				0.0	0.0	10.6	7.0	8.8	0.0
Cycle Q Clear(g_c), s	6.3	0.0	5.4				0.0	0.0	10.6	17.5	8.8	0.0
Prop In Lane	1.00		0.10				0.00		0.08	1.00		0.00
Lane Grp Cap(c), veh/h	1699	0	871				0	0	711	325	722	0
V/C Ratio(X)	0.35	0.00	0.31				0.00	0.00	0.58	0.38	0.50	0.00
Avail Cap(c_a), veh/h	1699	0	871				0	0	794	369	807	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.8	0.0	9.6				0.0	0.0	14.5	21.4	13.9	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.9				0.0	0.0	0.8	0.7	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	2.9				0.0	0.0	5.5	1.9	4.6	0.0
LnGrp Delay(d),s/veh	10.3	0.0	10.5				0.0	0.0	15.3	22.1	14.5	0.0
LnGrp LOS	B		B						B	C	B	
Approach Vol, veh/h		860						409			484	
Approach Delay, s/veh		10.4						15.3			16.4	
Approach LOS		B						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		32.7		27.3				27.3
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		25.0		25.0				25.0
Max Q Clear Time (g_c+I1), s		8.3		19.5				12.6
Green Ext Time (p_c), s		4.6		2.7				4.9

Intersection Summary	
HCM 2010 Ctrl Delay	13.2
HCM 2010 LOS	B

Notes

Intersection	
Intersection Delay, s/veh	12.7
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Vol, veh/h	0	0	0	0	0	10	170	20	0	10	270	0	0	0	210	180
Future Vol, veh/h	0	0	0	0	0	10	170	20	0	10	270	0	0	0	210	180
Peak Hour Factor	0.92	1.00	1.00	1.00	0.92	0.69	0.69	0.69	0.92	0.88	0.88	0.88	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	14	246	29	0	11	307	0	0	0	250	214
Number of Lanes	0	0	0	0	0	0	2	0	0	0	1	0	0	0	1	1

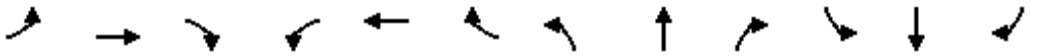
Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	11.5	15.7	11.5
HCM LOS	B	C	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	4%	11%	0%	0%	0%
Vol Thru, %	96%	89%	81%	100%	0%
Vol Right, %	0%	0%	19%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	280	95	105	210	180
LT Vol	10	10	0	0	0
Through Vol	270	85	85	210	0
RT Vol	0	0	20	0	180
Lane Flow Rate	318	138	152	250	214
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.532	0.252	0.27	0.409	0.309
Departure Headway (Hd)	6.019	6.587	6.398	5.892	5.183
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	601	545	562	613	694
Service Time	4.05	4.325	4.136	3.625	2.915
HCM Lane V/C Ratio	0.529	0.253	0.27	0.408	0.308
HCM Control Delay	15.7	11.5	11.5	12.7	10.2
HCM Lane LOS	C	B	B	B	B
HCM 95th-tile Q	3.1	1	1.1	2	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	70	10	110	30	10	10	380	190	40	350	10
Future Volume (veh/h)	10	70	10	110	30	10	10	380	190	40	350	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.96	0.99		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	11	80	2	124	34	5	12	452	194	47	407	12
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.84	0.84	0.84	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	295	7	298	64	8	707	886	380	531	1302	38
Arrive On Green	0.17	0.17	0.15	0.17	0.17	0.15	0.70	0.70	0.68	0.70	0.70	0.68
Sat Flow, veh/h	115	1732	41	1128	377	48	960	1273	546	780	1870	55
Grp Volume(v), veh/h	93	0	0	163	0	0	12	0	646	47	0	419
Grp Sat Flow(s),veh/h/ln	1887	0	0	1553	0	0	960	0	1819	780	0	1925
Q Serve(g_s), s	0.0	0.0	0.0	3.0	0.0	0.0	0.3	0.0	10.2	1.8	0.0	5.1
Cycle Q Clear(g_c), s	2.5	0.0	0.0	5.5	0.0	0.0	5.4	0.0	10.2	12.0	0.0	5.1
Prop In Lane	0.12		0.02	0.76		0.03	1.00		0.30	1.00		0.03
Lane Grp Cap(c), veh/h	389	0	0	370	0	0	707	0	1266	531	0	1340
V/C Ratio(X)	0.24	0.00	0.00	0.44	0.00	0.00	0.02	0.00	0.51	0.09	0.00	0.31
Avail Cap(c_a), veh/h	781	0	0	679	0	0	707	0	1266	531	0	1340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	0.0	0.0	22.8	0.0	0.0	4.6	0.0	4.4	7.1	0.0	3.5
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.8	0.0	0.0	0.0	0.0	1.5	0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	2.6	0.0	0.0	0.1	0.0	5.4	0.4	0.0	2.9
LnGrp Delay(d),s/veh	22.0	0.0	0.0	23.6	0.0	0.0	4.6	0.0	5.9	7.5	0.0	4.2
LnGrp LOS	C			C			A		A	A		A
Approach Vol, veh/h		93			163			658			466	
Approach Delay, s/veh		22.0			23.6			5.8			4.5	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		45.8		14.2		45.8		14.2
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		28.0		22.0		22.0		22.0
Max Q Clear Time (g_c+I1), s		12.2		4.5		14.0		7.5
Green Ext Time (p_c), s		7.5		0.9		4.7		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	8.6
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	450	170	0	0	0	240	0	490	0	330	460
Future Volume (vph)	0	450	170	0	0	0	240	0	490	0	330	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.5	3.5				4.0		4.0		4.0	3.7
Lane Util. Factor		0.95	1.00				1.00		1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.97				1.00		0.99		1.00	0.97
Flpb, ped/bikes		1.00	1.00				1.00		1.00		1.00	1.00
Frt		1.00	0.85				1.00		0.85		1.00	0.85
Flt Protected		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (prot)		3539	1536				1770		1564		1863	1542
Flt Permitted		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (perm)		3539	1536				1770		1564		1863	1542
Peak-hour factor, PHF	0.94	0.94	0.94	1.00	1.00	1.00	0.83	0.83	0.83	0.89	0.89	0.89
Adj. Flow (vph)	0	479	181	0	0	0	289	0	590	0	371	517
RTOR Reduction (vph)	0	0	81	0	0	0	0	0	11	0	0	345
Lane Group Flow (vph)	0	479	100	0	0	0	289	0	579	0	371	172
Confl. Peds. (#/hr)			5			5			1			10
Confl. Bikes (#/hr)												13
Turn Type		NA	Perm				Prot		Perm		NA	Perm
Protected Phases		2					3				4	
Permitted Phases			2						8			4
Actuated Green, G (s)		14.2	14.2				16.1		40.8		20.5	20.5
Effective Green, g (s)		14.7	14.7				16.3		41.0		20.7	21.0
Actuated g/C Ratio		0.23	0.23				0.26		0.65		0.33	0.33
Clearance Time (s)		4.0	4.0				4.2		4.2		4.2	4.2
Vehicle Extension (s)		3.0	3.0				3.0		3.0		3.0	3.0
Lane Grp Cap (vph)		823	357				456		1014		610	512
v/s Ratio Prot		c0.14					c0.16				0.20	
v/s Ratio Perm			0.06						c0.37			0.11
v/c Ratio		0.58	0.28				0.63		0.57		0.61	0.34
Uniform Delay, d1		21.5	19.9				20.8		6.2		17.8	15.9
Progression Factor		1.00	1.00				1.00		1.00		1.00	1.00
Incremental Delay, d2		1.1	0.4				2.9		0.8		1.7	0.4
Delay (s)		22.6	20.3				23.7		7.0		19.6	16.2
Level of Service		C	C				C		A		B	B
Approach Delay (s)		22.0			0.0			12.5			17.6	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	63.2	Sum of lost time (s)	11.5
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	5	10	60	5	10	10	710	20	5	520	10
Future Volume (veh/h)	20	5	10	60	5	10	10	710	20	5	520	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	24	6	12	83	7	14	11	816	23	6	619	12
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.72	0.72	0.72	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	296	84	110	474	35	389	437	1067	30	301	1078	21
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	737	325	425	1336	135	1506	792	1801	51	652	1820	35
Grp Volume(v), veh/h	42	0	0	90	0	14	11	0	839	6	0	631
Grp Sat Flow(s),veh/h/ln	1487	0	0	1472	0	1506	792	0	1852	652	0	1855
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.0	18.1	0.4	0.0	11.2
Cycle Q Clear(g_c), s	2.1	0.0	0.0	2.1	0.0	0.4	11.7	0.0	18.1	18.4	0.0	11.2
Prop In Lane	0.57		0.29	0.92		1.00	1.00		0.03	1.00		0.02
Lane Grp Cap(c), veh/h	490	0	0	509	0	389	437	0	1097	301	0	1099
V/C Ratio(X)	0.09	0.00	0.00	0.18	0.00	0.04	0.03	0.00	0.77	0.02	0.00	0.57
Avail Cap(c_a), veh/h	608	0	0	646	0	535	560	0	1384	402	0	1387
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.1	0.0	0.0	15.5	0.0	14.9	10.4	0.0	8.1	15.0	0.0	6.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	1.0	0.0	0.2	0.1	0.0	9.7	0.1	0.0	5.8
LnGrp Delay(d),s/veh	15.1	0.0	0.0	15.7	0.0	14.9	10.4	0.0	10.1	15.0	0.0	7.2
LnGrp LOS	B			B		B	B		B	B		A
Approach Vol, veh/h		42			104			850			637	
Approach Delay, s/veh		15.1			15.6			10.1			7.3	
Approach LOS		B			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.7		17.8		35.7		17.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		18.0		40.0		19.0
Max Q Clear Time (g_c+I1), s		20.1		4.1		20.4		4.1
Green Ext Time (p_c), s		11.4		0.6		11.2		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	9.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	230	320	440	140	20	430	700	520	30	530	50
Future Volume (veh/h)	60	230	320	440	140	20	430	700	520	30	530	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	65	247	213	360	407	20	494	805	407	36	631	48
Adj No. of Lanes	1	1	1	1	1	0	2	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.83	0.83	0.83	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	324	543	379	376	18	606	1323	905	44	740	56
Arrive On Green	0.17	0.17	0.17	0.21	0.21	0.21	0.18	0.37	0.37	0.02	0.22	0.22
Sat Flow, veh/h	1774	1863	1515	1774	1758	86	3442	3539	1515	1774	3329	253
Grp Volume(v), veh/h	65	247	213	360	0	427	494	805	407	36	335	344
Grp Sat Flow(s),veh/h/ln	1774	1863	1515	1774	0	1844	1721	1770	1515	1774	1770	1812
Q Serve(g_s), s	2.4	9.5	8.0	15.0	0.0	16.0	10.3	13.8	11.4	1.5	13.6	13.6
Cycle Q Clear(g_c), s	2.4	9.5	8.0	15.0	0.0	16.0	10.3	13.8	11.4	1.5	13.6	13.6
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	309	324	543	379	0	394	606	1323	905	44	394	403
V/C Ratio(X)	0.21	0.76	0.39	0.95	0.00	1.08	0.82	0.61	0.45	0.82	0.85	0.85
Avail Cap(c_a), veh/h	379	398	603	379	0	394	735	1323	905	95	394	403
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	29.4	18.4	29.1	0.0	29.4	29.7	19.0	8.7	36.4	27.9	27.9
Incr Delay (d2), s/veh	0.3	6.7	0.5	33.4	0.0	69.7	5.9	2.1	1.6	29.6	16.2	16.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	5.5	3.4	10.8	0.0	15.6	5.4	7.1	7.5	1.1	8.4	8.6
LnGrp Delay(d),s/veh	26.8	36.2	18.9	62.5	0.0	99.1	35.6	21.1	10.3	65.9	44.1	44.0
LnGrp LOS	C	D	B	E		F	D	C	B	E	D	D
Approach Vol, veh/h		525			787			1706			715	
Approach Delay, s/veh		28.0			82.4			22.7			45.2	
Approach LOS		C			F			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	32.0		17.0	17.2	20.7		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	28.0		16.0	16.0	16.0		16.0
Max Q Clear Time (g_c+I1), s	3.5	15.8		11.5	12.3	15.6		18.0
Green Ext Time (p_c), s	0.0	8.6		1.1	0.8	0.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.3
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1090	120	170	860	10	610	20	200	20	10	10
Future Volume (veh/h)	30	1090	120	170	860	10	610	20	200	20	10	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	32	1160	114	183	925	11	752	0	204	22	25	6
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.93	0.93	0.93	0.83	0.83	0.83	0.66	0.66	0.66
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	1312	129	210	1935	23	916	0	596	305	320	271
Arrive On Green	0.02	0.28	0.28	0.12	0.37	0.37	0.26	0.00	0.26	0.17	0.17	0.17
Sat Flow, veh/h	1774	4691	461	1774	5178	62	3548	0	1583	1774	1863	1578
Grp Volume(v), veh/h	32	838	436	183	605	331	752	0	204	22	25	6
Grp Sat Flow(s),veh/h/ln	1774	1695	1762	1774	1695	1850	1774	0	1583	1774	1863	1578
Q Serve(g_s), s	1.7	22.0	22.0	9.4	12.7	12.7	18.6	0.0	8.6	1.0	1.0	0.3
Cycle Q Clear(g_c), s	1.7	22.0	22.0	9.4	12.7	12.7	18.6	0.0	8.6	1.0	1.0	0.3
Prop In Lane	1.00		0.26	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	43	948	493	210	1267	691	916	0	596	305	320	271
V/C Ratio(X)	0.75	0.88	0.89	0.87	0.48	0.48	0.82	0.00	0.34	0.07	0.08	0.02
Avail Cap(c_a), veh/h	114	948	493	210	1267	691	916	0	596	305	320	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	32.1	32.1	40.3	22.2	22.2	32.5	0.0	20.8	32.3	32.3	32.0
Incr Delay (d2), s/veh	22.2	11.8	20.2	30.6	1.3	2.4	8.2	0.0	1.6	0.5	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	11.8	13.4	6.4	6.1	6.9	10.1	0.0	4.0	0.5	0.6	0.1
LnGrp Delay(d),s/veh	67.3	43.9	52.3	70.9	23.5	24.6	40.7	0.0	22.3	32.7	32.8	32.1
LnGrp LOS	E	D	D	E	C	C	D		C	C	C	C
Approach Vol, veh/h		1306			1119			956			53	
Approach Delay, s/veh		47.3			31.6			36.8			32.7	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	30.0		20.0	6.2	38.8		28.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	1.0	26.0		16.0	6.0	31.0		24.0
Max Q Clear Time (g_c+I1), s	11.4	24.0		3.0	3.7	14.7		20.6
Green Ext Time (p_c), s	0.0	1.8		0.1	0.0	12.2		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	39.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	530	770	0	0	870	170	180	5	120	0	0	0
Future Volume (veh/h)	530	770	0	0	870	170	180	5	120	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900			
Adj Flow Rate, veh/h	546	794	0	0	1000	134	198	5	65			
Adj No. of Lanes	2	2	0	0	2	0	1	1	0			
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.91	0.91	0.91			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	973	2751	0	0	1414	189	242	15	200			
Arrive On Green	0.28	0.78	0.00	0.00	0.45	0.45	0.14	0.14	0.14			
Sat Flow, veh/h	3442	3632	0	0	3224	419	1774	113	1464			
Grp Volume(v), veh/h	546	794	0	0	565	569	198	0	70			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1780	1774	0	1577			
Q Serve(g_s), s	12.6	6.0	0.0	0.0	23.9	24.0	10.1	0.0	3.7			
Cycle Q Clear(g_c), s	12.6	6.0	0.0	0.0	23.9	24.0	10.1	0.0	3.7			
Prop In Lane	1.00		0.00	0.00		0.24	1.00		0.93			
Lane Grp Cap(c), veh/h	973	2751	0	0	799	804	242	0	215			
V/C Ratio(X)	0.56	0.29	0.00	0.00	0.71	0.71	0.82	0.00	0.32			
Avail Cap(c_a), veh/h	973	2751	0	0	799	804	343	0	305			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.75	0.75	1.00	0.00	1.00			
Uniform Delay (d), s/veh	28.4	3.0	0.0	0.0	20.5	20.6	39.0	0.0	36.3			
Incr Delay (d2), s/veh	0.7	0.3	0.0	0.0	3.9	3.9	9.9	0.0	0.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.1	3.0	0.0	0.0	12.5	12.6	5.6	0.0	1.7			
LnGrp Delay(d),s/veh	29.2	3.2	0.0	0.0	24.5	24.5	49.0	0.0	37.1			
LnGrp LOS	C	A			C	C	D		D			
Approach Vol, veh/h		1340			1134			268				
Approach Delay, s/veh		13.8			24.5			45.9				
Approach LOS		B			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		76.3			30.3	46.0		16.7
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		67.0			21.0	42.0		18.0
Max Q Clear Time (g_c+I1), s		8.0			14.6	26.0		12.1
Green Ext Time (p_c), s		10.6			3.9	6.7		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	21.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	170	0	300	50	1290	0	0	800	650
Future Volume (veh/h)	0	0	0	170	0	300	50	1290	0	0	800	650
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				202	0	253	60	1536	0	0	860	699
Adj No. of Lanes				0	1	1	1	2	0	0	2	1
Peak Hour Factor				0.84	0.84	0.84	0.84	0.84	0.84	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				695	0	620	1064	3598	0	0	1277	555
Arrive On Green				0.39	0.00	0.39	0.60	1.00	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	3632	1538
Grp Volume(v), veh/h				202	0	253	60	1536	0	0	860	699
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1770	1538
Q Serve(g_s), s				7.6	0.0	11.2	1.4	0.0	0.0	0.0	19.9	35.0
Cycle Q Clear(g_c), s				7.6	0.0	11.2	1.4	0.0	0.0	0.0	19.9	35.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				695	0	620	1064	3598	0	0	1277	555
V/C Ratio(X)				0.29	0.00	0.41	0.06	0.43	0.00	0.00	0.67	1.26
Avail Cap(c_a), veh/h				695	0	620	1064	3598	0	0	1277	555
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.82	0.82	0.00	0.00	0.84	0.84
Uniform Delay (d), s/veh				20.2	0.0	21.4	8.0	0.0	0.0	0.0	26.2	31.0
Incr Delay (d2), s/veh				1.1	0.0	2.0	0.1	0.3	0.0	0.0	2.4	128.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.9	0.0	5.3	0.7	0.2	0.0	0.0	10.1	34.6
LnGrp Delay(d),s/veh				21.3	0.0	23.3	8.1	0.3	0.0	0.0	28.6	159.7
LnGrp LOS				C		C	A	A			C	F
Approach Vol, veh/h					455			1596			1559	
Approach Delay, s/veh					22.4			0.6			87.4	
Approach LOS					C			A			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	15.0	39.0				104.0		42.0
Change Period (Y+Rc), s	4.9	* 4.9				4.9		4.2
Max Green Setting (Gmax), s	12.5	* 34				50.1		37.8
Max Q Clear Time (g_c+I1), s	9.4	37.0				2.0		13.2
Green Ext Time (p_c), s	6.7	0.0				19.0		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	40.8
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	20	30	340	20	400	40	1210	260	360	960	10
Future Volume (veh/h)	30	20	30	340	20	400	40	1210	260	360	960	10
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	44	29	10	438	0	277	47	1424	227	387	1032	11
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	2	2	0
Peak Hour Factor	0.68	0.68	0.68	0.81	0.81	0.81	0.85	0.85	0.85	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	38	84	768	0	534	57	1435	965	454	1779	19
Arrive On Green	0.05	0.05	0.05	0.22	0.00	0.22	0.03	0.41	0.41	0.13	0.50	0.50
Sat Flow, veh/h	1090	718	1574	3548	0	1503	1774	3539	1536	3442	3586	38
Grp Volume(v), veh/h	73	0	10	438	0	277	47	1424	227	387	509	534
Grp Sat Flow(s),veh/h/ln	1808	0	1574	1774	0	1503	1774	1770	1536	1721	1770	1855
Q Serve(g_s), s	4.3	0.0	0.7	12.0	0.0	16.0	2.9	43.6	7.1	12.0	22.2	22.2
Cycle Q Clear(g_c), s	4.3	0.0	0.7	12.0	0.0	16.0	2.9	43.6	7.1	12.0	22.2	22.2
Prop In Lane	0.60		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	97	0	84	768	0	534	57	1435	965	454	878	920
V/C Ratio(X)	0.76	0.00	0.12	0.57	0.00	0.52	0.83	0.99	0.24	0.85	0.58	0.58
Avail Cap(c_a), veh/h	100	0	87	945	0	609	98	1435	965	506	878	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	0.0	49.1	38.1	0.0	28.3	52.4	32.2	9.1	46.2	19.4	19.4
Incr Delay (d2), s/veh	26.8	0.0	0.6	0.7	0.0	0.8	24.9	22.1	0.6	12.3	2.8	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.3	6.0	0.0	6.7	1.8	25.6	4.9	6.5	11.4	11.9
LnGrp Delay(d),s/veh	77.6	0.0	49.7	38.8	0.0	29.1	77.3	54.3	9.7	58.5	22.2	22.1
LnGrp LOS	E		D	D		C	E	D	A	E	C	C
Approach Vol, veh/h		83			715			1698			1430	
Approach Delay, s/veh		74.3			35.1			49.0			32.0	
Approach LOS		E			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	60.0		28.6	19.4	50.1		10.8
Change Period (Y+Rc), s	6.0	* 6		5.0	5.0	6.0		5.0
Max Green Setting (Gmax), s	6.0	* 54		29.0	16.0	44.0		6.0
Max Q Clear Time (g_c+I1), s	14.9	24.2		18.0	14.0	45.6		6.3
Green Ext Time (p_c), s	0.0	8.0		2.6	0.4	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.8
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	20	50	1410	1280	10
Future Vol, veh/h	10	20	50	1410	1280	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	180	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	88	88	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	30	57	1602	1561	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2482	787	1573	0	-	0
Stage 1	1567	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	24	334	415	-	-	-
Stage 1	157	-	-	-	-	-
Stage 2	351	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	21	334	415	-	-	-
Mov Cap-2 Maneuver	21	-	-	-	-	-
Stage 1	157	-	-	-	-	-
Stage 2	303	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	185.9	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	415	-	56	-	-
HCM Lane V/C Ratio	0.137	-	0.812	-	-
HCM Control Delay (s)	15	-	185.9	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.5	-	3.5	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	100	1450	60	70	1310
Future Vol, veh/h	30	100	1450	60	70	1310
Conflicting Peds, #/hr	0	0	0	13	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	93	93	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	141	1559	65	79	1472

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2497	825	0	0	1637	0
Stage 1	1604	-	-	-	-	-
Stage 2	893	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 24	316	-	-	392	-
Stage 1	150	-	-	-	-	-
Stage 2	360	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 19	312	-	-	392	-
Mov Cap-2 Maneuver	97	-	-	-	-	-
Stage 1	148	-	-	-	-	-
Stage 2	287	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	35.5	0	0.8
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	97	312	392	-
HCM Lane V/C Ratio	-	-	0.436	0.451	0.201	-
HCM Control Delay (s)	-	-	68.1	25.7	16.5	-
HCM Lane LOS	-	-	F	D	C	-
HCM 95th %tile Q(veh)	-	-	1.8	2.2	0.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Appendix E.2

Intersection Bicycle LOS Worksheets for 2021 Near-Term Plus Project Conditions

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	76	5	10	6
Total Flow Rate (veh/h)	544	131	1888	1488
Effct. Green for Bike (s)	20.4	10.5	69.5	74.6
Cross Street Width (ft)	82.0	73.9	69.4	52.1
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	255	131	869	932
Bicycle Delay (s/bike)	63.3	70.0	25.7	22.9
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.26	1.83	4.18	3.58
Bicycle LOS	C	A	D	D

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	62	8	14	0
Total Flow Rate (veh/h)	1048	667	1559	1463
Effct. Green for Bike (s)	17.8	13.5	21.1	20.1
Cross Street Width (ft)	87.8	85.7	63.1	61.6
Through Lanes Number	1	2	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	548	415	649	618
Bicycle Delay (s/bike)	17.7	20.5	14.9	15.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.56	2.35	3.81	2.64
Bicycle LOS	D	B	D	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	19	4	44	1
Total Flow Rate (veh/h)	1014	161	1156	169
Effct. Green for Bike (s)	28.4	11.8	38.0	14.9
Cross Street Width (ft)	60.2	71.4	36.3	60.7
Through Lanes Number	1	1	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	403	167	539	211
Bicycle Delay (s/bike)	45.4	59.3	38.5	56.4
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	4.15	2.92	3.07	2.77
Bicycle LOS	D	C	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	21	5
Total Flow Rate (veh/h)	579	39	393	377
Effct. Green for Bike (s)	16.5	5.7	9.5	9.5
Cross Street Width (ft)	58.5	61.2	24.0	12.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	550	190	317	317
Bicycle Delay (s/bike)	15.8	24.6	21.5	21.3
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.41	2.56	0.96	0.77
Bicycle LOS	C	B	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	5	0
Total Flow Rate (veh/h)	518	554	26	309
Effct. Green for Bike (s)	39.0	19.9	8.0	8.0
Cross Street Width (ft)	55.3	62.1	49.9	36.3
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	667	340	137	137
Bicycle Delay (s/bike)	26.0	40.3	50.9	50.8
Bicycle Compliance	Fair	Poor	Poor	Poor
Bicycle LOS Score	3.26	2.35	2.37	2.62
Bicycle LOS	C	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	0	18	2
Total Flow Rate (veh/h)	60	125	1642	1442
Effct. Green for Bike (s)	8.9	9.7	41.2	43.2
Cross Street Width (ft)	72.8	72.5	38.1	38.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	198	216	916	960
Bicycle Delay (s/bike)	36.7	35.8	13.4	12.2
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.77	2.88	2.21	2.05
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	20	5
Total Flow Rate (veh/h)	332	91	1732	1467
Effct. Green for Bike (s)	11.8	11.8	32.2	32.2
Cross Street Width (ft)	59.9	72.0	23.9	26.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	429	429	1171	1171
Bicycle Delay (s/bike)	17.0	17.0	4.8	4.7
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	3.02	2.81	2.28	2.11
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	16	5
Total Flow Rate (veh/h)	189	792	763	1275
Effct. Green for Bike (s)	18.1	18.1	16.1	16.1
Cross Street Width (ft)	59.9	61.1	35.9	23.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	724	724	644	644
Bicycle Delay (s/bike)	10.2	10.2	11.6	11.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.79	3.80	1.67	1.91
Bicycle LOS	C	D	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	13	1	17	4
Total Flow Rate (veh/h)	67	207	744	1213
Effct. Green for Bike (s)	9.6	9.6	40.4	40.4
Cross Street Width (ft)	60.1	59.9	32.9	35.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	320	320	1347	1347
Bicycle Delay (s/bike)	21.3	21.2	3.2	3.2
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.59	2.82	1.60	2.04
Bicycle LOS	B	C	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	18	5
Total Flow Rate (veh/h)	188	106	631	1093
Effct. Green for Bike (s)	9.5	9.5	43.6	24.0
Cross Street Width (ft)	61.3	60.1	36.1	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	317	317	1453	800
Bicycle Delay (s/bike)	21.3	21.3	2.3	10.8
Bicycle Compliance	Fair	Fair	Good	Fair
Bicycle LOS Score	2.81	2.65	1.56	2.12
Bicycle LOS	C	B	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	2	5	1
Total Flow Rate (veh/h)	126	411	595	1086
Effct. Green for Bike (s)	14.0	14.0	27.7	34.4
Cross Street Width (ft)	61.2	60.9	48.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	467	467	923	1147
Bicycle Delay (s/bike)	17.7	17.7	8.7	5.5
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.70	3.17	1.71	2.12
Bicycle LOS	B	C	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	3	18	5
Total Flow Rate (veh/h)	0	253	568	943
Effct. Green for Bike (s)	0.0	7.8	42.2	42.2
Cross Street Width (ft)	48.1	60.0	36.0	38.1
Through Lanes Number	0	3	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	260	1407	1407
Bicycle Delay (s/bike)	0.0	22.7	2.7	2.6
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.62	1.51	2.63
Bicycle LOS		B	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	3	1	3
Total Flow Rate (veh/h)	315	658	608	245
Effct. Green for Bike (s)	10.8	24.1	17.0	17.0
Cross Street Width (ft)	35.9	38.6	60.1	47.9
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	288	643	453	453
Bicycle Delay (s/bike)	27.6	17.3	22.4	22.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.63	3.24	2.41	2.70
Bicycle LOS	B	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	1	21	9
Total Flow Rate (veh/h)	492	695	539	313
Effct. Green for Bike (s)	29.2	35.0	23.2	23.2
Cross Street Width (ft)	38.0	38.8	48.2	48.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	712	854	566	566
Bicycle Delay (s/bike)	17.0	13.5	21.3	21.2
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.95	3.30	1.90	1.53
Bicycle LOS	C	C	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	6	1	10
Total Flow Rate (veh/h)	0	494	205	303
Effct. Green for Bike (s)	0.0	28.0	22.0	22.0
Cross Street Width (ft)	35.9	48.1	36.1	37.4
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	933	733	733
Bicycle Delay (s/bike)	0.0	8.6	12.0	12.1
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.57	2.45	2.63
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	8	6	4
Total Flow Rate (veh/h)	0	488	123	90
Effct. Green for Bike (s)	0.0	19.0	31.0	31.0
Cross Street Width (ft)	24.0	36.0	36.0	38.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	633	1033	1033
Bicycle Delay (s/bike)	0.0	14.1	7.0	7.0
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.38	2.31	2.29
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	5	2	3
Total Flow Rate (veh/h)	0	546	195	152
Effct. Green for Bike (s)	0.0	27.0	23.0	23.0
Cross Street Width (ft)	23.9	24.1	36.0	36.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	900	767	767
Bicycle Delay (s/bike)	0.0	9.1	11.4	11.4
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.23	2.43	2.36
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	13	0	4	0
Total Flow Rate (veh/h)	816	0	237	605
Effct. Green for Bike (s)	30.2	0.0	19.8	19.8
Cross Street Width (ft)	34.7	48.2	38.5	35.9
Through Lanes Number	2	0	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1007	0	660	660
Bicycle Delay (s/bike)	7.4	0.0	13.5	13.5
Bicycle Compliance	Good		Fair	Fair
Bicycle LOS Score	1.48	0.00	1.47	2.04
Bicycle LOS	A		A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	0	3	5
Total Flow Rate (veh/h)	90	270	641	384
Effct. Green for Bike (s)	16.0	16.0	16.0	16.0
Cross Street Width (ft)	38.0	38.0	26.0	26.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	14.0	14.0	14.0	14.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	800	800	800	800
Bicycle Delay (s/bike)	7.2	7.2	7.2	7.2
Bicycle Compliance	Good	Good	Good	Good
Bicycle LOS Score	1.86	2.16	2.59	2.16
Bicycle LOS	A	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	10
Total Flow Rate (veh/h)	1024	0	494	528
Effct. Green for Bike (s)	24.9	0.0	0.0	18.7
Cross Street Width (ft)	37.6	25.0	24.1	52.2
Through Lanes Number	2	0	0	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	461	0	0	346
Bicycle Delay (s/bike)	32.0	0.0	0.0	37.1
Bicycle Compliance	Poor			Poor
Bicycle LOS Score	2.98	0.00	0.00	2.37
Bicycle LOS	C			B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	2	8	6
Total Flow Rate (veh/h)	64	72	706	720
Effct. Green for Bike (s)	10.9	16.4	32.3	32.3
Cross Street Width (ft)	39.5	37.8	36.2	30.8
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	16.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	325	490	964	964
Bicycle Delay (s/bike)	23.6	19.1	9.0	9.0
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.41	1.18	2.21	3.22
Bicycle LOS	A	A	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	13	4	5	3
Total Flow Rate (veh/h)	710	613	1112	724
Effct. Green for Bike (s)	27.1	27.8	51.2	36.5
Cross Street Width (ft)	87.2	73.8	37.1	62.5
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	399	409	753	537
Bicycle Delay (s/bike)	43.9	43.1	26.5	36.5
Bicycle Compliance	Poor	Poor	Fair	Poor
Bicycle LOS Score	4.07	3.70	1.97	2.04
Bicycle LOS	D	D	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	11	2	1	0
Total Flow Rate (veh/h)	1109	640	1130	48
Effct. Green for Bike (s)	31.0	45.4	16.0	16.0
Cross Street Width (ft)	48.7	48.2	84.8	86.6
Through Lanes Number	3	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	667	976	344	344
Bicycle Delay (s/bike)	20.8	12.2	31.9	31.9
Bicycle Compliance	Fair	Fair	Poor	Poor
Bicycle LOS Score	1.84	1.58	4.72	2.96
Bicycle LOS	A	A	E	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	10	5	0	0
Total Flow Rate (veh/h)	1810	712	290	0
Effct. Green for Bike (s)	72.3	40.3	12.7	0.0
Cross Street Width (ft)	38.7	35.1	92.8	91.2
Through Lanes Number	2	2	1	0
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1555	867	273	0
Bicycle Delay (s/bike)	2.3	15.0	34.7	0.0
Bicycle Compliance	Good	Fair	Poor	
Bicycle LOS Score	2.57	1.61	3.46	0.00
Bicycle LOS	B	A	C	

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	1	4
Total Flow Rate (veh/h)	0	787	953	1133
Effct. Green for Bike (s)	0.0	33.4	54.5	47.3
Cross Street Width (ft)	60.2	73.8	24.0	14.8
Through Lanes Number	0	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	689	1124	975
Bicycle Delay (s/bike)	0.0	20.9	9.3	12.8
Bicycle Compliance		Fair	Good	Fair
Bicycle LOS Score	0.00	3.99	1.86	1.86
Bicycle LOS		D	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	1	15
Total Flow Rate (veh/h)	42	729	1108	1662
Effct. Green for Bike (s)	4.1	17.6	42.9	61.6
Cross Street Width (ft)	81.6	80.9	63.0	56.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	69	298	727	1044
Bicycle Delay (s/bike)	55.0	42.7	23.9	13.6
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.88	2.93	2.37	2.73
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	13	55	1	1
Total Flow Rate (veh/h)	405	513	1527	1663
Effct. Green for Bike (s)	15.8	20.0	75.9	70.4
Cross Street Width (ft)	82.0	73.9	69.4	52.1
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	198	250	949	880
Bicycle Delay (s/bike)	65.4	63.0	22.1	25.1
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.15	2.46	3.88	3.73
Bicycle LOS	C	B	D	D

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	17	58	0	2
Total Flow Rate (veh/h)	723	766	1660	1697
Effct. Green for Bike (s)	16.8	14.6	21.0	20.0
Cross Street Width (ft)	87.8	85.7	63.1	61.5
Through Lanes Number	1	2	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	517	449	646	615
Bicycle Delay (s/bike)	18.0	20.1	14.9	15.6
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.02	2.43	3.89	2.83
Bicycle LOS	C	B	D	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	4	25	10	50
Total Flow Rate (veh/h)	856	255	786	448
Effct. Green for Bike (s)	16.9	16.9	40.8	21.1
Cross Street Width (ft)	60.2	71.1	36.3	60.8
Through Lanes Number	1	1	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	307	307	742	384
Bicycle Delay (s/bike)	39.5	39.9	21.9	36.8
Bicycle Compliance	Poor	Poor	Fair	Poor
Bicycle LOS Score	3.89	3.07	2.76	3.23
Bicycle LOS	D	C	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	9	5
Total Flow Rate (veh/h)	354	33	264	375
Effct. Green for Bike (s)	12.2	5.8	10.2	10.2
Cross Street Width (ft)	58.1	61.2	24.0	12.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	407	193	340	340
Bicycle Delay (s/bike)	19.0	24.5	20.8	20.7
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.03	2.55	0.86	0.77
Bicycle LOS	C	B	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	1	2	8
Total Flow Rate (veh/h)	753	321	14	461
Effct. Green for Bike (s)	28.5	13.3	11.2	11.2
Cross Street Width (ft)	54.0	62.1	49.8	36.3
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	487	227	191	191
Bicycle Delay (s/bike)	33.5	46.0	47.9	48.0
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	3.63	1.97	2.34	2.88
Bicycle LOS	D	A	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	9	2	6
Total Flow Rate (veh/h)	65	261	1656	1523
Effct. Green for Bike (s)	8.4	15.7	37.9	38.4
Cross Street Width (ft)	72.9	72.6	38.1	38.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	187	349	842	853
Bicycle Delay (s/bike)	37.0	30.8	15.1	14.8
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.78	3.10	2.22	2.11
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	8	10
Total Flow Rate (veh/h)	137	73	2147	1652
Effct. Green for Bike (s)	7.8	7.8	36.5	36.5
Cross Street Width (ft)	60.0	72.0	23.9	26.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	284	284	1327	1327
Bicycle Delay (s/bike)	20.3	20.3	3.1	3.1
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.70	2.78	2.62	2.26
Bicycle LOS	B	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	6	8
Total Flow Rate (veh/h)	155	681	1418	934
Effct. Green for Bike (s)	17.5	17.5	16.1	16.1
Cross Street Width (ft)	59.9	61.1	35.9	23.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	700	700	644	644
Bicycle Delay (s/bike)	10.6	10.6	11.5	11.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.73	3.62	2.21	1.62
Bicycle LOS	B	D	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	11	5	5
Total Flow Rate (veh/h)	194	293	1191	827
Effct. Green for Bike (s)	15.7	15.7	36.3	36.3
Cross Street Width (ft)	60.1	59.9	32.5	36.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	523	523	1210	1210
Bicycle Delay (s/bike)	16.4	16.4	4.7	4.7
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.80	2.96	1.97	1.72
Bicycle LOS	C	C	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	5	5
Total Flow Rate (veh/h)	230	102	1108	766
Effct. Green for Bike (s)	11.2	11.1	43.8	25.0
Cross Street Width (ft)	61.3	60.1	36.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	373	370	1460	833
Bicycle Delay (s/bike)	19.9	19.9	2.2	10.2
Bicycle Compliance	Fair	Fair	Good	Fair
Bicycle LOS Score	2.88	2.65	1.95	1.85
Bicycle LOS	C	B	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	5	1	3
Total Flow Rate (veh/h)	168	451	1000	785
Effct. Green for Bike (s)	15.3	15.3	26.5	35.1
Cross Street Width (ft)	61.2	60.8	48.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	510	510	883	1170
Bicycle Delay (s/bike)	16.7	16.7	9.4	5.2
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.77	3.23	2.05	1.87
Bicycle LOS	C	C	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	3	3	8
Total Flow Rate (veh/h)	0	275	1000	768
Effct. Green for Bike (s)	0.0	8.0	42.0	42.0
Cross Street Width (ft)	48.0	60.0	36.0	38.2
Through Lanes Number	0	3	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	267	1400	1400
Bicycle Delay (s/bike)	0.0	22.6	2.7	2.7
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.63	1.86	2.34
Bicycle LOS		B	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	11	0	1
Total Flow Rate (veh/h)	390	501	423	202
Effct. Green for Bike (s)	12.9	20.4	12.1	12.1
Cross Street Width (ft)	35.9	38.6	60.1	48.0
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	344	544	323	323
Bicycle Delay (s/bike)	25.7	20.0	26.4	26.4
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.75	2.98	2.11	2.63
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	5	4	15
Total Flow Rate (veh/h)	554	612	660	418
Effct. Green for Bike (s)	28.6	35.5	23.6	23.6
Cross Street Width (ft)	38.1	38.7	48.1	48.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	698	866	576	576
Bicycle Delay (s/bike)	17.4	13.2	20.8	21.0
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.06	3.16	2.10	1.70
Bicycle LOS	C	C	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	15	3	11
Total Flow Rate (veh/h)	0	687	366	337
Effct. Green for Bike (s)	0.0	29.0	23.0	23.0
Cross Street Width (ft)	36.0	48.1	36.1	37.4
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	967	767	767
Bicycle Delay (s/bike)	0.0	8.1	11.4	11.5
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.67	2.72	2.69
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	12	9	9
Total Flow Rate (veh/h)	0	649	203	137
Effct. Green for Bike (s)	0.0	20.0	32.0	32.0
Cross Street Width (ft)	24.0	36.0	36.0	38.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	667	1067	1067
Bicycle Delay (s/bike)	0.0	13.4	6.6	6.6
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.47	2.45	2.37
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	8	9	1
Total Flow Rate (veh/h)	0	605	390	195
Effct. Green for Bike (s)	0.0	28.0	24.0	24.0
Cross Street Width (ft)	23.9	24.0	36.0	36.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	933	800	800
Bicycle Delay (s/bike)	0.0	8.6	10.8	10.8
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.26	2.75	2.43
Bicycle LOS		B	C	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	0	4	5
Total Flow Rate (veh/h)	884	0	427	484
Effct. Green for Bike (s)	31.9	0.0	20.1	20.1
Cross Street Width (ft)	34.2	48.2	38.5	36.0
Through Lanes Number	2	0	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1063	0	670	670
Bicycle Delay (s/bike)	6.6	0.0	13.3	13.3
Bicycle Compliance	Good		Fair	Fair
Bicycle LOS Score	1.53	0.00	1.78	1.84
Bicycle LOS	A		A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	6	1	6
Total Flow Rate (veh/h)	102	169	690	466
Effct. Green for Bike (s)	12.8	13.0	42.1	42.1
Cross Street Width (ft)	38.0	37.9	26.0	26.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	14.0	14.0	14.0	14.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	427	433	1403	1403
Bicycle Delay (s/bike)	18.6	18.5	2.7	2.7
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.88	1.99	2.67	2.30
Bicycle LOS	A	A	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	13
Total Flow Rate (veh/h)	660	0	879	888
Effct. Green for Bike (s)	14.7	0.0	0.0	20.4
Cross Street Width (ft)	37.6	25.1	24.2	52.2
Through Lanes Number	2	0	0	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	330	0	0	458
Bicycle Delay (s/bike)	31.0	0.0	0.0	26.6
Bicycle Compliance	Poor			Fair
Bicycle LOS Score	2.68	0.00	0.00	2.97
Bicycle LOS	B			C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	5	6	4	12
Total Flow Rate (veh/h)	42	104	850	637
Effct. Green for Bike (s)	12.8	16.3	36.7	36.7
Cross Street Width (ft)	39.5	37.8	36.2	30.8
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	16.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	382	487	1096	1096
Bicycle Delay (s/bike)	22.0	19.2	6.9	6.9
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.38	1.24	2.44	3.08
Bicycle LOS	A	A	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	13	13	2
Total Flow Rate (veh/h)	656	723	1897	727
Effct. Green for Bike (s)	14.0	16.1	30.3	16.1
Cross Street Width (ft)	87.1	73.6	37.1	62.5
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	350	402	758	402
Bicycle Delay (s/bike)	27.3	25.7	15.5	25.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.97	3.88	2.62	2.04
Bicycle LOS	D	D	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	10	0	0
Total Flow Rate (veh/h)	1320	1119	1000	60
Effct. Green for Bike (s)	26.0	35.0	24.0	16.0
Cross Street Width (ft)	48.7	48.2	84.9	86.6
Through Lanes Number	3	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	559	753	516	344
Bicycle Delay (s/bike)	24.2	18.2	25.6	31.9
Bicycle Compliance	Fair	Fair	Fair	Poor
Bicycle LOS Score	1.96	1.84	4.51	2.98
Bicycle LOS	A	A	E	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	9	1	0
Total Flow Rate (veh/h)	1340	1195	335	0
Effct. Green for Bike (s)	70.1	45.1	14.9	0.0
Cross Street Width (ft)	38.8	35.1	92.6	91.2
Through Lanes Number	2	2	1	0
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	6.0	0.0
Curb Is Present?	Yes	Yes	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1508	970	320	0
Bicycle Delay (s/bike)	2.8	12.4	32.8	0.0
Bicycle Compliance	Good	Fair	Poor	
Bicycle LOS Score	2.19	2.01	2.24	0.00
Bicycle LOS	B	B	B	

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	8	8
Total Flow Rate (veh/h)	0	559	1596	1559
Effct. Green for Bike (s)	0.0	38.0	51.0	33.1
Cross Street Width (ft)	60.2	73.7	24.0	14.8
Through Lanes Number	0	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	784	1052	682
Bicycle Delay (s/bike)	0.0	17.9	11.0	21.1
Bicycle Compliance		Fair	Fair	Fair
Bicycle LOS Score	0.00	3.61	2.39	2.21
Bicycle LOS		D	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	1	14	3
Total Flow Rate (veh/h)	117	939	1777	1430
Effct. Green for Bike (s)	6.0	20.7	44.2	56.0
Cross Street Width (ft)	81.6	80.9	62.9	56.1
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	103	357	762	966
Bicycle Delay (s/bike)	52.2	39.2	22.4	15.5
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.00	3.27	2.92	2.53
Bicycle LOS	C	C	C	B

Appendix E.3

Intersection Pedestrian LOS Worksheets for 2021 Near-Term Plus Project Conditions

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	96861800
Level of Service	F

Crosswalk	
Length (ft)	80
Lanes Crossed	4
Veh Vol Crossed	2510
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	25.86
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	96861800.00
Avg Ped Delay (s)	96861800.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	8871610
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2510
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	8871610.00
Avg Ped Delay (s)	8871610.00

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.1	69.4	82.0	73.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	0.0	8.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	4	0
Ped. Right-Left Flow Rate (p/h)	8	0	41	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	90	30	180	50
Veh. RTOR Flow in Walk (v/h)	14	3	8	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	1355.6	0.0	1537.8	9112.5
Right Corner Quality of Service	A	-	A	A
Ped. Circulation Area (sq.ft)	855.4	0.0	83.8	0.0
Crosswalk Circulation Code	A	-	A	-
Pedestrian Delay (s/p)	69.4	80.0	72.2	80.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.35	2.48	3.04	3.02
Pedestrian Crosswalk LOS	B	B	C	C

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	18.2
Level of Service	C

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	480
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.80
Prob of Blocked Lane	0.55
Delay for adq Gap	22.72
Avg Ped Delay (s)	18.22

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	19.4
Level of Service	C

Crosswalk	
Length (ft)	33
Lanes Crossed	2
Veh Vol Crossed	480
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.43
Prob of Delayed X-ing	0.81
Prob of Blocked Lane	0.56
Delay for adq Gap	23.98
Avg Ped Delay (s)	19.40

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	61.6	63.1	87.8	85.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	7	7
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	25	7	19
Ped. Right-Left Flow Rate (p/h)	3	2	5	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	260	300	50	50
Veh. RTOR Flow in Walk (v/h)	61	12	0	3
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	4270.5	1445.3	1799.9	2597.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2618.7	453.7	1659.2	860.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	24.1	24.1	24.1	24.1
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.69	2.61	3.01	3.03
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.7	36.3	60.2	71.4
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	19	0	98	0
Ped. Right-Left Flow Rate (p/h)	92	21	6	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	3	13
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	290	10	30	40
Veh. RTOR Flow in Walk (v/h)	29	3	5	7
85th percentile speed (mph)	30	25	35	25
Right Corner Area per Ped (sq.ft)	270.8	3394.2	565.9	576.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	13.3	364.5	76.7	0.0
Crosswalk Circulation Code	E	A	A	-
Pedestrian Delay (s/p)	61.8	61.8	61.8	70.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.70	2.11	2.72	2.50
Pedestrian Crosswalk LOS	B	B	B	B

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	2
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	90
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.26
Prob of Blocked Lane	0.14
Delay for adq Gap	7.81
Avg Ped Delay (s)	2.04

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	2
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	90
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.26
Prob of Blocked Lane	0.14
Delay for adq Gap	7.81
Avg Ped Delay (s)	2.04

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	4480.8
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1170
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.84
Delay for adq Gap	4483.83
Avg Ped Delay (s)	4480.77

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	4480.8
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1170
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.84
Delay for adq Gap	4483.83
Avg Ped Delay (s)	4480.77

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	699.6
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	820
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.72
Delay for adq Gap	703.85
Avg Ped Delay (s)	699.60

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	699.6
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	820
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.72
Delay for adq Gap	703.85
Avg Ped Delay (s)	699.60

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	24.0	58.5	61.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	4	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	3	3	0
Ped. Right-Left Flow Rate (p/h)	12	4	9	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	5
Veh. Perm. R. Flow in Walk (v/h)	80	10	10	0
Veh. RTOR Flow in Walk (v/h)	0	2	0	0
85th percentile speed (mph)	30	25	35	35
Right Corner Area per Ped (sq.ft)	2788.2	10398.8	3819.7	5203.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	451.0	2337.5	1747.4	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	21.7	21.7	21.7	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.97	1.73	2.35	2.59
Pedestrian Crosswalk LOS	A	A	B	B

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	13.1	
Level of Service	C	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	300	270
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.60	0.56
Prob of Blocked Lane	0.37	0.34
Delay for adq Gap	11.68	10.84
Avg Ped Delay (s)	7.01	6.09

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	201.3
Level of Service	F

Crosswalk	
Length (ft)	69
Lanes Crossed	4
Veh Vol Crossed	570
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.71
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.59
Delay for adq Gap	206.97
Avg Ped Delay (s)	201.29

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	147.4	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	520	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	0.96	
Prob of Blocked Lane	0.56	
Delay for adq Gap	153.37	
Avg Ped Delay (s)	147.37	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	11.6	
Level of Service	C	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	250	270
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.53	0.56
Prob of Blocked Lane	0.32	0.34
Delay for adq Gap	10.32	10.84
Avg Ped Delay (s)	5.51	6.09

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.3	49.9	55.3	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	7	1
Ped. Right-Left Flow Rate (p/h)	6	1	4	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	183	0	5	40
Veh. Perm. R. Flow in Walk (v/h)	10	60	0	150
Veh. RTOR Flow in Walk (v/h)	0	8	0	80
85th percentile speed (mph)	30	30	25	35
Right Corner Area per Ped (sq.ft)	4239.7	36386.5	6053.8	10414.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	197.4	7562.7	857.4	4923.9
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	50.8	50.8	50.8	50.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.63	2.36	1.75	2.38
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	38.1	72.8	72.5
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	1	0	1
Ped. Right-Left Flow Rate (p/h)	3	4	0	5
Ped. R. Sidewalk Flow Rate (p/h)	0	4	0	0
Veh. Perm. L. Flow in Walk (v/h)	10	60	0	0
Veh. Perm. R. Flow in Walk (v/h)	20	30	150	10
Veh. RTOR Flow in Walk (v/h)	14	7	33	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	24254.4	4844.8	14570.9	8074.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3933.2	1905.4	0.0	2407.8
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	36.5	36.5	45.0	36.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.01	2.15	2.97	2.87
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.9	23.9	59.9	72.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	6	0	2
Ped. Right-Left Flow Rate (p/h)	1	4	0	3
Ped. R. Sidewalk Flow Rate (p/h)	2	1	0	0
Veh. Perm. L. Flow in Walk (v/h)	30	30	40	5
Veh. Perm. R. Flow in Walk (v/h)	210	10	60	490
Veh. RTOR Flow in Walk (v/h)	129	3	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18219.0	4547.2	7275.6	10400.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3775.2	1629.5	0.0	2559.2
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	19.2	19.2	19.2	19.2
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.37	1.82	2.92	2.95
Pedestrian Crosswalk LOS	B	A	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	23.9	35.9	59.9	61.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	3	0	1
Ped. Right-Left Flow Rate (p/h)	1	6	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	90	10	0	0
Veh. Perm. R. Flow in Walk (v/h)	20	650	20	90
Veh. RTOR Flow in Walk (v/h)	0	222	2	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	36439.5	7275.3	8093.0	14575.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	7248.5	0.1	0.0	23375.0
Crosswalk Circulation Code	A	F	-	A
Pedestrian Delay (s/p)	16.8	16.8	16.8	16.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.97	2.51	2.65	2.84
Pedestrian Crosswalk LOS	A	B	B	C

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	19.2	
Level of Service	C	

Crosswalk		
Length (ft)	16	16
Lanes Crossed	1	1
Veh Vol Crossed	910	370
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	7.57	7.57
Prob of Delayed X-ing	0.85	0.54
Prob of Blocked Lane	0.85	0.54
Delay for adq Gap	17.94	7.18
Avg Ped Delay (s)	15.29	3.89

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	58.3	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	1	2
Veh Vol Crossed	370	910
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.68	0.94
Prob of Blocked Lane	0.68	0.75
Delay for adq Gap	13.89	52.08
Avg Ped Delay (s)	9.41	48.85

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	27.4	
Level of Service	D	

Crosswalk		
Length (ft)	28	16
Lanes Crossed	2	1
Veh Vol Crossed	660	290
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	7.57
Prob of Delayed X-ing	0.87	0.46
Prob of Blocked Lane	0.64	0.46
Delay for adq Gap	28.29	6.26
Avg Ped Delay (s)	24.53	2.86

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	547.5
Level of Service	F

Crosswalk	
Length (ft)	56
Lanes Crossed	3
Veh Vol Crossed	950
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	19.00
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.81
Delay for adq Gap	551.15
Avg Ped Delay (s)	547.48

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	92
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	720
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.96
Prob of Blocked Lane	0.79
Delay for adq Gap	96.29
Avg Ped Delay (s)	92.01

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	92
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	720
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.96
Prob of Blocked Lane	0.79
Delay for adq Gap	96.29
Avg Ped Delay (s)	92.01

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	35.9	32.9	60.1	59.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	10.0	10.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	5	23	17	7
Ped. Right-Left Flow Rate (p/h)	2	1	1	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	10	20	20	60
Veh. Perm. R. Flow in Walk (v/h)	10	90	20	60
Veh. RTOR Flow in Walk (v/h)	4	40	2	5
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	2896.3	2076.9	1721.4	4037.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3220.2	753.3	1257.1	1867.2
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	20.8	20.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.00	1.92	2.61	2.70
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	36.1	61.3	60.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	7.0	7.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	4	61	12
Ped. Right-Left Flow Rate (p/h)	16	9	7	1
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	6
Veh. Perm. L. Flow in Walk (v/h)	60	5	4	30
Veh. Perm. R. Flow in Walk (v/h)	40	20	10	70
Veh. RTOR Flow in Walk (v/h)	8	4	0	3
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	822.3	2781.7	885.3	1968.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1209.6	1720.3	237.6	1073.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	23.4	23.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.28	1.98	2.56	2.63
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	48.0	61.2	60.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	18	15	5	11
Ped. Right-Left Flow Rate (p/h)	13	3	47	40
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	20	100	1	82
Veh. Perm. R. Flow in Walk (v/h)	20	140	80	50
Veh. RTOR Flow in Walk (v/h)	12	80	23	14
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	872.8	1051.1	1017.9	870.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	763.2	965.9	369.1	350.5
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	21.7	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.22	2.52	2.58	2.70
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.1	36.0	48.1	60.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Pretimed	Pretimed
Corresponding Signal Phase	2	6	0	4
Effective Walk Time (s)	13.0	13.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	18	11	7	35
Ped. Right-Left Flow Rate (p/h)	4	2	3	1
Ped. R. Sidewalk Flow Rate (p/h)	3	4	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	10	40	0
Veh. Perm. R. Flow in Walk (v/h)	0	40	0	320
Veh. RTOR Flow in Walk (v/h)	0	28	0	47
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	2072.7	1358.1	3153.7	1228.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1269.3	1968.7	0.0	488.0
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	18.4	18.4	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.22	2.09	2.41	2.48
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	60.1	35.9	38.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	8	4	6	2
Effective Walk Time (s)	8.0	8.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	5	4	2
Ped. Right-Left Flow Rate (p/h)	2	9	11	5
Ped. R. Sidewalk Flow Rate (p/h)	2	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	110	10
Veh. Perm. R. Flow in Walk (v/h)	90	10	130	10
Veh. RTOR Flow in Walk (v/h)	25	7	30	5
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	3160.0	3451.9	2493.6	5582.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1947.9	1064.7	387.1	2115.1
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	29.9	29.9	29.0	29.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.37	2.51	2.52	2.13
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.1	48.2	38.0	38.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	7	6	3
Ped. Right-Left Flow Rate (p/h)	0	2	7	1
Ped. R. Sidewalk Flow Rate (p/h)	1	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	40	10
Veh. Perm. R. Flow in Walk (v/h)	20	20	150	60
Veh. RTOR Flow in Walk (v/h)	3	0	28	9
85th percentile speed (mph)	30	30	25	25
Right Corner Area per Ped (sq.ft)	4540.6	5591.6	3287.1	10396.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	6338.5	1407.7	416.7	2515.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	33.4	33.4	33.4	33.4
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.39	2.43	2.31	2.18
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	37.4	36.1	35.9	48.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	4	8	0	2
Effective Walk Time (s)	11.0	11.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	30	21	15	33
Ped. Right-Left Flow Rate (p/h)	13	22	21	37
Ped. R. Sidewalk Flow Rate (p/h)	1	13	2	16
Veh. Perm. L. Flow in Walk (v/h)	0	30	20	0
Veh. Perm. R. Flow in Walk (v/h)	0	30	0	120
Veh. RTOR Flow in Walk (v/h)	0	3	0	41
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	900.2	567.7	883.8	552.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	545.6	486.5	0.0	301.3
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	20.0	20.0	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.20	2.21	2.08	2.12
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.0	36.0	24.0	36.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	23	15	23	60
Ped. Right-Left Flow Rate (p/h)	32	39	30	36
Ped. R. Sidewalk Flow Rate (p/h)	15	9	8	15
Veh. Perm. L. Flow in Walk (v/h)	0	40	30	0
Veh. Perm. R. Flow in Walk (v/h)	0	20	0	30
Veh. RTOR Flow in Walk (v/h)	0	1	0	6
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	578.6	441.6	620.6	429.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	350.0	307.8	0.0	184.4
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	21.7	21.7	30.0	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.17	2.22	1.84	1.98
Pedestrian Crosswalk LOS	B	B	A	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.0	23.9	24.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	4
Effective Walk Time (s)	12.0	12.0	0.0	17.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	13	8	11	33
Ped. Right-Left Flow Rate (p/h)	18	7	13	15
Ped. R. Sidewalk Flow Rate (p/h)	3	2	0	15
Veh. Perm. L. Flow in Walk (v/h)	0	100	60	0
Veh. Perm. R. Flow in Walk (v/h)	0	30	0	40
Veh. RTOR Flow in Walk (v/h)	0	4	0	9
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	1242.3	1109.2	1851.8	769.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	819.2	1356.2	0.0	617.9
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	19.2	19.2	30.0	15.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.16	2.33	1.96	1.82
Pedestrian Crosswalk LOS	B	B	A	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	35.9	38.5	34.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	0
Effective Walk Time (s)	11.0	11.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	1	6	0
Ped. Right-Left Flow Rate (p/h)	14	6	5	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	300	0	0	140
Veh. Perm. R. Flow in Walk (v/h)	30	0	20	0
Veh. RTOR Flow in Walk (v/h)	6	0	9	0
85th percentile speed (mph)	25	30	25	25
Right Corner Area per Ped (sq.ft)	2496.5	10392.8	4041.7	3640.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	572.9	3392.2	2027.5	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	20.0	20.0	20.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.57	2.11	1.99	2.57
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.1	26.0	38.0	38.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	11	7	2
Ped. Right-Left Flow Rate (p/h)	4	5	1	4
Ped. R. Sidewalk Flow Rate (p/h)	2	1	1	0
Veh. Perm. L. Flow in Walk (v/h)	10	140	5	10
Veh. Perm. R. Flow in Walk (v/h)	20	5	170	5
Veh. RTOR Flow in Walk (v/h)	10	3	26	0
85th percentile speed (mph)	25	25	25	30
Right Corner Area per Ped (sq.ft)	4545.9	3165.0	2908.8	6067.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	4098.3	1177.8	2806.0	4750.3
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	12.0	12.0	12.0	12.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.75	2.09	2.28	2.18
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.2	24.1	37.6	25.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	2	3	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	0	2	0
Effective Walk Time (s)	11.0	0.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	6	0	0
Ped. Right-Left Flow Rate (p/h)	2	0	0	3
Ped. R. Sidewalk Flow Rate (p/h)	0	0	2	6
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	270	0	280	200
Veh. RTOR Flow in Walk (v/h)	28	0	26	0
85th percentile speed (mph)	30	30	30	45
Right Corner Area per Ped (sq.ft)	18197.8	8100.0	9061.9	5583.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1538.5	0.1	0.0	0.1
Crosswalk Circulation Code	A	F	-	F
Pedestrian Delay (s/p)	43.6	54.0	43.6	54.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.52	2.24	2.36	2.12
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	30.8	36.2	39.5	37.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	1	0	12
Ped. Right-Left Flow Rate (p/h)	1	6	1	7
Ped. R. Sidewalk Flow Rate (p/h)	0	1	4	0
Veh. Perm. L. Flow in Walk (v/h)	30	30	5	5
Veh. Perm. R. Flow in Walk (v/h)	5	5	20	10
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18217.7	2679.1	6069.9	3300.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	6163.4	2794.0	14661.2	779.0
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	23.4	23.4	26.0	26.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.79	2.00	2.41	2.41
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	62.5	37.1	87.2	73.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	7	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	3	5	3
Ped. Right-Left Flow Rate (p/h)	3	3	3	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	420	10	400	40
Veh. RTOR Flow in Walk (v/h)	186	0	157	7
85th percentile speed (mph)	40	30	35	30
Right Corner Area per Ped (sq.ft)	6025.6	5573.5	4830.4	6593.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	1350.3	286.1	1263.8
Crosswalk Circulation Code	F	A	A	A
Pedestrian Delay (s/p)	59.3	59.3	59.3	59.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.89	2.37	3.28	2.57
Pedestrian Crosswalk LOS	C	B	C	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	86.6	84.8	48.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	7	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	9.0	0.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	3	1
Ped. Right-Left Flow Rate (p/h)	2	0	8	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	60	20	500	10
Veh. RTOR Flow in Walk (v/h)	12	2	49	6
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	5589.5	72852.6	6592.8	18225.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	6702.3	0.0	0.0	12894.4
Crosswalk Circulation Code	A	-	F	A
Pedestrian Delay (s/p)	37.9	46.5	37.9	37.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.00	3.04	2.53	2.17
Pedestrian Crosswalk LOS	C	C	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	91.2	92.8	38.7	35.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	6	4	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	Actuated	Actuated	None
Corresponding Signal Phase	0	8	2	6
Effective Walk Time (s)	0.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	7	9	0
Ped. Right-Left Flow Rate (p/h)	0	0	1	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	130	170	0
Veh. RTOR Flow in Walk (v/h)	0	27	38	0
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	7247.3	10414.3	4028.9	0.0
Right Corner Quality of Service	A	A	A	-
Ped. Circulation Area (sq.ft)	0.0	1759.3	620.8	0.0
Crosswalk Circulation Code	-	A	A	-
Pedestrian Delay (s/p)	46.5	37.9	37.9	46.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.00	2.89	1.91	2.05
Pedestrian Crosswalk LOS	C	C	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	14.8	24.0	60.2	73.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	No signal	Actuated	Actuated
Corresponding Signal Phase	2	6	0	8
Effective Walk Time (s)	0.0	50.1	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	230	0	390
Veh. RTOR Flow in Walk (v/h)	0	101	0	0
85th percentile speed (mph)	30	30	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	48.5	11.3	48.5	39.9
Pedestrian Compliance Code	Poor	Fair	Poor	Poor
Pedestrian Crosswalk Score	1.90	2.20	2.80	2.84
Pedestrian Crosswalk LOS	A	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	56.7	63.0	81.6	80.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	5	5	6
Number of Right-Turn Islands	0	1	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	4	0	5
Ped. Right-Left Flow Rate (p/h)	2	2	0	7
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	10	340	260	10
Veh. RTOR Flow in Walk (v/h)	10	182	57	0
85th percentile speed (mph)	30	40	45	35
Right Corner Area per Ped (sq.ft)	18193.0	4025.1	12107.3	4520.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2318.5	187.2	0.0	824.3
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	51.3	51.3	51.3	51.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.00	2.95	3.19	3.00
Pedestrian Crosswalk LOS	A	C	C	C

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	4411540	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	2390	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	1.00	
Prob of Blocked Lane	0.98	
Delay for adq Gap	4411540.00	
Avg Ped Delay (s)	4411540.00	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	241.1	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	1430	960
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.99	0.95
Prob of Blocked Lane	0.89	0.77
Delay for adq Gap	187.74	58.84
Avg Ped Delay (s)	185.36	55.71

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	2330350
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2280
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	2330350.00
Avg Ped Delay (s)	2330350.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	2330350
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2280
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	2330350.00
Avg Ped Delay (s)	2330350.00

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	25023500
Level of Service	F

Crosswalk	
Length (ft)	80
Lanes Crossed	4
Veh Vol Crossed	2310
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	25.86
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	25023500.00
Avg Ped Delay (s)	25023500.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	2772790
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2310
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	2772790.00
Avg Ped Delay (s)	2772790.00

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.1	69.4	82.0	73.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	0.0	8.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	3	0	27	1
Ped. Right-Left Flow Rate (p/h)	6	0	6	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	90	130	110	40
Veh. RTOR Flow in Walk (v/h)	25	17	0	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	1665.3	72800.0	2128.2	7264.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	761.6	0.0	157.5	0.1
Crosswalk Circulation Code	A	-	A	F
Pedestrian Delay (s/p)	69.4	80.0	72.2	80.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.36	2.51	3.05	3.02
Pedestrian Crosswalk LOS	B	B	C	C

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	17
Level of Service	C

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	460
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.79
Prob of Blocked Lane	0.54
Delay for adq Gap	21.52
Avg Ped Delay (s)	16.96

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	18
Level of Service	C

Crosswalk	
Length (ft)	33
Lanes Crossed	2
Veh Vol Crossed	460
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.43
Prob of Delayed X-ing	0.80
Prob of Blocked Lane	0.55
Delay for adq Gap	22.68
Avg Ped Delay (s)	18.05

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	61.5	63.1	87.8	85.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	7	7
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	11	16	14
Ped. Right-Left Flow Rate (p/h)	4	27	11	24
Ped. R. Sidewalk Flow Rate (p/h)	0	0	2	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	190	240	80	150
Veh. RTOR Flow in Walk (v/h)	85	52	2	67
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	2259.3	942.9	1078.2	1677.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2977.0	362.2	715.5	469.5
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	24.1	24.1	24.1	24.1
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.73	2.67	3.02	3.14
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.8	36.3	60.2	71.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	75	11	48	0
Ped. Right-Left Flow Rate (p/h)	22	13	80	0
Ped. R. Sidewalk Flow Rate (p/h)	1	0	7	12
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	400	20	30	120
Veh. RTOR Flow in Walk (v/h)	15	2	4	8
85th percentile speed (mph)	30	25	35	25
Right Corner Area per Ped (sq.ft)	304.6	3006.1	425.3	628.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	12.6	400.4	83.0	0.0
Crosswalk Circulation Code	E	A	A	-
Pedestrian Delay (s/p)	46.4	46.4	46.4	55.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.64	2.09	2.71	2.47
Pedestrian Crosswalk LOS	B	B	B	B

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	3.4
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	140
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.38
Prob of Blocked Lane	0.21
Delay for adq Gap	8.97
Avg Ped Delay (s)	3.38

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	3.4
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	140
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.38
Prob of Blocked Lane	0.21
Delay for adq Gap	8.97
Avg Ped Delay (s)	3.38

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	2229.5
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1040
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.80
Delay for adq Gap	2232.95
Avg Ped Delay (s)	2229.52

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	2229.5
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1040
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.80
Delay for adq Gap	2232.95
Avg Ped Delay (s)	2229.52

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	598.5
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	790
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.71
Delay for adq Gap	602.87
Avg Ped Delay (s)	598.47

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	598.5
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	790
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.71
Delay for adq Gap	602.87
Avg Ped Delay (s)	598.47

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	24.0	58.1	61.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	4	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	3	3	4	0
Ped. Right-Left Flow Rate (p/h)	1	9	8	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	10
Veh. Perm. R. Flow in Walk (v/h)	50	10	10	0
Veh. RTOR Flow in Walk (v/h)	0	3	0	0
85th percentile speed (mph)	30	25	35	35
Right Corner Area per Ped (sq.ft)	4547.8	6054.7	3025.1	18204.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2165.0	1361.7	1745.4	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	21.7	21.7	21.7	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.75	1.73	2.31	2.52
Pedestrian Crosswalk LOS	A	A	B	B

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	13.4	
Level of Service	C	

Crosswalk		
Length (ft)	29	29
Lanes Crossed	2	2
Veh Vol Crossed	230	320
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	11.29
Prob of Delayed X-ing	0.51	0.63
Prob of Blocked Lane	0.30	0.39
Delay for adq Gap	10.22	12.86
Avg Ped Delay (s)	5.25	8.14

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	181.1
Level of Service	F

Crosswalk	
Length (ft)	69
Lanes Crossed	4
Veh Vol Crossed	550
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.71
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.58
Delay for adq Gap	186.96
Avg Ped Delay (s)	181.14

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	139.8	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	510	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	0.96	
Prob of Blocked Lane	0.55	
Delay for adq Gap	145.89	
Avg Ped Delay (s)	139.81	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	12.1	
Level of Service	C	

Crosswalk		
Length (ft)	29	28
Lanes Crossed	2	2
Veh Vol Crossed	320	190
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	11.00
Prob of Delayed X-ing	0.63	0.44
Prob of Blocked Lane	0.39	0.25
Delay for adq Gap	12.86	8.88
Avg Ped Delay (s)	8.14	3.91

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.3	49.8	54.0	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	26	9	5
Ped. Right-Left Flow Rate (p/h)	1	1	3	3
Ped. R. Sidewalk Flow Rate (p/h)	1	1	2	2
Veh. Perm. L. Flow in Walk (v/h)	111	5	5	110
Veh. Perm. R. Flow in Walk (v/h)	5	20	0	210
Veh. RTOR Flow in Walk (v/h)	0	6	0	113
85th percentile speed (mph)	30	30	25	35
Right Corner Area per Ped (sq.ft)	4014.7	2014.4	1733.2	4830.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	838.2	316.3	781.6	198.9
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	50.8	50.8	50.8	50.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.55	2.41	1.75	2.54
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	38.1	72.9	72.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	3	0	0	8
Ped. Right-Left Flow Rate (p/h)	1	2	0	3
Ped. R. Sidewalk Flow Rate (p/h)	0	4	4	0
Veh. Perm. L. Flow in Walk (v/h)	10	140	0	0
Veh. Perm. R. Flow in Walk (v/h)	30	40	80	20
Veh. RTOR Flow in Walk (v/h)	25	3	21	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18213.6	4261.4	12150.0	4841.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2856.5	3069.9	0.0	1292.5
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	36.5	36.5	45.0	36.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.04	2.27	2.99	2.91
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.7	23.9	60.0	72.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	6	7	1	11
Ped. Right-Left Flow Rate (p/h)	3	8	3	6
Ped. R. Sidewalk Flow Rate (p/h)	4	5	0	0
Veh. Perm. L. Flow in Walk (v/h)	30	30	90	10
Veh. Perm. R. Flow in Walk (v/h)	80	5	190	710
Veh. RTOR Flow in Walk (v/h)	50	4	0	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	4282.6	1957.9	3824.2	2792.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1527.4	1102.9	3978.4	452.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	19.2	19.2	19.2	19.2
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.32	1.90	3.01	3.01
Pedestrian Crosswalk LOS	B	A	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	23.9	35.9	59.9	61.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	5	1	0
Ped. Right-Left Flow Rate (p/h)	1	14	0	3
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	9
Veh. Perm. L. Flow in Walk (v/h)	110	10	0	0
Veh. Perm. R. Flow in Walk (v/h)	10	550	50	150
Veh. RTOR Flow in Walk (v/h)	0	4	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	36429.0	3300.3	3639.7	5602.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	13973.9	44.7	24303.7	7270.1
Crosswalk Circulation Code	A	B	A	A
Pedestrian Delay (s/p)	16.8	16.8	16.8	16.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.00	2.18	2.70	2.87
Pedestrian Crosswalk LOS	A	B	B	C

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	19.9	
Level of Service	C	

Crosswalk		
Length (ft)	17	17
Lanes Crossed	1	1
Veh Vol Crossed	550	770
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	7.86	7.86
Prob of Delayed X-ing	0.70	0.81
Prob of Blocked Lane	0.70	0.81
Delay for adq Gap	10.50	15.44
Avg Ped Delay (s)	7.34	12.57

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	43.6	
Level of Service	E	

Crosswalk		
Length (ft)	29	17
Lanes Crossed	1	2
Veh Vol Crossed	770	550
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	7.86
Prob of Delayed X-ing	0.91	0.70
Prob of Blocked Lane	0.91	0.45
Delay for adq Gap	39.86	10.50
Avg Ped Delay (s)	36.30	7.34

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	28.3	
Level of Service	D	

Crosswalk		
Length (ft)	29	17
Lanes Crossed	2	1
Veh Vol Crossed	570	590
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	7.86
Prob of Delayed X-ing	0.83	0.72
Prob of Blocked Lane	0.59	0.72
Delay for adq Gap	24.16	11.26
Avg Ped Delay (s)	20.11	8.16

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	1392.7
Level of Service	F

Crosswalk	
Length (ft)	56
Lanes Crossed	3
Veh Vol Crossed	1160
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	19.00
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.87
Delay for adq Gap	1395.75
Avg Ped Delay (s)	1392.69

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	147.5
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	850
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.84
Delay for adq Gap	151.37
Avg Ped Delay (s)	147.53

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	147.5
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	850
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.84
Delay for adq Gap	151.37
Avg Ped Delay (s)	147.53

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	32.5	60.1	59.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	10.0	10.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	6	15	3	11
Ped. Right-Left Flow Rate (p/h)	1	18	16	12
Ped. R. Sidewalk Flow Rate (p/h)	4	14	3	1
Veh. Perm. L. Flow in Walk (v/h)	50	20	10	30
Veh. Perm. R. Flow in Walk (v/h)	20	120	30	20
Veh. RTOR Flow in Walk (v/h)	10	36	5	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	2426.6	1030.9	1311.1	2336.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2941.3	506.7	1191.3	972.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	20.8	20.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.09	1.95	2.63	2.68
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	36.0	61.3	60.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	7.0	7.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	11	13	6	8
Ped. Right-Left Flow Rate (p/h)	17	15	43	8
Ped. R. Sidewalk Flow Rate (p/h)	0	0	2	0
Veh. Perm. L. Flow in Walk (v/h)	80	10	16	0
Veh. Perm. R. Flow in Walk (v/h)	60	30	30	50
Veh. RTOR Flow in Walk (v/h)	13	14	0	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	939.0	1643.0	902.7	1645.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	732.5	775.7	313.9	955.1
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	23.4	23.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.31	2.00	2.62	2.60
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	48.0	61.2	60.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	18	19	46	37
Ped. Right-Left Flow Rate (p/h)	29	14	42	29
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	30	130	5	145
Veh. Perm. R. Flow in Walk (v/h)	30	140	140	50
Veh. RTOR Flow in Walk (v/h)	19	81	32	3
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	525.4	722.7	589.1	634.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	489.1	497.8	199.3	245.9
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	21.7	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.25	2.58	2.62	2.79
Pedestrian Crosswalk LOS	B	B	B	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	36.0	48.0	60.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Pretimed	Pretimed
Corresponding Signal Phase	2	6	0	4
Effective Walk Time (s)	13.0	13.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	11	14	20	17
Ped. Right-Left Flow Rate (p/h)	21	9	30	43
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	3
Veh. Perm. L. Flow in Walk (v/h)	0	30	50	0
Veh. Perm. R. Flow in Walk (v/h)	0	60	0	350
Veh. RTOR Flow in Walk (v/h)	0	44	0	101
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	874.0	870.7	965.6	753.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	872.8	1043.9	0.0	279.6
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	18.4	18.4	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.20	2.15	2.49	2.61
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.0	60.1	35.9	38.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	8	4	6	2
Effective Walk Time (s)	8.0	8.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	3	5	5
Ped. Right-Left Flow Rate (p/h)	3	3	12	13
Ped. R. Sidewalk Flow Rate (p/h)	3	0	1	2
Veh. Perm. L. Flow in Walk (v/h)	0	0	120	20
Veh. Perm. R. Flow in Walk (v/h)	90	10	130	20
Veh. RTOR Flow in Walk (v/h)	8	5	26	5
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	2689.1	3025.3	3014.7	2677.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1671.1	2487.0	318.3	779.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	29.9	29.9	29.0	29.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.35	2.49	2.40	2.09
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.1	48.1	38.1	38.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	6	6	21	9
Ped. Right-Left Flow Rate (p/h)	4	12	3	5
Ped. R. Sidewalk Flow Rate (p/h)	6	0	2	4
Veh. Perm. L. Flow in Walk (v/h)	0	0	30	20
Veh. Perm. R. Flow in Walk (v/h)	30	30	200	100
Veh. RTOR Flow in Walk (v/h)	9	0	31	18
85th percentile speed (mph)	30	30	25	25
Right Corner Area per Ped (sq.ft)	1796.4	2250.7	1648.3	2587.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1235.0	685.1	163.2	583.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	33.4	33.4	33.4	33.4
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.39	2.45	2.35	2.25
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	37.4	36.1	36.0	48.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	4	8	0	2
Effective Walk Time (s)	11.0	11.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	108	87	161	182
Ped. Right-Left Flow Rate (p/h)	72	88	187	175
Ped. R. Sidewalk Flow Rate (p/h)	1	30	18	0
Veh. Perm. L. Flow in Walk (v/h)	0	80	60	0
Veh. Perm. R. Flow in Walk (v/h)	0	70	0	180
Veh. RTOR Flow in Walk (v/h)	0	5	0	13
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	123.0	117.7	117.8	122.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	128.2	97.8	0.0	52.3
Crosswalk Circulation Code	A	A	F	B
Pedestrian Delay (s/p)	20.0	20.0	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.31	2.37	2.18	2.13
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.0	36.0	24.0	36.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	126	69	85	267
Ped. Right-Left Flow Rate (p/h)	121	121	156	170
Ped. R. Sidewalk Flow Rate (p/h)	3	18	16	9
Veh. Perm. L. Flow in Walk (v/h)	0	50	60	0
Veh. Perm. R. Flow in Walk (v/h)	0	40	0	70
Veh. RTOR Flow in Walk (v/h)	0	4	0	10
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	135.3	96.7	145.8	93.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	76.1	79.9	0.0	35.3
Crosswalk Circulation Code	A	A	F	C
Pedestrian Delay (s/p)	21.7	21.7	30.0	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.27	2.31	1.92	2.02
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.0	23.9	24.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	4
Effective Walk Time (s)	12.0	12.0	0.0	17.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	53	39	80	34
Ped. Right-Left Flow Rate (p/h)	43	34	96	59
Ped. R. Sidewalk Flow Rate (p/h)	5	4	0	3
Veh. Perm. L. Flow in Walk (v/h)	0	70	90	0
Veh. Perm. R. Flow in Walk (v/h)	0	40	0	60
Veh. RTOR Flow in Walk (v/h)	0	4	0	11
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	248.6	420.2	274.6	367.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	262.4	287.4	0.0	305.2
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	19.2	19.2	30.0	15.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.24	2.32	2.07	1.91
Pedestrian Crosswalk LOS	B	B	B	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	38.5	34.2	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	0
Effective Walk Time (s)	11.0	11.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	22	14	17	0
Ped. Right-Left Flow Rate (p/h)	2	8	16	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	520	0	0	110
Veh. Perm. R. Flow in Walk (v/h)	30	0	40	0
Veh. RTOR Flow in Walk (v/h)	6	0	15	0
85th percentile speed (mph)	25	30	25	25
Right Corner Area per Ped (sq.ft)	1270.6	3304.5	1311.8	2782.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	71.8	1077.7	646.3	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	20.0	20.0	20.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.91	2.07	2.05	2.57
Pedestrian Crosswalk LOS	C	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.1	26.0	38.0	37.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	9	9	2	2
Ped. Right-Left Flow Rate (p/h)	3	7	1	11
Ped. R. Sidewalk Flow Rate (p/h)	1	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	10	120	10	40
Veh. Perm. R. Flow in Walk (v/h)	10	10	190	10
Veh. RTOR Flow in Walk (v/h)	8	5	27	0
85th percentile speed (mph)	25	25	25	30
Right Corner Area per Ped (sq.ft)	4547.4	2505.1	3822.0	2782.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1202.9	561.4	3223.8	1176.3
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	22.5	22.5	22.5	22.5
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.79	2.09	2.31	2.28
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.2	24.2	37.6	25.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	2	3	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	0	2	0
Effective Walk Time (s)	11.0	0.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	6	1	1	2
Ped. Right-Left Flow Rate (p/h)	3	0	4	3
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	5
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	160	0	480	450
Veh. RTOR Flow in Walk (v/h)	7	0	10	0
85th percentile speed (mph)	30	30	30	45
Right Corner Area per Ped (sq.ft)	5194.8	12131.5	12110.8	3814.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1378.5	0.4	0.1	0.1
Crosswalk Circulation Code	A	F	F	F
Pedestrian Delay (s/p)	34.2	44.5	36.0	44.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.50	2.25	2.42	2.37
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	30.8	36.2	39.5	37.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	3	5	1	5
Ped. Right-Left Flow Rate (p/h)	2	4	0	6
Ped. R. Sidewalk Flow Rate (p/h)	0	2	0	1
Veh. Perm. L. Flow in Walk (v/h)	20	60	10	5
Veh. Perm. R. Flow in Walk (v/h)	10	10	20	10
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	12134.8	3300.9	7275.4	4271.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3740.9	2021.4	14477.7	1347.3
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	23.4	23.4	26.0	26.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.76	2.05	2.45	2.42
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	62.5	37.1	87.1	73.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	7	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	4.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	6	9	0
Ped. Right-Left Flow Rate (p/h)	5	1	4	3
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	320	20	510	50
Veh. RTOR Flow in Walk (v/h)	122	3	166	10
85th percentile speed (mph)	40	30	35	30
Right Corner Area per Ped (sq.ft)	4019.4	7286.1	3625.3	7276.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1593.3	1951.2	549.1	2081.6
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	31.5	31.5	31.5	36.1
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.83	2.46	3.38	2.63
Pedestrian Crosswalk LOS	C	B	C	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	86.6	84.9	48.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	7	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	9.0	0.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	0	1	0
Ped. Right-Left Flow Rate (p/h)	1	0	3	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	3
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	120	10	200	10
Veh. RTOR Flow in Walk (v/h)	13	0	31	6
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	12134.2	0.0	18189.4	14570.5
Right Corner Quality of Service	A	-	A	A
Ped. Circulation Area (sq.ft)	6124.3	0.0	1748.1	0.0
Crosswalk Circulation Code	A	-	A	-
Pedestrian Delay (s/p)	37.9	46.5	37.9	37.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.17	3.08	2.50	2.17
Pedestrian Crosswalk LOS	C	C	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	91.2	92.6	38.8	35.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	6	4	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	Actuated	Actuated	None
Corresponding Signal Phase	0	8	2	6
Effective Walk Time (s)	0.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	2	0
Ped. Right-Left Flow Rate (p/h)	0	1	1	1
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	170	120	0
Veh. RTOR Flow in Walk (v/h)	0	53	61	0
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	24268.4	36426.3	18213.1	72841.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	11592.7	2701.2	0.3
Crosswalk Circulation Code	-	A	A	F
Pedestrian Delay (s/p)	46.5	37.9	37.9	46.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.01	2.90	1.97	2.09
Pedestrian Crosswalk LOS	C	C	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	14.8	24.0	60.2	73.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	Actuated	Actuated
Corresponding Signal Phase	2	6	0	8
Effective Walk Time (s)	0.0	0.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	2	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	300	0	650
Veh. RTOR Flow in Walk (v/h)	0	87	0	0
85th percentile speed (mph)	30	30	35	35
Right Corner Area per Ped (sq.ft)	72900.0	36389.4	36450.0	72839.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.5	0.2	0.0	0.0
Crosswalk Circulation Code	F	F	-	-
Pedestrian Delay (s/p)	48.5	48.5	48.5	39.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.18	2.12	2.92	3.09
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	56.1	62.9	81.6	80.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	5	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	8.0	8.0	9.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	9	0	13
Ped. Right-Left Flow Rate (p/h)	2	4	1	15
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	30	400	260	10
Veh. RTOR Flow in Walk (v/h)	23	176	67	0
85th percentile speed (mph)	30	40	45	35
Right Corner Area per Ped (sq.ft)	14554.9	1752.0	5162.3	2176.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2215.1	0.0	6299.1	358.7
Crosswalk Circulation Code	A	F	A	A
Pedestrian Delay (s/p)	50.3	50.3	49.3	50.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.05	3.00	3.37	3.11
Pedestrian Crosswalk LOS	B	C	C	C

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	25407100	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	2690	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	1.00	
Prob of Blocked Lane	0.98	
Delay for adq Gap	25407100.00	
Avg Ped Delay (s)	25407100.00	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	302.9	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	1280	1410
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.98	0.99
Prob of Blocked Lane	0.86	0.88
Delay for adq Gap	129.27	178.59
Avg Ped Delay (s)	126.68	176.19

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	38300100
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2760
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	38300100.00
Avg Ped Delay (s)	38300100.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	38300100
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2760
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	38300100.00
Avg Ped Delay (s)	38300100.00

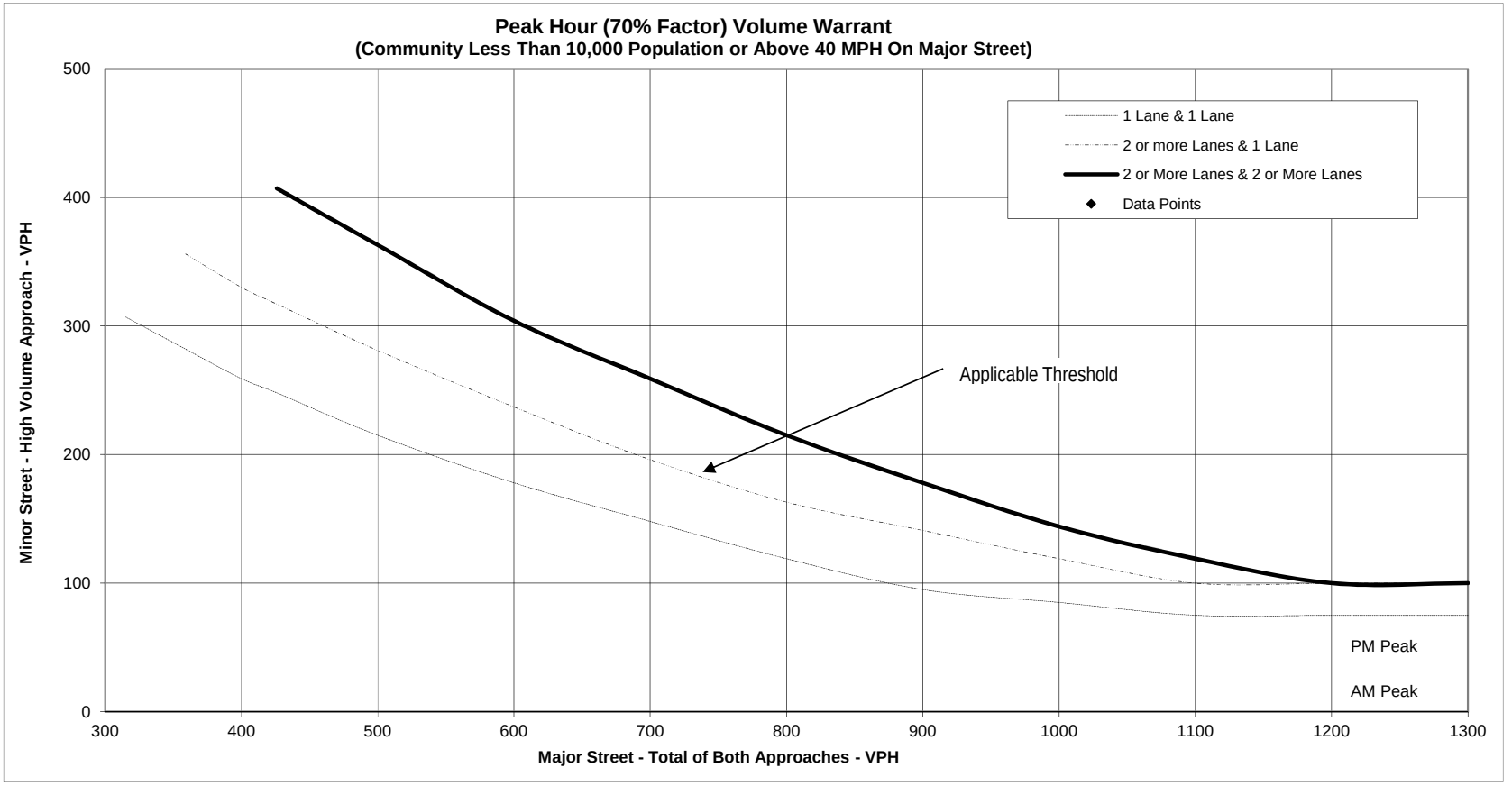
Appendix E.4

Intersection Peak Hour Signal Warrant Worksheets for 2021 Near-Term Plus Project Conditions

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2021 Plus Project
Intersection: Hwy 1/Stenner Creek Rd
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Hwy 1
Major Street (Orientation): North-South
Minor Street (Name): Stenner Creek Rd.
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	15	15	1390	1160	2,550	No
PM Peak	0	60	60	1315	1010	2,325	No

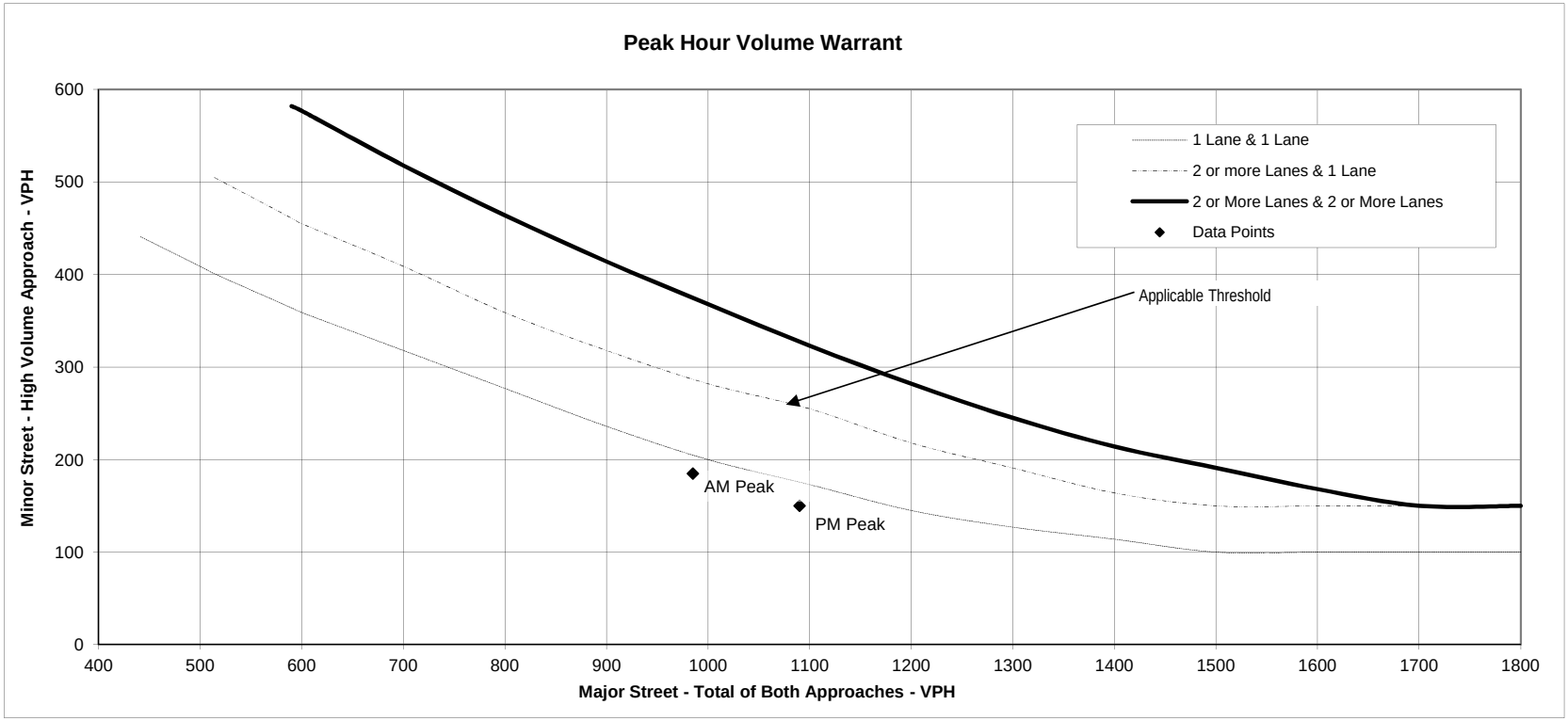


Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

PEAK HOUR VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2021 Plus Project
Intersection: Grand Ave/Slack St
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Grand Ave
Major Street (Orientation): North-South
Minor Street (Name): Slack St
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	185	20	185	605	380	985	No
PM Peak	150	25	150	470	620	1,090	No

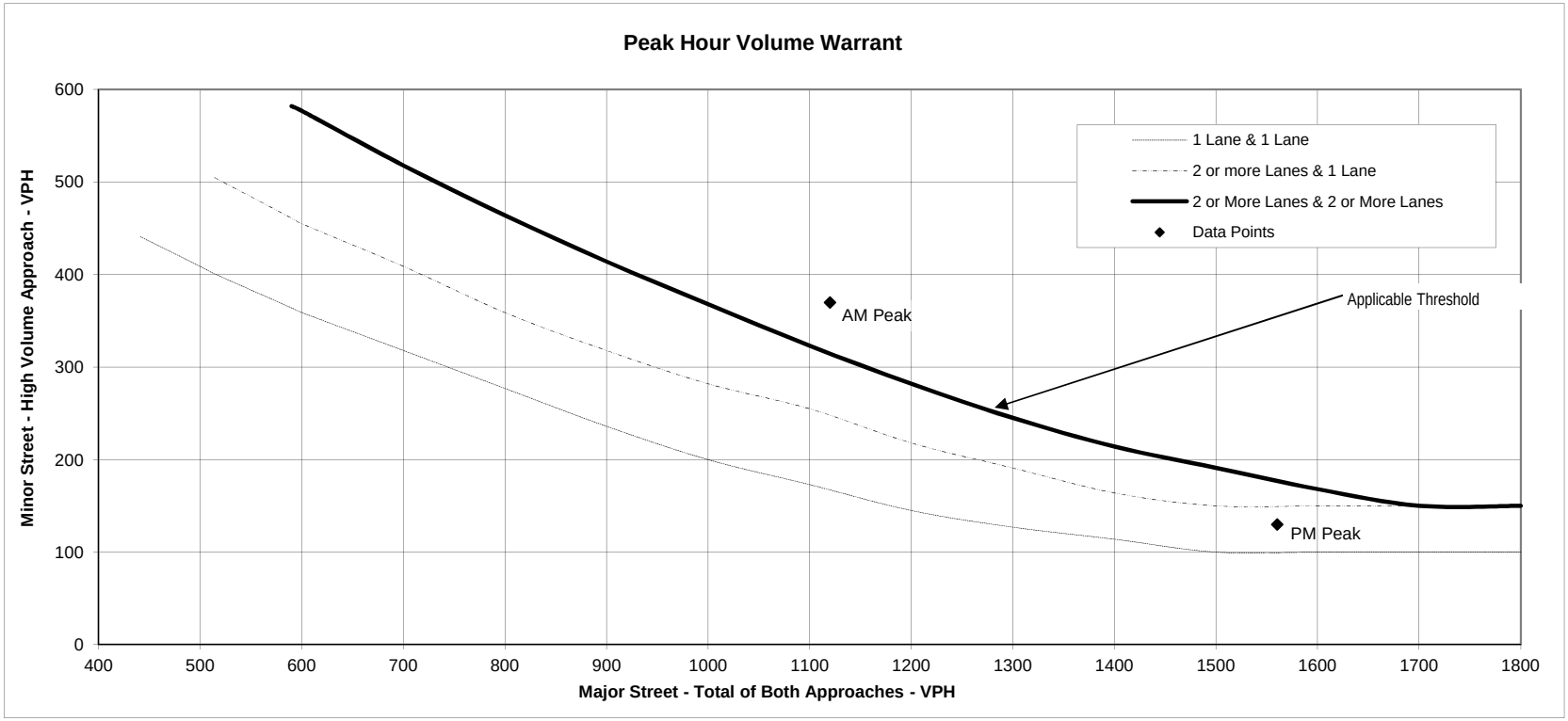


Note: 150 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 100 VPH as the threshold for a minor street approach with one lane

PEAK HOUR VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2021 Plus Project
Intersection: California Blvd/Taft St
Approach Type: 2 or More Lanes & 2 or More Lanes
Major Street (Name): California Blvd
Major Street (Orientation): North-South
Minor Street (Name): Taft St
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	370	370	770	350	1,120	Yes
PM Peak	0	130	130	790	770	1,560	No

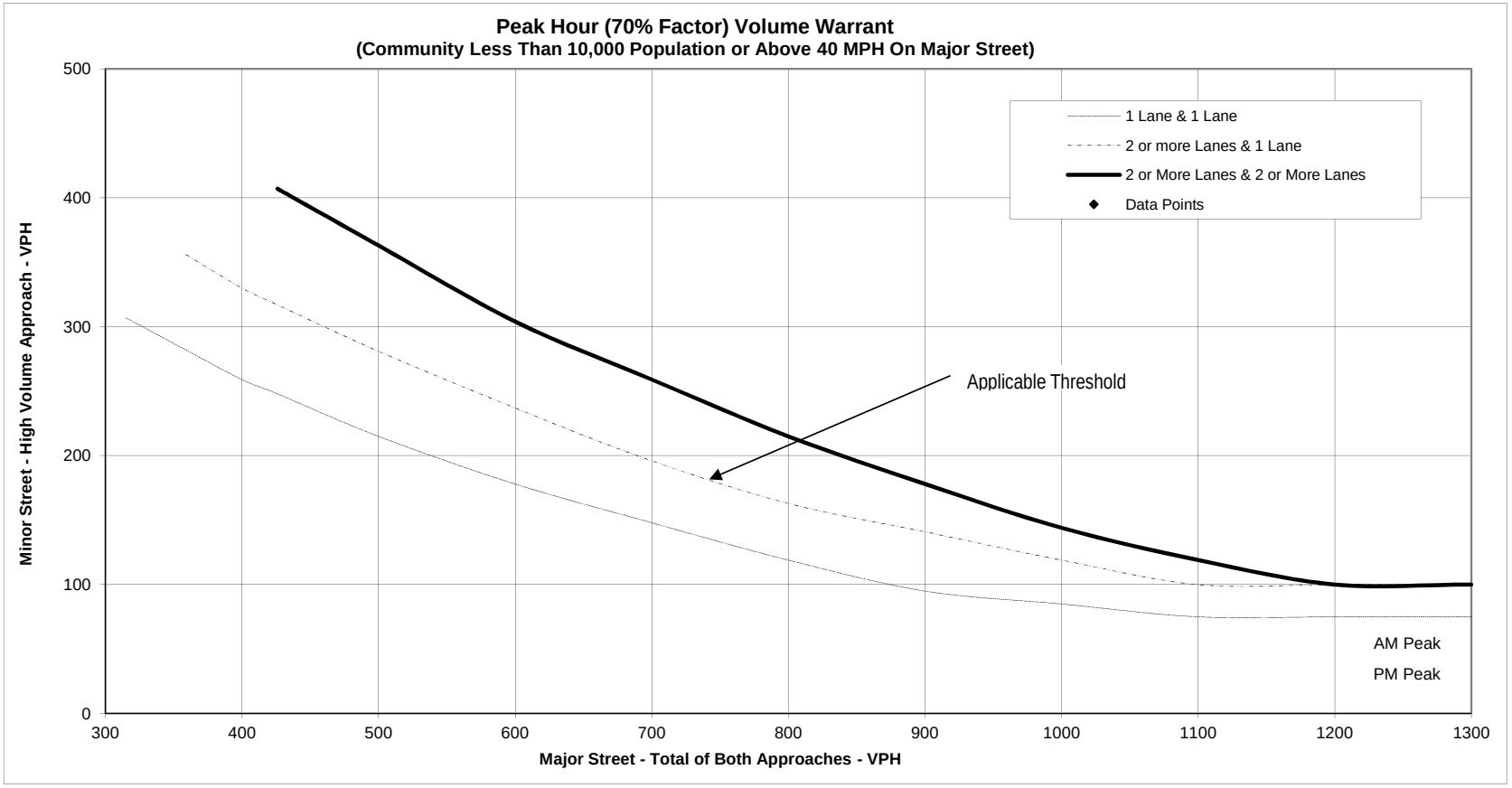


Note: 150 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 100 VPH as the threshold for a minor street approach with one lane

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2021 Plus Project
Intersection: Broad St/Rockview Pl
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Broad St
Major Street (Orientation): North-South
Minor Street (Name): Rockview Pl
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	50	0	50	990	1440	2,430	No
PM Peak	30	0	30	1460	1290	2,750	No

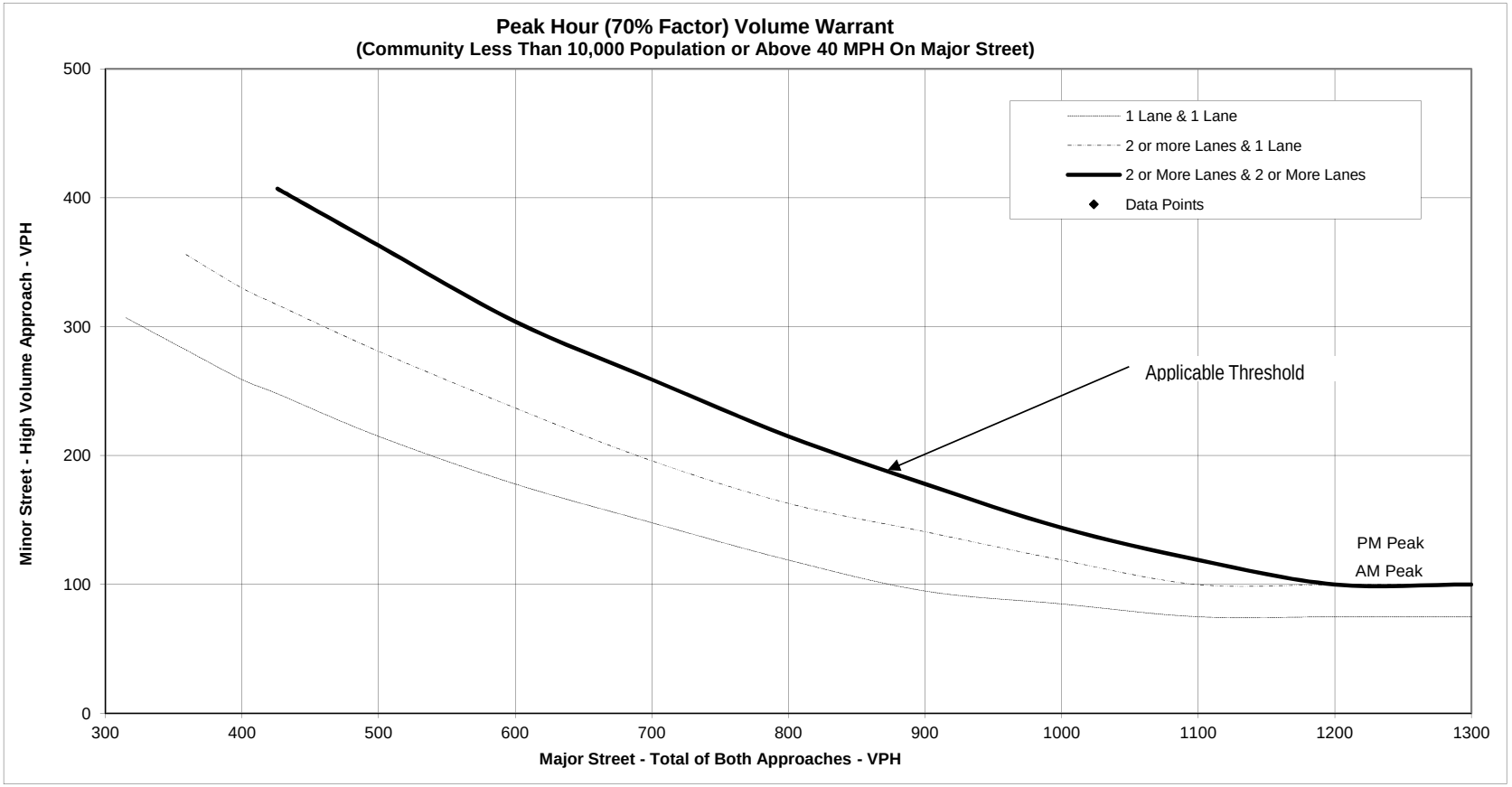


Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2021 Plus Project
Intersection: Broad St/Capitolio Wy
Approach Type: 2 or More Lanes & 2 or More Lanes
Major Street (Name): Broad St
Major Street (Orientation): North-South
Minor Street (Name): Capitolio Wy
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	110	110	980	1480	2,460	Yes
PM Peak	0	130	130	1510	1380	2,890	Yes



Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

Appendix E.5

Freeway LOS Worksheets for 2021 Near-Term Plus Project Conditions

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 1_2016_AM_Peak_US-101_NB_Marsh_St_to_Broad_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Direction:	US-101 NB
From/To:	Marsh St to Broad St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	2950	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	776	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1623	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1623	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	64.3	mi/h
Number of lanes, N	2	
Density, D	25.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 1_2016_PM_Peak_US-101_NB_Marsh_St_to_Broad_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Direction:	US-101 NB
From/To:	Marsh St to Broad St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	3840	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1011	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2112	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	2112	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	57.8	mi/h
Number of lanes, N	2	
Density, D	36.5	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 10_2016_AM_Peak_US-101_SB_Broad_St_to_Marsh_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Direction:	US-101 SB
From/To:	Broad St to Marsh St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	3000	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	789	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1650	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1650	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	64.1	mi/h
Number of lanes, N	2	
Density, D	25.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 10_2016_PM_Peak_US-101_SB_Broad_St_to_Marsh_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Direction:	US-101 SB
From/To:	Broad St to Marsh St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	3460	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	911	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1903	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1903	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	61.4	mi/h
Number of lanes, N	2	
Density, D	31.0	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.3

File Name: 2_2016_AM_Peak_US-101_NB_Broad_St_to_Osos_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Broad St to Osos St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	640	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1960	180	670	20	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	516	47	176	5	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2156	191	712	21	pc/h

Volume ratio, VR 0.293

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	903	lc/h
Weaving lane changes, LCW	1046	lc/h
Non-weaving vehicle index, INW	237	
Non-weaving lane change, LCNW	218	lc/h
Total lane changes, LCALL	1264	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.387	
Average weaving speed, SW	51.1	mi/h
Average non-weaving speed, SNW	53.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.8	mi/h
Weaving segment density, D	19.4	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.525	
Weaving segment flow rate, v	3080	pc/h
Weaving segment capacity, cW	5676	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5511	640	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1978	c
		Maximum	Analyzed	
v/c ratio		1.00	0.525	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 2_2016_PM_Peak_US-101_NB_Broad_St_to_Osos_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Broad St to Osos St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	640	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2975	225	565	25	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	783	59	149	7	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3273	239	601	27	pc/h

Volume ratio, VR 0.203

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	840	lc/h
Weaving lane changes, LCW	983	lc/h
Non-weaving vehicle index, INW	359	
Non-weaving lane change, LCNW	449	lc/h
Total lane changes, LCALL	1432	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.427	
Average weaving speed, SW	50.0	mi/h
Average non-weaving speed, SNW	52.3	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	51.8	mi/h
Weaving segment density, D	26.6	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.678	
Weaving segment flow rate, v	4140	pc/h
Weaving segment capacity, cW	5885	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4566	640	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2050	c
		Maximum	Analyzed	
v/c ratio		1.00	0.678	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 3_2016_AM_Peak_US-101_NB_Osos_St_to_Toro_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Osos St to Toro St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	510	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1594	126	536	14	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	419	33	141	4	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1753	134	570	15	pc/h

Volume ratio, VR 0.285

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	704	lc/h
Weaving lane changes, LCW	817	lc/h
Non-weaving vehicle index, INW	153	
Non-weaving lane change, LCNW	63	lc/h
Total lane changes, LCALL	880	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.348	
Average weaving speed, SW	52.1	mi/h
Average non-weaving speed, SNW	56.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.8	mi/h
Weaving segment density, D	15.0	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.422	
Weaving segment flow rate, v	2472	pc/h
Weaving segment capacity, cW	5667	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5421	510	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1974	c
		Maximum	Analyzed	
v/c ratio		1.00	0.422	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 3_2016_PM_Peak_US-101_NB_Osos_St_to_Toro_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Osos St to Toro St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	510	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2780	270	430	30	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	732	71	113	8	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3058	287	457	32	pc/h

Volume ratio, VR 0.194

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	744	lc/h
Weaving lane changes, LCW	857	lc/h
Non-weaving vehicle index, INW	268	
Non-weaving lane change, LCNW	335	lc/h
Total lane changes, LCALL	1192	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.442	
Average weaving speed, SW	49.7	mi/h
Average non-weaving speed, SNW	53.5	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.7	mi/h
Weaving segment density, D	24.2	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.629	
Weaving segment flow rate, v	3834	pc/h
Weaving segment capacity, cW	5877	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4475	510	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2047	c
		Maximum	Analyzed	
v/c ratio		1.00	0.629	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 4_2016_AM_Peak_US-101_NB_Toro_St_to_California_Blvd.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Toro St to California Blvd
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	740	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1267	243	453	27	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	333	64	119	7	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1394	258	482	29	pc/h

Volume ratio, VR 0.342

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	740	lc/h
Weaving lane changes, LCW	903	lc/h
Non-weaving vehicle index, INW	179	
Non-weaving lane change, LCNW	116	lc/h
Total lane changes, LCALL	1019	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.291	
Average weaving speed, SW	53.7	mi/h
Average non-weaving speed, SNW	56.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	55.3	mi/h
Weaving segment density, D	13.0	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.375	
Weaving segment flow rate, v	2163	pc/h
Weaving segment capacity, cW	5584	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6040	740	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1945	c
		Maximum	Analyzed	
v/c ratio		1.00	0.375	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 4_2016_PM_Peak_US-101_NB_Toro_St_to_California_Blvd.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Toro St to California Blvd
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	740	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2725	135	315	15	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	717	36	83	4	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2998	144	335	16	pc/h

Volume ratio, VR 0.137

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	479	lc/h
Weaving lane changes, LCW	642	lc/h
Non-weaving vehicle index, INW	379	
Non-weaving lane change, LCNW	444	lc/h
Total lane changes, LCALL	1086	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.306	
Average weaving speed, SW	53.3	mi/h
Average non-weaving speed, SNW	56.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	55.6	mi/h
Weaving segment density, D	20.9	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.555	
Weaving segment flow rate, v	3493	pc/h
Weaving segment capacity, cW	6052	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	3904	740	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2108	c
		Maximum	Analyzed	
v/c ratio		1.00	0.555	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 5_2016_AM_Peak_US-101_NB_California_Blvd_to_Grand_Ave.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	California Blvd to Grand Ave
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	530	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1102	108	408	12	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	290	28	107	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1212	115	434	13	pc/h

Volume ratio, VR 0.309

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	549	lc/h
Weaving lane changes, LCW	649	lc/h
Non-weaving vehicle index, INW	78	
Non-weaving lane change, LCNW	0	lc/h
Total lane changes, LCALL	649	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.265	
Average weaving speed, SW	54.5	mi/h
Average non-weaving speed, SNW	58.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	57.0	mi/h
Weaving segment density, D	10.4	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.306	
Weaving segment flow rate, v	1774	pc/h
Weaving segment capacity, cW	5615	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5686	530	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1956	c
		Maximum	Analyzed	
v/c ratio		1.00	0.306	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 5_2016_PM_Peak_US-101_NB_California_Blvd_to_Grand_Ave.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	California Blvd to Grand Ave
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	530	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2618	342	252	28	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	689	90	66	7	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2880	364	268	30	pc/h

Volume ratio, VR 0.178

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	632	lc/h
Weaving lane changes, LCW	732	lc/h
Non-weaving vehicle index, INW	185	
Non-weaving lane change, LCNW	309	lc/h
Total lane changes, LCALL	1041	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.385	
Average weaving speed, SW	51.1	mi/h
Average non-weaving speed, SNW	54.8	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.1	mi/h
Weaving segment density, D	21.8	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.577	
Weaving segment flow rate, v	3542	pc/h
Weaving segment capacity, cW	5914	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4317	530	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2061	c
		Maximum	Analyzed	
v/c ratio		1.00	0.577	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 6_2016_AM_Peak_US-101_SB_Grand_Ave_to_Taft_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Grand Ave to Taft St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	670	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2048	342	392	38	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	539	90	103	10	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2253	364	417	40	pc/h

Volume ratio, VR 0.254

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	781	lc/h
Weaving lane changes, LCW	908	lc/h
Non-weaving vehicle index, INW	184	
Non-weaving lane change, LCNW	258	lc/h
Total lane changes, LCALL	1166	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.350	
Average weaving speed, SW	52.0	mi/h
Average non-weaving speed, SNW	54.5	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	53.8	mi/h
Weaving segment density, D	19.0	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.514	
Weaving segment flow rate, v	3074	pc/h
Weaving segment capacity, cW	5773	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5096	670	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2011	c
		Maximum	Analyzed	
v/c ratio		1.00	0.514	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 6_2016_PM_Peak_US-101_SB_Grand_Ave_to_Taft_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Grand Ave to Taft St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	670	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1086	384	144	16	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	286	101	38	4	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1195	408	153	17	pc/h

Volume ratio, VR 0.316

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	561	lc/h
Weaving lane changes, LCW	688	lc/h
Non-weaving vehicle index, INW	97	
Non-weaving lane change, LCNW	35	lc/h
Total lane changes, LCALL	723	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.240	
Average weaving speed, SW	55.3	mi/h
Average non-weaving speed, SNW	58.1	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	57.2	mi/h
Weaving segment density, D	10.3	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.305	
Weaving segment flow rate, v	1773	pc/h
Weaving segment capacity, cW	5630	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5761	670	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1961	c
		Maximum	Analyzed	
v/c ratio		1.00	0.305	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 7_2016_AM_Peak_US-101_SB_Taft_St_to_Montalban_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Taft St to Montalban St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	390	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2191	189	199	21	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	577	50	52	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2410	201	212	22	pc/h

Volume ratio, VR 0.145

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	413	lc/h
Weaving lane changes, LCW	487	lc/h
Non-weaving vehicle index, INW	161	
Non-weaving lane change, LCNW	135	lc/h
Total lane changes, LCALL	622	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.327	
Average weaving speed, SW	52.7	mi/h
Average non-weaving speed, SNW	57.5	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	56.7	mi/h
Weaving segment density, D	16.7	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.459	
Weaving segment flow rate, v	2845	pc/h
Weaving segment capacity, cW	5957	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	3983	390	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2075	c
		Maximum	Analyzed	
v/c ratio		1.00	0.459	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 7_2016_PM_Peak_US-101_SB_Taft_St_to_Montalban_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Taft St to Montalban St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	390	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1380	800	90	10	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	363	211	24	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1518	851	96	11	pc/h

Volume ratio, VR 0.382

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	947	lc/h
Weaving lane changes, LCW	1021	lc/h
Non-weaving vehicle index, INW	101	
Non-weaving lane change, LCNW	0	lc/h
Total lane changes, LCALL	1021	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.483	
Average weaving speed, SW	48.7	mi/h
Average non-weaving speed, SNW	54.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.0	mi/h
Weaving segment density, D	15.9	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.444	
Weaving segment flow rate, v	2476	pc/h
Weaving segment capacity, cW	5409	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6485	390	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1884	c
		Maximum	Analyzed	
v/c ratio		1.00	0.444	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 8_2016_AM_Peak_US-101_SB_Lemon_St_to_Olive_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Lemon St to Olive St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	360	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2192	318	198	22	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	577	84	52	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2411	338	211	23	pc/h

Volume ratio, VR 0.184

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	549	lc/h
Weaving lane changes, LCW	609	lc/h
Non-weaving vehicle index, INW	149	
Non-weaving lane change, LCNW	119	lc/h
Total lane changes, LCALL	728	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.394	
Average weaving speed, SW	50.9	mi/h
Average non-weaving speed, SNW	56.3	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	55.2	mi/h
Weaving segment density, D	18.0	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.490	
Weaving segment flow rate, v	2983	pc/h
Weaving segment capacity, cW	5865	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4374	360	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2043	c
		Maximum	Analyzed	
v/c ratio		1.00	0.490	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 8_2016_PM_Peak_US-101_SB_Lemon_St_to_Olive_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Lemon St to Olive St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	360	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2081	679	99	11	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	548	179	26	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2289	722	105	12	pc/h

Volume ratio, VR 0.264

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	827	lc/h
Weaving lane changes, LCW	887	lc/h
Non-weaving vehicle index, INW	141	
Non-weaving lane change, LCNW	91	lc/h
Total lane changes, LCALL	978	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.497	
Average weaving speed, SW	48.4	mi/h
Average non-weaving speed, SNW	54.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.4	mi/h
Weaving segment density, D	19.9	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.532	
Weaving segment flow rate, v	3128	pc/h
Weaving segment capacity, cW	5681	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5205	360	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1980	c
		Maximum	Analyzed	
v/c ratio		1.00	0.532	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 9_2016_AM_Peak_US-101_SB_Olive_St_to_Broad_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Olive St to Broad St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	540	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2277	403	243	27	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.95	
Peak 15-min volume, v15	606	107	65	7	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2531	433	261	29	pc/h

Volume ratio, VR 0.213

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	694	lc/h
Weaving lane changes, LCW	849	lc/h
Non-weaving vehicle index, INW	373	
Non-weaving lane change, LCNW	242	lc/h
Total lane changes, LCALL	1091	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.394	
Average weaving speed, SW	50.9	mi/h
Average non-weaving speed, SNW	54.8	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	53.9	mi/h
Weaving segment density, D	20.1	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.537	
Weaving segment flow rate, v	3254	pc/h
Weaving segment capacity, cW	5839	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4672	540	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2034	c
		Maximum	Analyzed	
v/c ratio		1.00	0.537	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 9_2016_PM_Peak_US-101_SB_Olive_St_to_Broad_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Olive St to Broad St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	540	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2570	610	180	20	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.95	
Peak 15-min volume, v15	684	162	48	5	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2857	655	193	21	pc/h

Volume ratio, VR 0.228

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	848	lc/h
Weaving lane changes, LCW	1003	lc/h
Non-weaving vehicle index, INW	420	
Non-weaving lane change, LCNW	308	lc/h
Total lane changes, LCALL	1311	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.455	
Average weaving speed, SW	49.4	mi/h
Average non-weaving speed, SNW	52.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.1	mi/h
Weaving segment density, D	23.8	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.619	
Weaving segment flow rate, v	3726	pc/h
Weaving segment capacity, cW	5808	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4820	540	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2022	c
		Maximum	Analyzed	
v/c ratio		1.00	0.619	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 1_2016_AM_Peak_US-101_NB_Marsh_St_to_Broad_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/13/2017
Analysis Time Period:	AM Peak
Freeway/Direction:	US-101 NB
From/To:	Marsh St to Broad St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	2950	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	776	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1082	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1082	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	65.0	mi/h
Number of lanes, N	3	
Density, D	16.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 1_2016_PM_Peak_US-101_NB_Marsh_St_to_Broad_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/13/2017
Analysis Time Period:	PM Peak
Freeway/Direction:	US-101 NB
From/To:	Marsh St to Broad St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	3840	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1011	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1408	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1408	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	65.0	mi/h
Number of lanes, N	3	
Density, D	21.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Appendix F

Analysis Worksheets for 2035 No Project Conditions

Appendix F.1

Intersection Auto LOS Worksheets for 2035 No Project Conditions

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	5	1390	10	10	1650
Future Vol, veh/h	10	5	1390	10	10	1650
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	67	67	90	90	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	7	1544	11	11	1875

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2505	773	0	0	1545	0
Stage 1	1545	-	-	-	-	-
Stage 2	960	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	23	342	-	-	426	-
Stage 1	162	-	-	-	-	-
Stage 2	332	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	22	342	-	-	426	-
Mov Cap-2 Maneuver	107	-	-	-	-	-
Stage 1	162	-	-	-	-	-
Stage 2	323	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	35.8	0	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	139	426	-
HCM Lane V/C Ratio	-	-	0.161	0.027	-
HCM Control Delay (s)	-	-	35.8	13.7	-
HCM Lane LOS	-	-	E	B	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	180	60	20	20	20	50	1340	170	200	1510	80
Future Volume (veh/h)	90	180	60	20	20	20	50	1340	170	200	1510	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.81	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1976	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	114	228	63	26	26	23	62	1675	202	233	1756	93
Adj No. of Lanes	1	2	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.79	0.79	0.79	0.76	0.76	0.76	0.80	0.80	0.80	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	329	501	131	122	128	105	80	1728	760	232	2032	878
Arrive On Green	0.19	0.19	0.19	0.07	0.07	0.07	0.04	0.49	0.49	0.13	0.57	0.57
Sat Flow, veh/h	1774	2705	705	1774	1863	1535	1774	3539	1556	1774	3539	1530
Grp Volume(v), veh/h	114	153	138	26	26	23	62	1675	202	233	1756	93
Grp Sat Flow(s),veh/h/ln	1774	1863	1548	1774	1863	1535	1774	1770	1556	1774	1770	1530
Q Serve(g_s), s	7.7	10.0	11.0	1.9	1.8	1.9	4.8	63.3	10.5	18.0	57.7	3.8
Cycle Q Clear(g_c), s	7.7	10.0	11.0	1.9	1.8	1.9	4.8	63.3	10.5	18.0	57.7	3.8
Prop In Lane	1.00		0.46	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	329	345	287	122	128	105	80	1728	760	232	2032	878
V/C Ratio(X)	0.35	0.44	0.48	0.21	0.20	0.22	0.78	0.97	0.27	1.00	0.86	0.11
Avail Cap(c_a), veh/h	412	433	360	271	284	234	258	1800	791	232	2032	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	49.8	50.2	60.6	60.6	60.6	65.0	34.2	20.7	59.8	24.8	13.3
Incr Delay (d2), s/veh	0.2	0.3	0.5	0.3	0.3	0.4	6.0	14.1	0.1	60.2	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	5.2	4.8	0.9	0.9	0.8	2.5	34.1	4.5	12.6	29.2	1.6
LnGrp Delay(d),s/veh	49.1	50.1	50.6	60.9	60.8	61.0	71.0	48.3	20.8	120.0	28.7	13.3
LnGrp LOS	D	D	D	E	E	E	E	D	C	F	C	B
Approach Vol, veh/h		405			75			1939			2082	
Approach Delay, s/veh		50.0			60.9			46.2			38.3	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.5	73.2		29.5	9.7	85.0		13.4
Change Period (Y+Rc), s	3.5	6.0		4.0	3.5	6.0		4.0
Max Green Setting (Gmax), s	18.0	70.0		32.0	20.0	70.0		21.0
Max Q Clear Time (g_c+I1), s	20.0	65.3		13.0	6.8	59.7		3.9
Green Ext Time (p_c), s	0.0	1.9		1.4	0.1	7.3		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	43.1
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	60	480	50	70	40	10
Future Vol, veh/h	60	480	50	70	40	10
Conflicting Peds, #/hr	0	0	0	18	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	68	68	69	69	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	88	706	72	101	50	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	192	0	-	0	1023	142
Stage 1	-	-	-	-	141	-
Stage 2	-	-	-	-	882	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1381	-	-	-	261	906
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	405	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1380	-	-	-	226	890
Mov Cap-2 Maneuver	-	-	-	-	226	-
Stage 1	-	-	-	-	871	-
Stage 2	-	-	-	-	356	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	22.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1380	-	-	-	226	890
HCM Lane V/C Ratio	0.064	-	-	-	0.221	0.014
HCM Control Delay (s)	7.8	0	-	-	25.4	9.1
HCM Lane LOS	A	A	-	-	D	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.8	0

Intersection	
Intersection Delay, s/veh	15.4
Intersection LOS	C

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Lane Configurations									
Traffic Vol, veh/h	0	430	140	0	50	70	0	50	270
Future Vol, veh/h	0	430	140	0	50	70	0	50	270
Peak Hour Factor	0.92	0.80	0.80	0.92	0.64	0.64	0.92	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	538	175	0	78	109	0	60	325
Number of Lanes	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay	16.6	11.2	15.1
HCM LOS	C	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	51%	0%	100%
Vol Right, %	0%	100%	0%	49%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	50	270	287	283	50	70
LT Vol	50	0	0	0	50	0
Through Vol	0	0	287	143	0	70
RT Vol	0	270	0	140	0	0
Lane Flow Rate	60	325	358	354	78	109
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.121	0.546	0.603	0.561	0.157	0.204
Departure Headway (Hd)	7.256	6.041	6.058	5.707	7.225	6.714
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	493	595	595	630	495	533
Service Time	5.008	3.793	3.804	3.453	4.99	4.479
HCM Lane V/C Ratio	0.122	0.546	0.602	0.562	0.158	0.205
HCM Control Delay	11	15.9	17.6	15.5	11.3	11.2
HCM Lane LOS	B	C	C	C	B	B
HCM 95th-tile Q	0.4	3.3	4	3.5	0.6	0.8

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	20	30	0	350	280	0	30	110
Future Vol, veh/h	0	20	30	0	350	280	0	30	110
Peak Hour Factor	0.92	0.88	0.88	0.92	0.90	0.90	0.92	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	23	34	0	389	311	0	35	129
Number of Lanes	0	1	0	0	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	8.8	11.1	9.2
HCM LOS	A	B	A

Lane	NBLn1	NBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	40%	21%
Vol Thru, %	100%	0%	0%	79%
Vol Right, %	0%	100%	60%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	350	280	50	140
LT Vol	0	0	20	30
Through Vol	350	0	0	110
RT Vol	0	280	30	0
Lane Flow Rate	389	311	57	165
Geometry Grp	7	7	2	5
Degree of Util (X)	0.522	0.357	0.083	0.22
Departure Headway (Hd)	4.83	4.128	5.28	4.811
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	751	877	678	746
Service Time	2.53	1.828	3.315	2.836
HCM Lane V/C Ratio	0.518	0.355	0.084	0.221
HCM Control Delay	12.7	9.1	8.8	9.2
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	3.1	1.6	0.3	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	450	270	40	200	250	300	1160	60	250	1350	70
Future Volume (veh/h)	140	450	270	40	200	250	300	1160	60	250	1350	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.94	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	167	536	246	44	222	267	349	1349	70	269	1452	71
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	526	409	55	354	298	349	1474	631	310	1434	639
Arrive On Green	0.11	0.28	0.28	0.03	0.20	0.20	0.10	0.42	0.42	0.09	0.41	0.41
Sat Flow, veh/h	1774	1863	1451	1774	1770	1489	3442	3539	1516	3442	3539	1576
Grp Volume(v), veh/h	167	536	246	44	222	267	349	1349	70	269	1452	71
Grp Sat Flow(s),veh/h/ln	1774	1863	1451	1774	1770	1489	1721	1770	1516	1721	1770	1576
Q Serve(g_s), s	8.2	25.1	13.0	2.2	10.2	15.5	9.0	31.9	2.5	6.9	36.0	2.5
Cycle Q Clear(g_c), s	8.2	25.1	13.0	2.2	10.2	15.5	9.0	31.9	2.5	6.9	36.0	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	526	409	55	354	298	349	1474	631	310	1434	639
V/C Ratio(X)	0.83	1.02	0.60	0.79	0.63	0.90	1.00	0.92	0.11	0.87	1.01	0.11
Avail Cap(c_a), veh/h	220	526	409	80	359	302	349	1474	631	310	1434	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	31.9	27.6	42.7	32.5	34.6	39.9	24.4	15.9	39.9	26.4	16.5
Incr Delay (d2), s/veh	21.4	44.4	2.4	28.4	3.4	27.1	48.4	10.4	0.4	22.1	26.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	19.2	5.5	1.5	5.3	8.6	6.6	17.7	1.1	4.2	22.7	1.1
LnGrp Delay(d),s/veh	60.0	76.3	30.0	71.1	35.9	61.7	88.4	34.8	16.2	62.0	53.3	16.8
LnGrp LOS	E	F	C	E	D	E	F	C	B	E	F	B
Approach Vol, veh/h		949			533			1768			1792	
Approach Delay, s/veh		61.4			51.7			44.6			53.1	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	41.0	6.8	29.1	13.0	40.0	14.1	21.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	37.0	4.0	25.0	9.0	36.0	11.0	18.0
Max Q Clear Time (g_c+I1), s	10.2	33.9	4.2	27.1	11.0	38.0	10.2	17.5
Green Ext Time (p_c), s	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	51.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	220	310	50	50	10	390	550	30	10	80	30
Future Volume (veh/h)	220	220	310	50	50	10	390	550	30	10	80	30
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.76	1.00		0.97	1.00		0.91	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	301	301	383	56	56	8	470	663	30	15	123	37
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	1	1
Peak Hour Factor	0.73	0.73	0.73	0.90	0.90	0.90	0.83	0.83	0.83	0.65	0.65	0.65
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	517	543	621	104	93	13	590	1455	66	24	496	819
Arrive On Green	0.29	0.29	0.29	0.06	0.06	0.06	0.17	0.42	0.42	0.01	0.27	0.27
Sat Flow, veh/h	1774	1863	1201	1774	1587	227	3442	3431	155	1774	1863	1343
Grp Volume(v), veh/h	301	301	383	56	0	64	470	342	351	15	123	37
Grp Sat Flow(s),veh/h/ln	1774	1863	1201	1774	0	1814	1721	1770	1817	1774	1863	1343
Q Serve(g_s), s	13.6	12.9	23.7	2.9	0.0	3.2	12.3	13.0	13.0	0.8	4.9	1.2
Cycle Q Clear(g_c), s	13.6	12.9	23.7	2.9	0.0	3.2	12.3	13.0	13.0	0.8	4.9	1.2
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	517	543	621	104	0	106	590	750	770	24	496	819
V/C Ratio(X)	0.58	0.55	0.62	0.54	0.00	0.60	0.80	0.46	0.46	0.61	0.25	0.05
Avail Cap(c_a), veh/h	546	574	641	490	0	501	987	827	849	414	732	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	28.2	19.9	43.1	0.0	43.3	37.4	19.4	19.4	46.2	27.1	9.5
Incr Delay (d2), s/veh	1.4	1.0	1.7	4.3	0.0	5.4	2.5	0.4	0.4	22.4	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	6.8	8.1	1.5	0.0	1.8	6.1	6.4	6.6	0.5	2.5	0.7
LnGrp Delay(d),s/veh	29.9	29.2	21.6	47.5	0.0	48.7	40.0	19.8	19.8	68.5	27.4	9.5
LnGrp LOS	C	C	C	D		D	D	B	B	E	C	A
Approach Vol, veh/h		985			120			1163			175	
Approach Delay, s/veh		26.5			48.1			27.9			27.1	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.1	30.1		10.5	6.3	44.9		32.5
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	27.0	37.0		26.0	22.0	44.0		29.0
Max Q Clear Time (g_c+I1), s	14.3	6.9		5.2	2.8	15.0		25.7
Green Ext Time (p_c), s	1.8	5.9		0.5	0.0	5.9		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	4.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	40	210	20	50	70	40
Future Vol, veh/h	40	210	20	50	70	40
Conflicting Peds, #/hr	0	143	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	82	82	71	71
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	269	24	61	99	56

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	464	0	439	329
Stage 1	-	-	-	-	329	-
Stage 2	-	-	-	-	110	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1097	-	575	712
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	915	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1097	-	485	615
Mov Cap-2 Maneuver	-	-	-	-	485	-
Stage 1	-	-	-	-	630	-
Stage 2	-	-	-	-	894	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	14.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	525	-	-	1097	-
HCM Lane V/C Ratio	0.295	-	-	0.022	-
HCM Control Delay (s)	14.7	-	-	8.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.2	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	39.3
Intersection LOS	E

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	100	5	80	0	10	5	10	0	80	640	5
Future Vol, veh/h	0	100	5	80	0	10	5	10	0	80	640	5
Peak Hour Factor	0.92	0.86	0.86	0.86	0.92	0.50	0.50	0.50	0.92	0.66	0.66	0.66
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	116	6	93	0	20	10	20	0	121	970	8
Number of Lanes	0	0	1	0	0	0	1	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	1
HCM Control Delay	15.6	11.4	50
HCM LOS	C	B	E

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	54%	40%	21%	0%	0%
Vol Thru, %	0%	100%	98%	3%	20%	79%	100%	0%
Vol Right, %	0%	0%	2%	43%	40%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	80	427	218	185	25	47	73	20
LT Vol	80	0	0	100	10	10	0	0
Through Vol	0	427	213	5	5	37	73	0
RT Vol	0	0	5	80	10	0	0	20
Lane Flow Rate	121	646	331	215	50	61	96	26
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.215	1.054	0.538	0.435	0.106	0.119	0.185	0.045
Departure Headway (Hd)	6.379	5.871	5.854	7.274	7.771	7.181	7.072	6.355
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	562	621	615	493	464	502	510	567
Service Time	4.118	3.61	3.593	5.063	5.471	4.881	4.772	4.055
HCM Lane V/C Ratio	0.215	1.04	0.538	0.436	0.108	0.122	0.188	0.046
HCM Control Delay	10.9	75.1	15.2	15.6	11.4	10.8	11.4	9.4
HCM Lane LOS	B	F	C	C	B	B	B	A
HCM 95th-tile Q	0.8	17.7	3.2	2.2	0.4	0.4	0.7	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	10	110	20
Future Vol, veh/h	0	10	110	20
Peak Hour Factor	0.92	0.76	0.76	0.76
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	13	145	26
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	10.9
HCM LOS	B

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	30	40	790	300	10
Future Vol, veh/h	10	30	40	790	300	10
Conflicting Peds, #/hr	0	1	0	0	0	13
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	80	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	33	50	988	405	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1019	223	432	0	-	0
Stage 1	425	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	233	780	1124	-	-	-
Stage 1	627	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	217	770	1123	-	-	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	619	-	-	-	-	-
Stage 2	485	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1123	-	589	-	-
HCM Lane V/C Ratio	0.045	-	0.075	-	-
HCM Control Delay (s)	8.4	-	11.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	5	60	190	80	590	10	10	200	150
Future Vol, veh/h	0	0	0	5	60	190	80	590	10	10	200	150
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	0	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	93	93	93	74	74	74	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	5	65	204	108	797	14	15	308	231

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	1209	1604	409	549	0	0	815	0	0
Stage 1	1024	1024	-	-	-	-	-	-	-
Stage 2	185	580	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	175	104	592	1017	-	-	808	-	-
Stage 1	307	311	-	-	-	-	-	-	-
Stage 2	828	498	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	153	0	590	1017	-	-	808	-	-
Mov Cap-2 Maneuver	153	0	-	-	-	-	-	-	-
Stage 1	273	0	-	-	-	-	-	-	-
Stage 2	813	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.9	1.1	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1017	-	-	550	808	-	-
HCM Lane V/C Ratio	0.106	-	-	0.499	0.019	-	-
HCM Control Delay (s)	9	-	-	17.9	9.5	-	-
HCM Lane LOS	A	-	-	C	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	2.8	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	400	10	80	5	0	10	0	340	10	5	190	0
Future Volume (veh/h)	400	10	80	5	0	10	0	340	10	5	190	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.93	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	526	13	105	13	0	21	0	430	13	7	260	0
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	1	2	0
Peak Hour Factor	0.76	0.76	0.76	0.39	0.39	0.39	0.79	0.79	0.79	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	578	14	115	20	0	32	0	875	26	322	886	0
Arrive On Green	0.41	0.41	0.41	0.03	0.00	0.03	0.00	0.25	0.25	0.25	0.25	0.00
Sat Flow, veh/h	1420	35	283	631	0	1020	0	3591	106	936	3632	0
Grp Volume(v), veh/h	644	0	0	34	0	0	0	217	226	7	260	0
Grp Sat Flow(s),veh/h/ln	1738	0	0	1651	0	0	0	1770	1834	936	1770	0
Q Serve(g_s), s	13.5	0.0	0.0	0.8	0.0	0.0	0.0	4.0	4.1	0.2	2.3	0.0
Cycle Q Clear(g_c), s	13.5	0.0	0.0	0.8	0.0	0.0	0.0	4.0	4.1	4.3	2.3	0.0
Prop In Lane	0.82		0.16	0.38		0.62	0.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h	708	0	0	52	0	0	0	443	459	322	886	0
V/C Ratio(X)	0.91	0.00	0.00	0.65	0.00	0.00	0.00	0.49	0.49	0.02	0.29	0.00
Avail Cap(c_a), veh/h	720	0	0	684	0	0	0	733	760	476	1466	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.8	0.0	0.0	18.5	0.0	0.0	0.0	12.4	12.4	14.2	11.7	0.0
Incr Delay (d2), s/veh	15.4	0.0	0.0	12.8	0.0	0.0	0.0	0.8	0.8	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	0.0	0.0	0.5	0.0	0.0	0.0	2.0	2.1	0.1	1.1	0.0
LnGrp Delay(d),s/veh	26.2	0.0	0.0	31.3	0.0	0.0	0.0	13.2	13.2	14.3	11.9	0.0
LnGrp LOS	C			C				B	B	B	B	
Approach Vol, veh/h		644			34			443			267	
Approach Delay, s/veh		26.2			31.3			13.2			12.0	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		13.7		19.7		13.7		5.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		6.1		15.5		6.3		2.8
Green Ext Time (p_c), s		3.1		0.3		3.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	0	20	0	5	5	20	300	0	5	230	40
Future Vol, veh/h	30	0	20	0	5	5	20	300	0	5	230	40
Conflicting Peds, #/hr	0	0	15	0	0	4	0	0	0	0	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	50	50	50	75	75	75	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	0	25	0	10	10	27	400	0	6	271	47

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	579	770	185	615	793	204	329	0	0	400	0	0
Stage 1	317	317	-	453	453	-	-	-	-	-	-	-
Stage 2	262	453	-	162	340	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	398	330	826	375	320	803	1227	-	-	1155	-	-
Stage 1	669	653	-	556	568	-	-	-	-	-	-	-
Stage 2	720	568	-	824	638	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	370	317	806	350	308	800	1209	-	-	1151	-	-
Mov Cap-2 Maneuver	370	317	-	350	308	-	-	-	-	-	-	-
Stage 1	647	642	-	544	555	-	-	-	-	-	-	-
Stage 2	680	555	-	782	628	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.8	13.5	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1209	-	-	472	-	445	1151	-	-
HCM Lane V/C Ratio	0.022	-	-	0.132	-	0.045	0.005	-	-
HCM Control Delay (s)	8	-	-	13.8	0	13.5	8.1	0	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	-	0.1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	240	10	0	490	60	5	5	0	60	5	180
Future Volume (veh/h)	250	240	10	0	490	60	5	5	0	60	5	180
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.98		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	309	296	12	0	533	56	13	13	0	70	6	99
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.81	0.81	0.81	0.92	0.92	0.92	0.38	0.38	0.38	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	619	1233	50	169	851	723	187	137	0	390	13	209
Arrive On Green	0.14	0.69	0.69	0.00	0.46	0.46	0.14	0.14	0.00	0.14	0.14	0.14
Sat Flow, veh/h	1774	1777	72	1067	1863	1582	425	964	0	1392	89	1470
Grp Volume(v), veh/h	309	0	308	0	533	56	26	0	0	70	0	105
Grp Sat Flow(s),veh/h/ln	1774	0	1849	1067	1863	1582	1389	0	0	1392	0	1560
Q Serve(g_s), s	3.2	0.0	2.6	0.0	9.3	0.8	0.0	0.0	0.0	0.0	0.0	2.6
Cycle Q Clear(g_c), s	3.2	0.0	2.6	0.0	9.3	0.8	2.7	0.0	0.0	1.5	0.0	2.6
Prop In Lane	1.00		0.04	1.00		1.00	0.50		0.00	1.00		0.94
Lane Grp Cap(c), veh/h	619	0	1283	169	851	723	324	0	0	390	0	222
V/C Ratio(X)	0.50	0.00	0.24	0.00	0.63	0.08	0.08	0.00	0.00	0.18	0.00	0.47
Avail Cap(c_a), veh/h	1157	0	2474	1109	2492	2116	1170	0	0	976	0	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.6	0.0	2.4	0.0	8.8	6.5	15.9	0.0	0.0	16.3	0.0	16.8
Incr Delay (d2), s/veh	0.6	0.0	0.1	0.0	0.8	0.0	0.1	0.0	0.0	0.2	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	1.3	0.0	4.9	0.4	0.3	0.0	0.0	0.8	0.0	1.2
LnGrp Delay(d),s/veh	6.2	0.0	2.5	0.0	9.6	6.6	16.0	0.0	0.0	16.5	0.0	18.4
LnGrp LOS	A		A		A	A	B			B		B
Approach Vol, veh/h		617			589			26			175	
Approach Delay, s/veh		4.4			9.3			16.0			17.6	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		33.0		9.6	10.1	23.0		9.6
Change Period (Y+Rc), s		3.5		3.5	4.0	3.5		3.5
Max Green Setting (Gmax), s		57.0		24.0	19.0	57.0		30.0
Max Q Clear Time (g_c+I1), s		4.6		4.6	5.2	11.3		4.7
Green Ext Time (p_c), s		7.3		0.9	1.1	7.2		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	8.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	20	10	70	10	20	60	1520	160	30	1630	20
Future Volume (veh/h)	15	20	10	70	10	20	60	1520	160	30	1630	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	18	24	4	88	12	19	65	1652	136	32	1716	21
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.83	0.83	0.83	0.80	0.80	0.80	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	72	449	98	7	454	82	1688	137	47	1758	21
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.05	0.51	0.51	0.03	0.49	0.49
Sat Flow, veh/h	0	248	1555	0	25	1572	1774	3303	269	1774	3580	44
Grp Volume(v), veh/h	42	0	4	100	0	19	65	876	912	32	847	890
Grp Sat Flow(s),veh/h/ln	248	0	1555	26	0	1572	1774	1770	1802	1774	1770	1854
Q Serve(g_s), s	0.0	0.0	0.1	0.0	0.0	0.6	2.5	33.1	34.7	1.2	32.3	32.5
Cycle Q Clear(g_c), s	20.0	0.0	0.1	20.0	0.0	0.6	2.5	33.1	34.7	1.2	32.3	32.5
Prop In Lane	0.43		1.00	0.88		1.00	1.00		0.15	1.00		0.02
Lane Grp Cap(c), veh/h	146	0	449	105	0	454	82	905	921	47	869	911
V/C Ratio(X)	0.29	0.00	0.01	0.95	0.00	0.04	0.79	0.97	0.99	0.68	0.97	0.98
Avail Cap(c_a), veh/h	146	0	449	105	0	454	103	905	921	128	869	911
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	17.5	33.2	0.0	17.7	32.7	16.4	16.8	33.4	17.2	17.2
Incr Delay (d2), s/veh	1.1	0.0	0.0	71.8	0.0	0.0	27.0	23.1	27.5	15.8	24.9	24.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	4.0	0.0	0.3	1.8	21.9	24.0	0.8	21.5	22.6
LnGrp Delay(d),s/veh	21.1	0.0	17.6	105.0	0.0	17.7	59.7	39.5	44.3	49.2	42.1	42.1
LnGrp LOS	C		B	F		B	E	D	D	D	D	D
Approach Vol, veh/h		46			119			1853			1769	
Approach Delay, s/veh		20.8			91.1			42.6			42.2	
Approach LOS		C			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	39.4		24.0	7.2	38.0		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	33.0		16.0	4.0	34.0		20.0
Max Q Clear Time (g_c+I1), s	3.2	36.7		22.0	4.5	34.5		22.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	43.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	5	370	30	10	10	60	1370	30	5	990	510
Future Volume (veh/h)	40	5	370	30	10	10	60	1370	30	5	990	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	54	7	192	55	18	13	73	1671	37	5	1065	548
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.74	0.74	0.74	0.55	0.55	0.55	0.82	0.82	0.82	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	32	257	284	89	45	289	2205	49	226	2207	963
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	229	149	1191	766	412	210	312	3536	78	285	3539	1544
Grp Volume(v), veh/h	253	0	0	86	0	0	73	834	874	5	1065	548
Grp Sat Flow(s),veh/h/ln	1569	0	0	1388	0	0	312	1770	1845	285	1770	1544
Q Serve(g_s), s	4.2	0.0	0.0	0.0	0.0	0.0	8.2	16.7	16.8	0.6	8.1	10.3
Cycle Q Clear(g_c), s	7.4	0.0	0.0	2.3	0.0	0.0	16.2	16.7	16.8	17.5	8.1	10.3
Prop In Lane	0.21		0.76	0.64		0.15	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	426	0	0	418	0	0	289	1104	1150	226	2207	963
V/C Ratio(X)	0.59	0.00	0.00	0.21	0.00	0.00	0.25	0.76	0.76	0.02	0.48	0.57
Avail Cap(c_a), veh/h	589	0	0	559	0	0	289	1104	1150	226	2207	963
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	0.0	16.1	0.0	0.0	9.4	6.7	6.7	12.9	5.0	5.5
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.2	0.0	0.0	2.1	4.8	4.7	0.2	0.8	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.0	1.0	0.0	0.0	0.9	9.4	9.8	0.1	4.1	4.9
LnGrp Delay(d),s/veh	19.5	0.0	0.0	16.4	0.0	0.0	11.5	11.5	11.4	13.1	5.8	7.9
LnGrp LOS	B			B			B	B	B	B	A	A
Approach Vol, veh/h		253			86			1781			1618	
Approach Delay, s/veh		19.5			16.4			11.5			6.5	
Approach LOS		B			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		14.7		35.0		14.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		16.0		31.0		16.0
Max Q Clear Time (g_c+I1), s		18.8		9.4		19.5		4.3
Green Ext Time (p_c), s		11.7		1.2		11.1		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	10.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	5	20	20	10	750	10	630	10	10	1220	150
Future Volume (veh/h)	70	5	20	20	10	750	10	630	10	10	1220	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.94	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	115	8	33	24	12	587	11	708	10	11	1402	172
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.61	0.61	0.61	0.84	0.84	0.84	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	40	80	510	231	612	20	1227	17	20	1089	132
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.01	0.34	0.34	0.01	0.34	0.34
Sat Flow, veh/h	665	102	206	986	596	1582	1774	3570	50	1774	3166	385
Grp Volume(v), veh/h	156	0	0	36	0	587	11	351	367	11	778	796
Grp Sat Flow(s),veh/h/ln	973	0	0	1582	0	1582	1774	1770	1850	1774	1770	1781
Q Serve(g_s), s	4.2	0.0	0.0	0.0	0.0	16.8	0.3	7.6	7.6	0.3	16.0	16.0
Cycle Q Clear(g_c), s	4.9	0.0	0.0	0.6	0.0	16.8	0.3	7.6	7.6	0.3	16.0	16.0
Prop In Lane	0.74		0.21	0.67		1.00	1.00		0.03	1.00		0.22
Lane Grp Cap(c), veh/h	511	0	0	741	0	612	20	609	636	20	609	612
V/C Ratio(X)	0.31	0.00	0.00	0.05	0.00	0.96	0.54	0.58	0.58	0.54	1.28	1.30
Avail Cap(c_a), veh/h	511	0	0	741	0	612	153	609	636	153	609	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.1	0.0	0.0	8.9	0.0	13.9	22.9	12.5	12.5	22.9	15.3	15.3
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.0	26.5	20.9	3.9	3.8	20.9	137.6	146.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	0.3	0.0	11.8	0.3	4.3	4.4	0.3	30.9	32.6
LnGrp Delay(d),s/veh	10.4	0.0	0.0	8.9	0.0	40.4	43.7	16.4	16.3	43.7	152.8	162.0
LnGrp LOS	B			A		D	D	B	B	D	F	F
Approach Vol, veh/h		156			623			729			1585	
Approach Delay, s/veh		10.4			38.6			16.8			156.7	
Approach LOS		B			D			B			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	20.0		22.0	4.5	20.0		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	16.0		18.0	4.0	16.0		18.0
Max Q Clear Time (g_c+I1), s	2.3	9.6		6.9	2.3	18.0		18.8
Green Ext Time (p_c), s	0.0	5.8		3.6	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	92.5
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	30	930	90	40	400
Future Vol, veh/h	20	30	930	90	40	400
Conflicting Peds, #/hr	0	0	0	2	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	0	25	-	0	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	86	86	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	56	1081	105	42	417

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1581	1081	0	-	1081	0
Stage 1	1081	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	120	265	-	0	645	-
Stage 1	326	-	-	0	-	-
Stage 2	609	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	112	265	-	-	645	-
Mov Cap-2 Maneuver	112	-	-	-	-	-
Stage 1	326	-	-	-	-	-
Stage 2	569	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	34.2	0	1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	112	265	645	-
HCM Lane V/C Ratio	-	0.331	0.21	0.065	-
HCM Control Delay (s)	-	52.3	22.2	11	-
HCM Lane LOS	-	F	C	B	-
HCM 95th %tile Q(veh)	-	1.3	0.8	0.2	-

Intersection	
Int Delay, s/veh	17.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	130	360	620	110	50	340
Future Vol, veh/h	130	360	620	110	50	340
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	80	80	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	149	414	775	138	54	370

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1322	456	0	0	913	0
Stage 1	844	-	-	-	-	-
Stage 2	478	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	160	552	-	-	744	-
Stage 1	383	-	-	-	-	-
Stage 2	623	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 148	552	-	-	744	-
Mov Cap-2 Maneuver	~ 148	-	-	-	-	-
Stage 1	383	-	-	-	-	-
Stage 2	578	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	57.2	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	148	552	744	-
HCM Lane V/C Ratio	-	-	1.01	0.75	0.073	-
HCM Control Delay (s)	-	-	136.6	28.5	10.2	-
HCM Lane LOS	-	-	F	D	B	-
HCM 95th %tile Q(veh)	-	-	7.6	6.5	0.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	100	350	400	10	90	400
Future Vol, veh/h	100	350	400	10	90	400
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	0	0	-	150	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	83	83	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	123	432	482	12	107	476

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1172	-	0	-	482	0
Stage 1	482	-	-	-	-	-
Stage 2	690	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	213	0	-	0	1081	-
Stage 1	621	0	-	0	-	-
Stage 2	498	0	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	192	-	-	-	1081	-
Mov Cap-2 Maneuver	322	-	-	-	-	-
Stage 1	621	-	-	-	-	-
Stage 2	449	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23	0	1.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	322	-	1081	-
HCM Lane V/C Ratio	-	0.383	-	0.099	-
HCM Control Delay (s)	-	23	0	8.7	-
HCM Lane LOS	-	C	A	A	-
HCM 95th %tile Q(veh)	-	1.7	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	40	10	20	60	80	20	580	20	60	1080	70
Future Volume (veh/h)	10	40	10	20	60	80	20	580	20	60	1080	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	0.97		0.97	1.00		0.95	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	45	6	24	73	55	23	674	21	71	1271	75
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82	0.86	0.86	0.86	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	289	39	96	167	109	299	2281	71	542	2211	130
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	1240	1596	213	146	920	604	404	3497	109	741	3390	200
Grp Volume(v), veh/h	11	0	51	152	0	0	23	341	354	71	662	684
Grp Sat Flow(s),veh/h/ln	1240	0	1809	1669	0	0	404	1770	1837	741	1770	1821
Q Serve(g_s), s	0.0	0.0	1.4	0.0	0.0	0.0	2.0	5.0	5.0	2.7	12.5	12.5
Cycle Q Clear(g_c), s	0.4	0.0	1.4	4.7	0.0	0.0	14.6	5.0	5.0	7.7	12.5	12.5
Prop In Lane	1.00		0.12	0.16		0.36	1.00		0.06	1.00		0.11
Lane Grp Cap(c), veh/h	360	0	328	372	0	0	299	1154	1198	542	1154	1187
V/C Ratio(X)	0.03	0.00	0.16	0.41	0.00	0.00	0.08	0.30	0.30	0.13	0.57	0.58
Avail Cap(c_a), veh/h	569	0	633	646	0	0	299	1154	1198	542	1154	1187
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.97	0.97	0.97	0.09	0.09	0.09
Uniform Delay (d), s/veh	20.3	0.0	20.7	22.1	0.0	0.0	9.9	4.5	4.5	6.2	5.8	5.8
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.7	0.0	0.0	0.5	0.6	0.6	0.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.7	2.3	0.0	0.0	0.3	2.6	2.7	0.6	5.9	6.1
LnGrp Delay(d),s/veh	20.3	0.0	20.9	22.8	0.0	0.0	10.4	5.1	5.1	6.2	6.0	6.0
LnGrp LOS	C		C	C			B	A	A	A	A	A
Approach Vol, veh/h		62			152			718			1417	
Approach Delay, s/veh		20.8			22.8			5.3			6.0	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.1		15.9		44.1		15.9
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		29.0		21.0		29.0		21.0
Max Q Clear Time (g_c+I1), s		16.6		3.4		14.5		6.7
Green Ext Time (p_c), s		10.3		1.2		11.7		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	20	30	5	30	30	20	540	10	30	970	90
Future Volume (veh/h)	60	20	30	5	30	30	20	540	10	30	970	90
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.88	0.91		0.98	1.00		0.95	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	87	29	34	10	58	46	22	587	11	35	1141	102
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.69	0.69	0.69	0.52	0.52	0.52	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	318	407	305	355	208	165	325	1943	36	528	1692	151
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.06	0.55	0.55	0.03	0.52	0.52
Sat Flow, veh/h	1266	1863	1399	1208	955	757	1774	3550	66	1774	3273	292
Grp Volume(v), veh/h	87	29	34	10	0	104	22	292	306	35	616	627
Grp Sat Flow(s),veh/h/ln	1266	1863	1399	1208	0	1712	1774	1770	1847	1774	1770	1796
Q Serve(g_s), s	4.2	0.8	1.3	0.5	0.0	3.4	0.4	6.1	6.1	0.6	17.5	17.6
Cycle Q Clear(g_c), s	7.6	0.8	1.3	1.3	0.0	3.4	0.4	6.1	6.1	0.6	17.5	17.6
Prop In Lane	1.00		1.00	1.00		0.44	1.00		0.04	1.00		0.16
Lane Grp Cap(c), veh/h	318	407	305	355	0	374	325	969	1011	528	915	928
V/C Ratio(X)	0.27	0.07	0.11	0.03	0.00	0.28	0.07	0.30	0.30	0.07	0.67	0.68
Avail Cap(c_a), veh/h	377	493	370	411	0	453	325	969	1011	582	915	928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.95	0.95	0.95	0.80	0.80	0.80
Uniform Delay (d), s/veh	25.3	21.1	21.3	21.6	0.0	22.1	8.6	8.3	8.3	7.3	12.2	12.2
Incr Delay (d2), s/veh	0.5	0.1	0.2	0.0	0.0	0.4	0.4	0.8	0.7	0.0	3.2	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.4	0.5	0.2	0.0	1.7	0.2	3.1	3.3	0.3	9.2	9.5
LnGrp Delay(d),s/veh	25.8	21.2	21.5	21.7	0.0	22.5	9.0	9.1	9.1	7.3	15.3	15.3
LnGrp LOS	C	C	C	C		C	A	A	A	A	B	B
Approach Vol, veh/h		150			114			620			1278	
Approach Delay, s/veh		23.9			22.4			9.1			15.1	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	40.2		19.8	5.9	42.2		19.8
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	24.0		18.0	4.0	32.0		18.0
Max Q Clear Time (g_c+I1), s	2.4	19.6		5.4	2.6	8.1		9.6
Green Ext Time (p_c), s	0.0	3.1		1.1	0.0	10.0		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	60	20	120	110	130	10	420	70	110	840	50
Future Volume (veh/h)	20	60	20	120	110	130	10	420	70	110	840	50
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.92	0.94		0.92	0.99		0.95	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	25	76	10	133	122	61	12	500	59	138	1050	45
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.79	0.79	0.79	0.90	0.90	0.90	0.84	0.84	0.84	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	356	482	376	399	482	377	282	1403	165	585	1710	73
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.88	0.88	0.07	0.50	0.50
Sat Flow, veh/h	1141	1863	1453	1230	1863	1458	1774	3172	373	1774	3448	148
Grp Volume(v), veh/h	25	76	10	133	122	61	12	278	281	138	539	556
Grp Sat Flow(s),veh/h/ln	1141	1863	1453	1230	1863	1458	1774	1770	1775	1774	1770	1826
Q Serve(g_s), s	1.1	1.9	0.3	5.6	3.1	1.9	0.2	1.6	1.6	2.4	13.2	13.2
Cycle Q Clear(g_c), s	4.2	1.9	0.3	7.5	3.1	1.9	0.2	1.6	1.6	2.4	13.2	13.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.08
Lane Grp Cap(c), veh/h	356	482	376	399	482	377	282	783	785	585	878	906
V/C Ratio(X)	0.07	0.16	0.03	0.33	0.25	0.16	0.04	0.36	0.36	0.24	0.61	0.61
Avail Cap(c_a), veh/h	384	528	412	430	528	413	379	783	785	587	878	906
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.61	0.61	0.61
Uniform Delay (d), s/veh	19.3	17.2	16.6	20.1	17.6	17.2	9.7	2.0	2.0	7.3	11.0	11.0
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.5	0.3	0.2	0.1	1.2	1.3	0.1	2.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.0	0.1	1.9	1.6	0.8	0.1	0.9	0.9	1.2	6.9	7.1
LnGrp Delay(d),s/veh	19.4	17.3	16.6	20.6	17.9	17.4	9.8	3.3	3.3	7.4	12.9	12.9
LnGrp LOS	B	B	B	C	B	B	A	A	A	A	B	B
Approach Vol, veh/h		111			316			571			1233	
Approach Delay, s/veh		17.7			18.9			3.4			12.3	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	34.8		20.5	7.9	31.5		20.5
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	25.0		17.0	4.0	25.0		17.0
Max Q Clear Time (g_c+I1), s	2.2	15.2		9.5	4.4	3.6		6.2
Green Ext Time (p_c), s	0.0	7.0		1.4	0.0	12.4		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	10	160	40	40	460	0	0	540	440
Future Volume (veh/h)	0	0	0	10	160	40	40	460	0	0	540	440
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.91	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				14	225	17	45	523	0	0	621	432
Adj No. of Lanes				0	3	0	1	2	0	0	1	1
Peak Hour Factor				0.71	0.71	0.71	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				45	768	58	476	2368	0	0	1246	1033
Arrive On Green				0.16	0.16	0.16	0.67	0.67	0.00	0.00	1.00	1.00
Sat Flow, veh/h				276	4672	356	532	3632	0	0	1863	1544
Grp Volume(v), veh/h				94	78	84	45	523	0	0	621	432
Grp Sat Flow(s),veh/h/ln				1849	1695	1759	532	1770	0	0	1863	1544
Q Serve(g_s), s				2.7	2.4	2.5	1.8	3.4	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				2.7	2.4	2.5	1.8	3.4	0.0	0.0	0.0	0.0
Prop In Lane				0.15		0.20	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				304	279	289	476	2368	0	0	1246	1033
V/C Ratio(X)				0.31	0.28	0.29	0.09	0.22	0.00	0.00	0.50	0.42
Avail Cap(c_a), veh/h				678	622	645	476	2368	0	0	1246	1033
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.83	0.83
Uniform Delay (d), s/veh				22.1	22.0	22.0	3.6	3.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.6	0.5	0.6	0.4	0.2	0.0	0.0	1.2	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.4	1.2	1.3	0.3	1.7	0.0	0.0	0.4	0.3
LnGrp Delay(d),s/veh				22.6	22.5	22.6	4.0	4.1	0.0	0.0	1.2	1.0
LnGrp LOS				C	C	C	A	A			A	A
Approach Vol, veh/h					256			568			1053	
Approach Delay, s/veh					22.6			4.1			1.1	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		45.1		14.9		45.1		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		28.0		22.0		28.0		
Max Q Clear Time (g_c+I1), s		2.0		4.7		5.4		
Green Ext Time (p_c), s		9.9		1.2		9.3		

Intersection Summary		
HCM 2010 Ctrl Delay		4.9
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	160	100	250	270	10	100	170	120	10	150	10
Future Volume (veh/h)	10	160	100	250	270	10	100	170	120	10	150	10
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.93	0.98		0.97	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	12	186	85	305	329	3	145	246	133	15	231	7
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.82	0.82	0.82	0.69	0.69	0.69	0.65	0.65	0.65
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	431	445	352	632	739	607	440	386	209	321	616	19
Arrive On Green	0.01	0.24	0.24	0.17	0.40	0.40	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1774	1863	1475	1774	1863	1530	1130	1126	609	993	1796	54
Grp Volume(v), veh/h	12	186	85	305	329	3	145	0	379	15	0	238
Grp Sat Flow(s),veh/h/ln	1774	1863	1475	1774	1863	1530	1130	0	1735	993	0	1851
Q Serve(g_s), s	0.2	3.7	2.1	5.0	5.7	0.1	4.9	0.0	8.1	0.6	0.0	4.3
Cycle Q Clear(g_c), s	0.2	3.7	2.1	5.0	5.7	0.1	9.2	0.0	8.1	8.7	0.0	4.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.35	1.00		0.03
Lane Grp Cap(c), veh/h	431	445	352	632	739	607	440	0	595	321	0	635
V/C Ratio(X)	0.03	0.42	0.24	0.48	0.45	0.00	0.33	0.00	0.64	0.05	0.00	0.37
Avail Cap(c_a), veh/h	969	1217	964	890	1217	1000	537	0	743	450	0	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.5	14.3	13.6	8.5	9.8	8.1	14.5	0.0	12.3	15.9	0.0	11.0
Incr Delay (d2), s/veh	0.0	0.6	0.4	0.6	0.4	0.0	0.4	0.0	1.2	0.1	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.0	0.9	2.5	3.0	0.0	1.6	0.0	4.1	0.2	0.0	2.2
LnGrp Delay(d),s/veh	12.6	14.9	14.0	9.1	10.2	8.1	14.9	0.0	13.5	16.0	0.0	11.4
LnGrp LOS	B	B	B	A	B	A	B		B	B		B
Approach Vol, veh/h		283			637			524			253	
Approach Delay, s/veh		14.5			9.7			13.9			11.6	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	3.5	21.6		19.2	10.6	14.6		19.2
Change Period (Y+Rc), s	3.0	4.0		4.0	3.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	29.0		19.0	14.0	29.0		21.0
Max Q Clear Time (g_c+I1), s	2.2	7.7		11.2	7.0	5.7		10.7
Green Ext Time (p_c), s	0.0	3.7		3.0	0.7	3.8		3.6

Intersection Summary	
HCM 2010 Ctrl Delay	12.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	210	30	210	360	10	60	300	160	10	210	50
Future Volume (veh/h)	50	210	30	210	360	10	60	300	160	10	210	50
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.93	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	75	313	39	221	379	11	67	337	146	12	253	50
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.67	0.67	0.67	0.95	0.95	0.95	0.89	0.89	0.89	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	734	598	271	915	758	289	382	166	145	476	94
Arrive On Green	0.06	0.39	0.39	0.15	0.49	0.49	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1774	1863	1518	1774	1863	1543	1071	1205	522	908	1501	297
Grp Volume(v), veh/h	75	313	39	221	379	11	67	0	483	12	0	303
Grp Sat Flow(s),veh/h/ln	1774	1863	1518	1774	1863	1543	1071	0	1727	908	0	1798
Q Serve(g_s), s	3.1	9.0	1.2	8.9	9.6	0.3	4.0	0.0	19.5	0.9	0.0	10.2
Cycle Q Clear(g_c), s	3.1	9.0	1.2	8.9	9.6	0.3	14.2	0.0	19.5	20.5	0.0	10.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.30	1.00		0.17
Lane Grp Cap(c), veh/h	99	734	598	271	915	758	289	0	548	145	0	570
V/C Ratio(X)	0.76	0.43	0.07	0.81	0.41	0.01	0.23	0.00	0.88	0.08	0.00	0.53
Avail Cap(c_a), veh/h	458	734	598	458	915	758	299	0	563	153	0	586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.3	16.2	13.9	30.2	12.0	9.6	26.5	0.0	23.8	33.5	0.0	20.6
Incr Delay (d2), s/veh	11.2	1.8	0.2	5.9	1.4	0.0	0.4	0.0	14.9	0.2	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	5.0	0.5	4.8	5.2	0.1	1.2	0.0	11.5	0.2	0.0	5.2
LnGrp Delay(d),s/veh	45.5	18.1	14.1	36.0	13.3	9.6	26.9	0.0	38.7	33.8	0.0	21.5
LnGrp LOS	D	B	B	D	B	A	C		D	C		C
Approach Vol, veh/h		427			611			550			315	
Approach Delay, s/veh		22.5			21.5			37.3			22.0	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.3	32.5		26.8	7.1	39.7		26.8
Change Period (Y+Rc), s	3.0	3.5		3.5	3.0	3.5		3.5
Max Green Setting (Gmax), s	19.0	29.0		24.0	19.0	29.0		24.0
Max Q Clear Time (g_c+I1), s	10.9	11.0		22.5	5.1	11.6		21.5
Green Ext Time (p_c), s	0.5	4.5		0.9	0.2	4.4		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	26.4
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations			↕				↕				↕				↕	
Traffic Vol, veh/h	0	0	10	5	0	90	40	15	0	5	15	10	0	60	100	20
Future Vol, veh/h	0	0	10	5	0	90	40	15	0	5	15	10	0	60	100	20
Peak Hour Factor	0.92	0.70	0.70	0.70	0.92	0.85	0.85	0.85	0.92	0.75	0.75	0.75	0.92	0.59	0.59	0.59
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	14	7	0	106	47	18	0	7	20	13	0	102	169	34
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	9.3	7.9	10.2
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	0%	62%	33%
Vol Thru, %	50%	67%	28%	56%
Vol Right, %	33%	33%	10%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	15	145	180
LT Vol	5	0	90	60
Through Vol	15	10	40	100
RT Vol	10	5	15	20
Lane Flow Rate	40	21	171	305
Geometry Grp	1	1	1	1
Degree of Util (X)	0.051	0.028	0.228	0.378
Departure Headway (Hd)	4.586	4.752	4.82	4.456
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	779	751	744	808
Service Time	2.623	2.797	2.853	2.48
HCM Lane V/C Ratio	0.051	0.028	0.23	0.377
HCM Control Delay	7.9	7.9	9.3	10.2
HCM Lane LOS	A	A	A	B
HCM 95th-tile Q	0.2	0.1	0.9	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	40	440	40	30	220	0	0	160	150
Future Volume (veh/h)	0	0	0	40	440	40	30	220	0	0	160	150
Number				5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.89	0.96		1.00	1.00		0.90
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				48	530	43	34	250	0	0	186	115
Adj No. of Lanes				0	3	0	1	1	0	0	1	1
Peak Hour Factor				0.83	0.83	0.83	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				180	2110	174	405	683	0	0	683	524
Arrive On Green				0.47	0.47	0.47	0.73	0.73	0.00	0.00	0.12	0.12
Sat Flow, veh/h				386	4522	373	1033	1863	0	0	1863	1430
Grp Volume(v), veh/h				229	191	201	34	250	0	0	186	115
Grp Sat Flow(s),veh/h/ln				1843	1695	1743	1033	1863	0	0	1863	1430
Q Serve(g_s), s				4.5	4.1	4.2	0.9	2.9	0.0	0.0	5.4	4.4
Cycle Q Clear(g_c), s				4.5	4.1	4.2	6.4	2.9	0.0	0.0	5.4	4.4
Prop In Lane				0.21		0.21	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				860	791	814	405	683	0	0	683	524
V/C Ratio(X)				0.27	0.24	0.25	0.08	0.37	0.00	0.00	0.27	0.22
Avail Cap(c_a), veh/h				860	791	814	405	683	0	0	683	524
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				9.7	9.6	9.6	7.2	5.5	0.0	0.0	19.1	18.6
Incr Delay (d2), s/veh				0.8	0.7	0.7	0.4	1.5	0.0	0.0	1.0	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.5	2.0	2.2	0.3	1.7	0.0	0.0	3.0	1.9
LnGrp Delay(d),s/veh				10.5	10.3	10.4	7.6	7.0	0.0	0.0	20.1	19.6
LnGrp LOS				B	B	B	A	A			C	B
Approach Vol, veh/h					621			284			301	
Approach Delay, s/veh					10.4			7.1			19.9	
Approach LOS					B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		28.0		22.0				22.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary		
HCM 2010 Ctrl Delay		12.0
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	50	440	30	50	110	0	0	70	60
Future Volume (veh/h)	0	0	0	50	440	30	50	110	0	0	70	60
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.80	0.97		1.00	1.00		0.95
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1863
Adj Flow Rate, veh/h				56	489	31	68	151	0	0	106	73
Adj No. of Lanes				0	3	0	0	1	0	0	1	1
Peak Hour Factor				0.90	0.90	0.90	0.73	0.73	0.73	0.66	0.66	0.66
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				153	1422	91	295	618	0	0	962	778
Arrive On Green				0.10	0.10	0.10	0.52	0.52	0.00	0.00	0.52	0.52
Sat Flow, veh/h				484	4490	288	418	1195	0	0	1863	1505
Grp Volume(v), veh/h				213	177	186	219	0	0	0	106	73
Grp Sat Flow(s),veh/h/ln				1839	1695	1729	1614	0	0	0	1863	1505
Q Serve(g_s), s				6.5	5.8	6.0	0.0	0.0	0.0	0.0	1.7	1.5
Cycle Q Clear(g_c), s				6.5	5.8	6.0	3.9	0.0	0.0	0.0	1.7	1.5
Prop In Lane				0.26		0.17	0.31		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				582	537	548	912	0	0	0	962	778
V/C Ratio(X)				0.37	0.33	0.34	0.24	0.00	0.00	0.00	0.11	0.09
Avail Cap(c_a), veh/h				582	537	548	912	0	0	0	962	778
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				21.2	21.0	21.0	7.9	0.0	0.0	0.0	7.4	7.4
Incr Delay (d2), s/veh				1.8	1.6	1.7	0.6	0.0	0.0	0.0	0.2	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.6	3.0	3.1	2.1	0.0	0.0	0.0	0.9	0.7
LnGrp Delay(d),s/veh				23.0	22.6	22.7	8.6	0.0	0.0	0.0	7.7	7.6
LnGrp LOS				C	C	C	A				A	A
Approach Vol, veh/h					576			219			179	
Approach Delay, s/veh					22.8			8.6			7.6	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		36.0				36.0		24.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		31.0				31.0		19.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		16.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	150	400	40	70	190	0	0	140	50
Future Volume (veh/h)	0	0	0	150	400	40	70	190	0	0	140	50
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.92	0.97		1.00	1.00		0.93
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				174	465	41	76	207	0	0	163	45
Adj No. of Lanes				0	3	0	0	1	0	0	1	0
Peak Hour Factor				0.86	0.86	0.86	0.92	0.92	0.92	0.86	0.86	0.86
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				569	1653	147	202	507	0	0	529	146
Arrive On Green				0.45	0.45	0.45	0.38	0.38	0.00	0.00	0.38	0.38
Sat Flow, veh/h				1265	3673	326	328	1324	0	0	1381	381
Grp Volume(v), veh/h				247	210	223	283	0	0	0	0	208
Grp Sat Flow(s),veh/h/ln				1799	1695	1770	1652	0	0	0	0	1763
Q Serve(g_s), s				5.3	4.7	4.7	1.6	0.0	0.0	0.0	0.0	5.0
Cycle Q Clear(g_c), s				5.3	4.7	4.7	6.9	0.0	0.0	0.0	0.0	5.0
Prop In Lane				0.70		0.18	0.27		0.00	0.00		0.22
Lane Grp Cap(c), veh/h				810	763	797	709	0	0	0	0	676
V/C Ratio(X)				0.31	0.28	0.28	0.40	0.00	0.00	0.00	0.00	0.31
Avail Cap(c_a), veh/h				810	763	797	709	0	0	0	0	676
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				10.5	10.4	10.4	13.5	0.0	0.0	0.0	0.0	12.9
Incr Delay (d2), s/veh				1.0	0.9	0.9	1.7	0.0	0.0	0.0	0.0	1.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.8	2.3	2.5	3.7	0.0	0.0	0.0	0.0	2.6
LnGrp Delay(d),s/veh				11.5	11.3	11.3	15.1	0.0	0.0	0.0	0.0	14.1
LnGrp LOS				B	B	B	B					B
Approach Vol, veh/h					680			283			208	
Approach Delay, s/veh					11.3			15.1			14.1	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.0		32.0		28.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		23.0		27.0		23.0		
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		
Green Ext Time (p_c), s		0.0		0.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		12.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	260	30	0	0	0	0	220	20	140	400	0
Future Volume (veh/h)	280	260	30	0	0	0	0	220	20	140	400	0
Number	5	2	12				3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	247	511	31				0	227	12	173	494	0
Adj No. of Lanes	1	2	0				0	1	0	1	1	0
Peak Hour Factor	0.76	0.76	0.76				0.97	0.97	0.97	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	880	1720	104				0	591	31	390	628	0
Arrive On Green	0.50	0.50	0.50				0.00	0.34	0.34	0.34	0.34	0.00
Sat Flow, veh/h	1774	3467	210				0	1751	93	1132	1863	0
Grp Volume(v), veh/h	247	274	268				0	0	239	173	494	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1814				0	0	1844	1132	1863	0
Q Serve(g_s), s	4.9	5.2	5.2				0.0	0.0	5.9	8.2	14.4	0.0
Cycle Q Clear(g_c), s	4.9	5.2	5.2				0.0	0.0	5.9	14.2	14.4	0.0
Prop In Lane	1.00		0.12				0.00		0.05	1.00		0.00
Lane Grp Cap(c), veh/h	880	924	900				0	0	622	390	628	0
V/C Ratio(X)	0.28	0.30	0.30				0.00	0.00	0.38	0.44	0.79	0.00
Avail Cap(c_a), veh/h	880	924	900				0	0	768	480	776	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.9	8.9	8.9				0.0	0.0	15.1	20.5	17.9	0.0
Incr Delay (d2), s/veh	0.8	0.8	0.8				0.0	0.0	0.4	0.8	4.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.9	2.8				0.0	0.0	3.1	2.6	8.0	0.0
LnGrp Delay(d),s/veh	9.6	9.8	9.8				0.0	0.0	15.5	21.3	22.3	0.0
LnGrp LOS	A	A	A						B	C	C	
Approach Vol, veh/h		789						239			667	
Approach Delay, s/veh		9.7						15.5			22.0	
Approach LOS		A						B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		34.8		25.2				25.2
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		25.0		25.0				25.0
Max Q Clear Time (g_c+I1), s		7.2		16.4				7.9
Green Ext Time (p_c), s		4.5		3.8				5.7

Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Notes

Intersection	
Intersection Delay, s/veh	13.2
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Vol, veh/h	0	0	0	0	0	20	150	20	0	10	230	0	0	0	330	100
Future Vol, veh/h	0	0	0	0	0	20	150	20	0	10	230	0	0	0	330	100
Peak Hour Factor	0.92	1.00	1.00	1.00	0.92	0.80	0.80	0.80	0.92	0.93	0.93	0.93	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	25	188	25	0	11	247	0	0	0	375	114
Number of Lanes	0	0	0	0	0	0	2	0	0	0	1	0	0	0	1	1

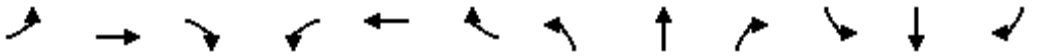
Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	10.9	13.2	14.3
HCM LOS	B	B	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	4%	21%	0%	0%	0%
Vol Thru, %	96%	79%	79%	100%	0%
Vol Right, %	0%	0%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	240	95	95	330	100
LT Vol	10	20	0	0	0
Through Vol	230	75	75	330	0
RT Vol	0	0	20	0	100
Lane Flow Rate	258	119	119	375	114
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.424	0.217	0.208	0.586	0.155
Departure Headway (Hd)	5.916	6.565	6.308	5.629	4.921
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	609	547	570	641	730
Service Time	3.943	4.296	4.04	3.352	2.644
HCM Lane V/C Ratio	0.424	0.218	0.209	0.585	0.156
HCM Control Delay	13.2	11.1	10.7	16	8.5
HCM Lane LOS	B	B	B	C	A
HCM 95th-tile Q	2.1	0.8	0.8	3.8	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	30	10	150	20	5	5	410	190	10	320	5
Future Volume (veh/h)	10	30	10	150	20	5	5	410	190	10	320	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.99	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	13	38	7	231	31	3	6	482	190	12	390	6
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.78	0.78	0.78	0.65	0.65	0.65	0.85	0.85	0.85	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	535	87	666	81	7	420	521	206	216	761	12
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	244	1338	217	1245	202	17	980	1304	514	759	1902	29
Grp Volume(v), veh/h	58	0	0	265	0	0	6	0	672	12	0	396
Grp Sat Flow(s),veh/h/ln	1799	0	0	1464	0	0	980	0	1818	759	0	1931
Q Serve(g_s), s	0.0	0.0	0.0	4.4	0.0	0.0	0.2	0.0	14.1	0.6	0.0	6.2
Cycle Q Clear(g_c), s	0.8	0.0	0.0	5.1	0.0	0.0	6.4	0.0	14.1	14.7	0.0	6.2
Prop In Lane	0.22		0.12	0.87		0.01	1.00		0.28	1.00		0.02
Lane Grp Cap(c), veh/h	830	0	0	754	0	0	420	0	727	216	0	772
V/C Ratio(X)	0.07	0.00	0.00	0.35	0.00	0.00	0.01	0.00	0.92	0.06	0.00	0.51
Avail Cap(c_a), veh/h	830	0	0	754	0	0	420	0	727	216	0	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.4	0.0	0.0	8.7	0.0	0.0	11.5	0.0	11.4	18.4	0.0	9.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.3	0.0	0.0	0.1	0.0	19.3	0.5	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	2.3	0.0	0.0	0.1	0.0	10.8	0.2	0.0	3.7
LnGrp Delay(d),s/veh	7.6	0.0	0.0	10.0	0.0	0.0	11.5	0.0	30.7	18.9	0.0	11.5
LnGrp LOS	A			A			B		C	B		B
Approach Vol, veh/h		58			265			678			408	
Approach Delay, s/veh		7.6			10.0			30.5			11.7	
Approach LOS		A			A			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		20.0		20.0		20.0		20.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		16.1		2.8		16.7		7.1
Green Ext Time (p_c), s		0.0		1.1		0.0		0.9

Intersection Summary		
HCM 2010 Ctrl Delay		20.3
HCM 2010 LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	580	310	0	0	0	100	0	440	0	440	160
Future Volume (vph)	0	580	310	0	0	0	100	0	440	0	440	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5				4.2		4.2		4.2	4.5
Lane Util. Factor		0.95	1.00				1.00		1.00		1.00	1.00
Frpb, ped/bikes		1.00	1.00				1.00		0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00				1.00		1.00		1.00	1.00
Frt		1.00	0.85				1.00		0.85		1.00	0.85
Flt Protected		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (prot)		3539	1583				1770		1558		1863	1566
Flt Permitted		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (perm)		3539	1583				1770		1558		1863	1566
Peak-hour factor, PHF	0.83	0.83	0.83	1.00	1.00	1.00	0.81	0.81	0.81	0.87	0.87	0.87
Adj. Flow (vph)	0	699	373	0	0	0	123	0	543	0	506	184
RTOR Reduction (vph)	0	0	98	0	0	0	0	0	25	0	0	56
Lane Group Flow (vph)	0	699	275	0	0	0	123	0	518	0	506	128
Confl. Peds. (#/hr)						4			7			5
Confl. Bikes (#/hr)												12
Turn Type		NA	Perm				Prot		Perm		NA	custom
Protected Phases		2					3				4	2
Permitted Phases			2						8			4
Actuated Green, G (s)		26.8	26.8				11.1		43.3		28.0	54.8
Effective Green, g (s)		26.8	26.8				11.1		43.3		28.0	54.8
Actuated g/C Ratio		0.34	0.34				0.14		0.55		0.36	0.70
Clearance Time (s)		4.5	4.5				4.2		4.2		4.2	4.5
Vehicle Extension (s)		3.0	3.0				3.0		3.0		3.0	3.0
Lane Grp Cap (vph)		1203	538				249		856		661	1089
v/s Ratio Prot		c0.20					0.07				c0.27	0.04
v/s Ratio Perm			0.17						c0.33			0.04
v/c Ratio		0.58	0.51				0.49		0.60		0.77	0.12
Uniform Delay, d1		21.4	20.8				31.3		12.0		22.5	4.0
Progression Factor		1.00	1.00				1.00		1.00		1.00	1.00
Incremental Delay, d2		0.7	0.8				1.5		1.2		5.3	0.0
Delay (s)		22.1	21.6				32.8		13.2		27.8	4.0
Level of Service		C	C				C		B		C	A
Approach Delay (s)		21.9			0.0			16.8			21.4	
Approach LOS		C			A			B			C	

Intersection Summary			
HCM 2000 Control Delay	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	78.8	Sum of lost time (s)	12.9
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	10	5	40	10	5	5	640	20	5	630	10
Future Volume (veh/h)	30	10	5	40	10	5	5	640	20	5	630	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.96	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	14	7	63	16	8	6	800	25	7	863	14
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.70	0.70	0.70	0.63	0.63	0.63	0.80	0.80	0.80	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	101	40	408	91	376	286	1088	34	317	1108	18
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	871	397	156	1162	360	1483	630	1795	56	661	1827	30
Grp Volume(v), veh/h	64	0	0	79	0	8	6	0	825	7	0	877
Grp Sat Flow(s),veh/h/ln	1424	0	0	1522	0	1483	630	0	1851	661	0	1857
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	0.2	0.4	0.0	18.1	0.4	0.0	20.2
Cycle Q Clear(g_c), s	2.7	0.0	0.0	1.9	0.0	0.2	20.6	0.0	18.1	18.5	0.0	20.2
Prop In Lane	0.67		0.11	0.80		1.00	1.00		0.03	1.00		0.02
Lane Grp Cap(c), veh/h	467	0	0	499	0	376	286	0	1122	317	0	1126
V/C Ratio(X)	0.14	0.00	0.00	0.16	0.00	0.02	0.02	0.00	0.74	0.02	0.00	0.78
Avail Cap(c_a), veh/h	558	0	0	614	0	493	344	0	1295	379	0	1299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.8	0.0	0.0	16.6	0.0	16.0	16.1	0.0	8.0	14.6	0.0	8.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.9	0.0	0.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	1.0	0.0	0.1	0.1	0.0	9.5	0.1	0.0	10.8
LnGrp Delay(d),s/veh	16.9	0.0	0.0	16.8	0.0	16.0	16.1	0.0	9.9	14.6	0.0	11.1
LnGrp LOS	B			B		B	B		A	B		B
Approach Vol, veh/h		64			87			831			884	
Approach Delay, s/veh		16.9			16.7			9.9			11.1	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		38.7		18.5		38.7		18.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		18.0		40.0		19.0
Max Q Clear Time (g_c+I1), s		22.6		4.7		22.2		3.9
Green Ext Time (p_c), s		12.1		0.6		12.3		0.7

Intersection Summary		
HCM 2010 Ctrl Delay		11.1
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	170	450	540	100	10	220	410	470	20	760	40
Future Volume (veh/h)	70	170	450	540	100	10	220	410	470	20	760	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	75	183	270	706	0	0	247	461	321	23	874	38
Adj No. of Lanes	1	1	1	2	1	0	2	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	364	382	452	769	404	0	306	1371	935	28	1086	47
Arrive On Green	0.21	0.21	0.21	0.22	0.00	0.00	0.09	0.39	0.39	0.02	0.31	0.31
Sat Flow, veh/h	1774	1863	1517	3548	1863	0	3442	3539	1529	1774	3452	150
Grp Volume(v), veh/h	75	183	270	706	0	0	247	461	321	23	448	464
Grp Sat Flow(s),veh/h/ln	1774	1863	1517	1774	1863	0	1721	1770	1529	1774	1770	1833
Q Serve(g_s), s	4.6	11.4	20.1	25.6	0.0	0.0	9.3	12.1	13.9	1.7	30.6	30.6
Cycle Q Clear(g_c), s	4.6	11.4	20.1	25.6	0.0	0.0	9.3	12.1	13.9	1.7	30.6	30.6
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	364	382	452	769	404	0	306	1371	935	28	557	577
V/C Ratio(X)	0.21	0.48	0.60	0.92	0.00	0.00	0.81	0.34	0.34	0.81	0.80	0.80
Avail Cap(c_a), veh/h	364	382	452	809	425	0	418	1371	935	67	557	577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.4	46.1	39.9	50.4	0.0	0.0	58.9	28.4	13.1	64.6	41.4	41.4
Incr Delay (d2), s/veh	1.3	4.3	5.7	15.0	0.0	0.0	8.1	0.7	1.0	39.9	8.4	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.3	9.1	14.2	0.0	0.0	4.8	6.0	9.3	1.1	16.2	16.8
LnGrp Delay(d),s/veh	44.7	50.4	45.6	65.4	0.0	0.0	66.9	29.1	14.1	104.4	49.8	49.6
LnGrp LOS	D	D	D	E			E	C	B	F	D	D
Approach Vol, veh/h		528			706			1029			935	
Approach Delay, s/veh		47.1			65.4			33.5			51.1	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	57.0		33.0	16.7	47.4		34.5
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0
Max Green Setting (Gmax), s	5.0	51.0		27.0	16.0	40.0		30.0
Max Q Clear Time (g_c+I1), s	3.7	15.9		22.1	11.3	32.6		27.6
Green Ext Time (p_c), s	0.0	14.7		1.2	0.4	5.4		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	47.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	660	60	130	430	10	410	10	490	10	10	10
Future Volume (veh/h)	20	660	60	130	430	10	410	10	490	10	10	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	22	717	52	146	483	10	541	0	572	16	16	6
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.77	0.77	0.77	0.62	0.62	0.62
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	33	1629	117	183	2164	45	763	0	499	305	320	271
Arrive On Green	0.02	0.34	0.34	0.10	0.42	0.42	0.22	0.00	0.22	0.17	0.17	0.17
Sat Flow, veh/h	1774	4822	347	1774	5125	106	3548	0	1563	1774	1863	1578
Grp Volume(v), veh/h	22	503	266	146	319	174	541	0	572	16	16	6
Grp Sat Flow(s),veh/h/ln	1774	1695	1779	1774	1695	1841	1774	0	1563	1774	1863	1578
Q Serve(g_s), s	1.1	10.7	10.8	7.5	5.6	5.6	13.1	0.0	20.0	0.7	0.7	0.3
Cycle Q Clear(g_c), s	1.1	10.7	10.8	7.5	5.6	5.6	13.1	0.0	20.0	0.7	0.7	0.3
Prop In Lane	1.00		0.20	1.00		0.06	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	33	1145	601	183	1431	777	763	0	499	305	320	271
V/C Ratio(X)	0.67	0.44	0.44	0.80	0.22	0.22	0.71	0.00	1.15	0.05	0.05	0.02
Avail Cap(c_a), veh/h	95	1145	601	382	1431	777	763	0	499	305	320	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	23.9	24.0	40.8	17.1	17.1	33.8	0.0	31.8	32.2	32.2	32.0
Incr Delay (d2), s/veh	20.5	1.2	2.4	7.8	0.4	0.7	5.5	0.0	87.1	0.3	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	5.2	5.7	4.0	2.7	3.0	7.0	0.0	24.9	0.4	0.4	0.1
LnGrp Delay(d),s/veh	65.9	25.2	26.3	48.6	17.5	17.8	39.3	0.0	118.8	32.5	32.4	32.1
LnGrp LOS	E	C	C	D	B	B	D		F	C	C	C
Approach Vol, veh/h		791			639			1113			38	
Approach Delay, s/veh		26.7			24.7			80.2			32.4	
Approach LOS		C			C			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.6	35.4		20.0	5.7	43.3		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	20.0	21.0		16.0	5.0	36.0		20.0
Max Q Clear Time (g_c+I1), s	9.5	12.8		2.7	3.1	7.6		22.0
Green Ext Time (p_c), s	0.3	4.6		0.1	0.0	9.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	49.3
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	930	0	0	540	190	30	5	150	0	0	0
Future Volume (veh/h)	220	930	0	0	540	190	30	5	150	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900			
Adj Flow Rate, veh/h	278	1177	0	0	621	173	34	6	131			
Adj No. of Lanes	2	2	0	0	2	0	1	1	0			
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.88	0.88	0.88			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	1036	2816	0	0	1231	342	210	8	177			
Arrive On Green	0.30	0.80	0.00	0.00	0.45	0.45	0.12	0.12	0.12			
Sat Flow, veh/h	3442	3632	0	0	2820	758	1774	68	1494			
Grp Volume(v), veh/h	278	1177	0	0	403	391	34	0	137			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1715	1774	0	1563			
Q Serve(g_s), s	5.7	9.5	0.0	0.0	15.0	15.1	1.6	0.0	7.9			
Cycle Q Clear(g_c), s	5.7	9.5	0.0	0.0	15.0	15.1	1.6	0.0	7.9			
Prop In Lane	1.00		0.00	0.00		0.44	1.00		0.96			
Lane Grp Cap(c), veh/h	1036	2816	0	0	799	775	210	0	185			
V/C Ratio(X)	0.27	0.42	0.00	0.00	0.50	0.51	0.16	0.00	0.74			
Avail Cap(c_a), veh/h	1036	2816	0	0	799	775	420	0	370			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.95	0.95	1.00	0.00	1.00			
Uniform Delay (d), s/veh	24.7	2.9	0.0	0.0	18.1	18.1	36.9	0.0	39.6			
Incr Delay (d2), s/veh	0.1	0.5	0.0	0.0	2.1	2.2	0.4	0.0	5.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.7	4.8	0.0	0.0	7.7	7.5	0.8	0.0	3.7			
LnGrp Delay(d),s/veh	24.8	3.4	0.0	0.0	20.2	20.3	37.2	0.0	45.4			
LnGrp LOS	C	A			C	C	D		D			
Approach Vol, veh/h		1455			794			171				
Approach Delay, s/veh		7.5			20.3			43.7				
Approach LOS		A			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		78.0			32.0	46.0		15.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		63.0			17.0	42.0		22.0
Max Q Clear Time (g_c+I1), s		11.5			7.7	17.1		9.9
Green Ext Time (p_c), s		13.9			5.9	5.2		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	460	5	250	40	900	0	0	730	530
Future Volume (veh/h)	0	0	0	460	5	250	40	900	0	0	730	530
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				561	6	171	48	1071	0	0	811	589
Adj No. of Lanes				0	1	1	1	2	0	0	2	1
Peak Hour Factor				0.82	0.82	0.82	0.84	0.84	0.84	0.90	0.90	0.90
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				616	7	556	272	1965	0	0	1244	543
Arrive On Green				0.35	0.35	0.35	0.15	0.56	0.00	0.00	0.35	0.35
Sat Flow, veh/h				1756	19	1583	1774	3632	0	0	3632	1543
Grp Volume(v), veh/h				567	0	171	48	1071	0	0	811	589
Grp Sat Flow(s),veh/h/ln				1775	0	1583	1774	1770	0	0	1770	1543
Q Serve(g_s), s				29.6	0.0	7.6	2.3	18.7	0.0	0.0	18.7	34.1
Cycle Q Clear(g_c), s				29.6	0.0	7.6	2.3	18.7	0.0	0.0	18.7	34.1
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				623	0	556	272	1965	0	0	1244	543
V/C Ratio(X)				0.91	0.00	0.31	0.18	0.54	0.00	0.00	0.65	1.09
Avail Cap(c_a), veh/h				692	0	617	272	1965	0	0	1244	543
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.84	0.84	0.00	0.00	0.95	0.95
Uniform Delay (d), s/veh				30.0	0.0	22.9	35.7	13.8	0.0	0.0	26.5	31.5
Incr Delay (d2), s/veh				15.3	0.0	0.3	0.3	0.9	0.0	0.0	2.5	62.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				17.1	0.0	3.4	1.1	9.3	0.0	0.0	9.6	24.0
LnGrp Delay(d),s/veh				45.3	0.0	23.2	36.0	14.7	0.0	0.0	29.0	94.4
LnGrp LOS				D		C	D	B			C	F
Approach Vol, veh/h					738			1119			1400	
Approach Delay, s/veh					40.2			15.6			56.5	
Approach LOS					D			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.8	39.0				58.8		38.2
Change Period (Y+Rc), s	4.9	* 4.9				4.9		4.2
Max Green Setting (Gmax), s	12.5	* 34				50.1		37.8
Max Q Clear Time (g_c+I1), s	4.3	36.1				20.7		31.6
Green Ext Time (p_c), s	4.6	0.0				9.4		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	38.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	490	20	420	20	610	290	470	1530	10
Future Volume (veh/h)	10	10	10	490	20	420	20	610	290	470	1530	10
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	14	14	0	549	0	212	24	726	269	528	1719	11
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	2	2	0
Peak Hour Factor	0.70	0.70	0.70	0.92	0.92	0.92	0.84	0.84	0.84	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	19	19	33	727	0	605	28	1409	944	625	1999	13
Arrive On Green	0.02	0.02	0.00	0.20	0.00	0.20	0.02	0.40	0.40	0.18	0.55	0.55
Sat Flow, veh/h	909	909	1583	3548	0	1551	1774	3539	1555	3442	3604	23
Grp Volume(v), veh/h	28	0	0	549	0	212	24	726	269	528	843	887
Grp Sat Flow(s),veh/h/ln	1817	0	1583	1774	0	1551	1774	1770	1555	1721	1770	1858
Q Serve(g_s), s	1.7	0.0	0.0	15.7	0.0	10.5	1.5	16.8	9.0	16.0	43.9	44.0
Cycle Q Clear(g_c), s	1.7	0.0	0.0	15.7	0.0	10.5	1.5	16.8	9.0	16.0	43.9	44.0
Prop In Lane	0.50		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	38	0	33	727	0	605	28	1409	944	625	982	1030
V/C Ratio(X)	0.73	0.00	0.00	0.75	0.00	0.35	0.85	0.52	0.29	0.84	0.86	0.86
Avail Cap(c_a), veh/h	67	0	59	951	0	703	66	1409	944	827	982	1030
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.6	0.0	0.0	40.4	0.0	23.6	53.1	24.6	10.3	42.8	20.5	20.5
Incr Delay (d2), s/veh	23.3	0.0	0.0	2.5	0.0	0.3	45.5	1.3	0.8	6.2	9.7	9.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	8.0	0.0	4.6	1.1	8.4	6.0	8.2	24.0	25.1
LnGrp Delay(d),s/veh	76.0	0.0	0.0	43.0	0.0	23.9	98.5	26.0	11.1	49.0	30.2	29.9
LnGrp LOS	E			D		C	F	C	B	D	C	C
Approach Vol, veh/h		28			761			1019			2258	
Approach Delay, s/veh		76.0			37.7			23.8			34.5	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.7	66.0		27.2	24.7	49.1		7.3
Change Period (Y+Rc), s	6.0	* 6		5.0	5.0	6.0		5.0
Max Green Setting (Gmax), s	4.0	* 60		29.0	26.0	38.0		4.0
Max Q Clear Time (g_c+I1), s	3.5	46.0		17.7	18.0	18.8		3.7
Green Ext Time (p_c), s	0.0	10.0		2.8	1.6	5.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.7
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	15.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	50	40	1050	1920	10
Future Vol, veh/h	10	50	40	1050	1920	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	180	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	94	94	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	76	43	1117	2259	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2909	1135	2271	0	-	0
Stage 1	2265	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 12	196	221	-	-	-
Stage 1	64	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 10	196	221	-	-	-
Mov Cap-2 Maneuver	~ 10	-	-	-	-	-
Stage 1	64	-	-	-	-	-
Stage 2	391	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 604.2	0.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	221	-	48	-	-
HCM Lane V/C Ratio	0.193	-	1.894	-	-
HCM Control Delay (s)	25.1	-	$ 604.2	-	-
HCM Lane LOS	D	-	F	-	-
HCM 95th %tile Q(veh)	0.7	-	9.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	14.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	130	120	960	140	90	1910
Future Vol, veh/h	130	120	960	140	90	1910
Conflicting Peds, #/hr	0	0	0	15	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	89	89	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	163	150	1079	157	94	1990

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2354	633	0	0	1251	0
Stage 1	1172	-	-	-	-	-
Stage 2	1182	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 30	422	-	-	552	-
Stage 1	257	-	-	-	-	-
Stage 2	254	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 25	416	-	-	552	-
Mov Cap-2 Maneuver	~ 116	-	-	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	211	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	161.1	0	0.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	116	416	552	-
HCM Lane V/C Ratio	-	-	1.401	0.361	0.17	-
HCM Control Delay (s)	-	-	292.7	18.5	12.9	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	11.2	1.6	0.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.8

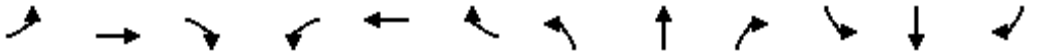
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	70	1830	5	10	1200
Future Vol, veh/h	20	70	1830	5	10	1200
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	93	2033	6	13	1500

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2808	1017	0	0	2033	0
Stage 1	2033	-	-	-	-	-
Stage 2	775	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 14	235	-	-	275	-
Stage 1	87	-	-	-	-	-
Stage 2	415	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 13	235	-	-	275	-
Mov Cap-2 Maneuver	68	-	-	-	-	-
Stage 1	87	-	-	-	-	-
Stage 2	395	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	84.6	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	152	275	-
HCM Lane V/C Ratio	-	-	0.789	0.045	-
HCM Control Delay (s)	-	-	84.6	18.7	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	5	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	100	80	160	70	170	50	1620	90	40	1360	30
Future Volume (veh/h)	140	100	80	160	70	170	50	1620	90	40	1360	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.89	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1976	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	134	213	77	148	170	190	54	1742	97	54	1838	40
Adj No. of Lanes	1	2	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.74	0.74	0.74	0.78	0.78	0.78	0.93	0.93	0.93	0.74	0.74	0.74
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	449	154	264	277	210	64	1856	820	64	1856	804
Arrive On Green	0.17	0.17	0.17	0.15	0.15	0.15	0.04	0.52	0.52	0.04	0.52	0.52
Sat Flow, veh/h	1774	2577	885	1774	1863	1408	1774	3539	1564	1774	3539	1534
Grp Volume(v), veh/h	134	151	139	148	170	190	54	1742	97	54	1838	40
Grp Sat Flow(s),veh/h/ln	1774	1863	1600	1774	1863	1408	1774	1770	1564	1774	1770	1534
Q Serve(g_s), s	9.3	10.0	10.8	10.6	11.7	18.2	4.2	63.3	4.3	4.2	70.6	1.7
Cycle Q Clear(g_c), s	9.3	10.0	10.8	10.6	11.7	18.2	4.2	63.3	4.3	4.2	70.6	1.7
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	309	324	278	264	277	210	64	1856	820	64	1856	804
V/C Ratio(X)	0.43	0.47	0.50	0.56	0.61	0.91	0.84	0.94	0.12	0.84	0.99	0.05
Avail Cap(c_a), veh/h	413	434	373	271	285	215	252	1856	820	226	1856	804
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.7	51.0	51.3	54.3	54.7	57.5	65.8	30.6	16.6	65.8	32.3	16.0
Incr Delay (d2), s/veh	1.0	1.0	1.4	2.5	3.7	36.3	24.3	9.9	0.1	24.5	18.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	5.2	4.9	5.4	6.3	9.2	2.5	33.3	1.9	2.5	39.0	0.8
LnGrp Delay(d),s/veh	51.6	52.0	52.7	56.7	58.4	93.7	90.1	40.5	16.6	90.3	50.9	16.0
LnGrp LOS	D	D	D	E	E	F	F	D	B	F	D	B
Approach Vol, veh/h		424			508			1893			1932	
Approach Delay, s/veh		52.1			71.1			40.7			51.3	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	76.0		27.9	9.0	76.0		24.5
Change Period (Y+Rc), s	3.5	6.0		4.0	3.5	6.0		4.0
Max Green Setting (Gmax), s	18.0	70.0		32.0	20.0	70.0		21.0
Max Q Clear Time (g_c+I1), s	6.2	65.3		12.8	6.2	72.6		20.2
Green Ext Time (p_c), s	0.1	4.7		2.2	0.1	0.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	49.3
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	190	270	90	80	40
Future Vol, veh/h	20	190	270	90	80	40
Conflicting Peds, #/hr	0	0	0	42	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	62	62	85	85	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	306	318	106	93	47

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	466	0	-	0	784	415
Stage 1	-	-	-	-	413	-
Stage 2	-	-	-	-	371	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1095	-	-	-	362	637
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	698	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1093	-	-	-	322	610
Mov Cap-2 Maneuver	-	-	-	-	322	-
Stage 1	-	-	-	-	641	-
Stage 2	-	-	-	-	647	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	17.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1093	-	-	-	322	610
HCM Lane V/C Ratio	0.03	-	-	-	0.289	0.076
HCM Control Delay (s)	8.4	0	-	-	20.7	11.4
HCM Lane LOS	A	A	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.2	0.2

Intersection	
Intersection Delay, s/veh	14.5
Intersection LOS	B

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Lane Configurations									
Traffic Vol, veh/h	0	190	90	0	220	280	0	120	180
Future Vol, veh/h	0	190	90	0	220	280	0	120	180
Peak Hour Factor	0.92	0.64	0.64	0.92	0.94	0.94	0.92	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	297	141	0	234	298	0	160	240
Number of Lanes	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay	13.3	16.1	13.8
HCM LOS	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	41%	0%	100%
Vol Right, %	0%	100%	0%	59%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	180	127	153	220	280
LT Vol	120	0	0	0	220	0
Through Vol	0	0	127	63	0	280
RT Vol	0	180	0	90	0	0
Lane Flow Rate	160	240	198	240	234	298
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.334	0.42	0.365	0.414	0.454	0.536
Departure Headway (Hd)	7.517	6.296	6.643	6.224	6.982	6.473
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	477	569	538	575	515	554
Service Time	5.285	4.064	4.415	3.995	4.749	4.239
HCM Lane V/C Ratio	0.335	0.422	0.368	0.417	0.454	0.538
HCM Control Delay	14	13.6	13.2	13.4	15.5	16.5
HCM Lane LOS	B	B	B	B	C	C
HCM 95th-tile Q	1.5	2.1	1.7	2	2.3	3.2

Intersection	
Intersection Delay, s/veh	14.8
Intersection LOS	B

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	160	40	0	200	120	0	20	360
Future Vol, veh/h	0	160	40	0	200	120	0	20	360
Peak Hour Factor	0.92	0.79	0.79	0.92	0.87	0.87	0.92	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	203	51	0	230	138	0	24	429
Number of Lanes	0	1	0	0	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	13.3	11.1	18.7
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	80%	5%
Vol Thru, %	100%	0%	0%	95%
Vol Right, %	0%	100%	20%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	200	120	200	380
LT Vol	0	0	160	20
Through Vol	200	0	0	360
RT Vol	0	120	40	0
Lane Flow Rate	230	138	253	452
Geometry Grp	7	7	2	5
Degree of Util (X)	0.377	0.199	0.421	0.672
Departure Headway (Hd)	5.898	5.187	5.982	5.351
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	609	691	603	674
Service Time	3.637	2.927	4.024	3.387
HCM Lane V/C Ratio	0.378	0.2	0.42	0.671
HCM Control Delay	12.2	9.2	13.3	18.7
HCM Lane LOS	B	A	B	C
HCM 95th-tile Q	1.8	0.7	2.1	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	240	170	100	350	270	330	1340	90	320	1130	150
Future Volume (veh/h)	120	240	170	100	350	270	330	1340	90	320	1130	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.84	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	145	289	113	106	372	225	375	1523	100	372	1314	96
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.83	0.83	0.83	0.94	0.94	0.94	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	373	292	118	355	208	421	1573	683	382	1534	674
Arrive On Green	0.09	0.20	0.20	0.07	0.18	0.18	0.12	0.44	0.44	0.11	0.43	0.43
Sat Flow, veh/h	1774	1863	1462	1774	1998	1168	3442	3539	1537	3442	3539	1555
Grp Volume(v), veh/h	145	289	113	106	328	269	375	1523	100	372	1314	96
Grp Sat Flow(s),veh/h/ln	1774	1863	1462	1774	1770	1397	1721	1770	1537	1721	1770	1555
Q Serve(g_s), s	7.3	13.2	6.0	5.3	16.0	16.0	9.7	37.8	3.5	9.7	30.1	3.4
Cycle Q Clear(g_c), s	7.3	13.2	6.0	5.3	16.0	16.0	9.7	37.8	3.5	9.7	30.1	3.4
Prop In Lane	1.00		1.00	1.00		0.84	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	158	373	292	118	315	248	421	1573	683	382	1534	674
V/C Ratio(X)	0.92	0.78	0.39	0.90	1.04	1.08	0.89	0.97	0.15	0.97	0.86	0.14
Avail Cap(c_a), veh/h	158	373	292	118	315	248	421	1573	683	382	1534	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	34.1	31.2	41.7	37.0	37.0	38.9	24.4	14.9	39.9	23.0	15.4
Incr Delay (d2), s/veh	48.6	9.9	0.8	52.1	62.3	81.0	20.5	16.3	0.5	38.7	6.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	7.8	2.5	4.3	13.2	11.7	5.8	22.0	1.6	6.7	16.0	1.5
LnGrp Delay(d),s/veh	89.3	44.0	32.0	93.7	99.3	118.0	59.4	40.7	15.3	78.6	29.4	15.8
LnGrp LOS	F	D	C	F	F	F	E	D	B	E	C	B
Approach Vol, veh/h		547			703			1998			1782	
Approach Delay, s/veh		53.5			105.6			42.9			38.9	
Approach LOS		D			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	44.0	10.0	22.0	15.0	43.0	12.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	40.0	6.0	18.0	11.0	39.0	8.0	16.0
Max Q Clear Time (g_c+I1), s	11.7	39.8	7.3	15.2	11.7	32.1	9.3	18.0
Green Ext Time (p_c), s	0.0	0.2	0.0	1.6	0.0	6.6	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay		51.4
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	130	400	80	110	20	450	240	40	20	370	110
Future Volume (veh/h)	120	130	400	80	110	20	450	240	40	20	370	110
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.72	1.00		0.93	1.00		0.94	1.00		0.82
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	145	157	464	89	122	20	536	286	42	21	385	108
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.84	0.84	0.84	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	500	525	629	202	176	29	666	1314	190	47	485	786
Arrive On Green	0.28	0.28	0.28	0.11	0.11	0.10	0.19	0.43	0.42	0.03	0.26	0.26
Sat Flow, veh/h	1774	1863	1145	1774	1542	253	3442	3075	445	1774	1863	1305
Grp Volume(v), veh/h	145	157	464	89	0	142	536	163	165	21	385	108
Grp Sat Flow(s),veh/h/ln	1774	1863	1145	1774	0	1795	1721	1770	1750	1774	1863	1305
Q Serve(g_s), s	6.8	7.0	30.0	5.0	0.0	8.1	15.8	6.2	6.4	1.2	20.5	4.4
Cycle Q Clear(g_c), s	6.8	7.0	30.0	5.0	0.0	8.1	15.8	6.2	6.4	1.2	20.5	4.4
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	500	525	629	202	0	205	666	756	748	47	485	786
V/C Ratio(X)	0.29	0.30	0.74	0.44	0.00	0.69	0.80	0.22	0.22	0.44	0.79	0.14
Avail Cap(c_a), veh/h	500	525	629	450	0	455	905	756	748	383	665	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	30.0	24.5	44.0	0.0	45.5	41.0	19.2	19.4	51.0	36.7	12.2
Incr Delay (d2), s/veh	0.3	0.3	4.6	1.5	0.0	4.2	3.8	0.1	0.1	6.3	4.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.7	12.4	2.5	0.0	4.3	7.9	3.1	3.1	0.7	11.2	2.6
LnGrp Delay(d),s/veh	30.2	30.3	29.0	45.5	0.0	49.6	44.9	19.4	19.5	57.4	41.3	12.2
LnGrp LOS	C	C	C	D		D	D	B	B	E	D	B
Approach Vol, veh/h		766			231			864			514	
Approach Delay, s/veh		29.5			48.1			35.2			35.9	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	24.6	31.7		16.1	6.9	49.5		34.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	27.0	37.0		26.0	22.0	44.0		29.0
Max Q Clear Time (g_c+I1), s	17.8	22.5		10.1	3.2	8.4		32.0
Green Ext Time (p_c), s	1.8	4.2		1.0	0.0	6.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.8
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	6.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	40	160	20	100	110	20
Future Vol, veh/h	40	160	20	100	110	20
Conflicting Peds, #/hr	0	171	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	73	73	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	188	27	137	143	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	406	0	504	314
Stage 1	-	-	-	-	312	-
Stage 2	-	-	-	-	192	-
Critical Hdwy	-	-	4.12	-	7.12	6.22
Critical Hdwy Stg 1	-	-	-	-	6.12	-
Critical Hdwy Stg 2	-	-	-	-	6.12	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1153	-	478	726
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	810	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1151	-	393	607
Mov Cap-2 Maneuver	-	-	-	-	393	-
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	790	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	19.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	416	-	-	1151	-
HCM Lane V/C Ratio	0.406	-	-	0.024	-
HCM Control Delay (s)	19.4	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.9	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	13.6
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	50	10	70	0	10	10	5	0	100	230	10
Future Vol, veh/h	0	50	10	70	0	10	10	5	0	100	230	10
Peak Hour Factor	0.92	0.79	0.79	0.79	0.92	0.70	0.70	0.70	0.92	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	63	13	89	0	14	14	7	0	118	271	12
Number of Lanes	0	0	1	0	0	0	1	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	1
HCM Control Delay	12.7	10.8	11.1
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	38%	40%	5%	0%	0%
Vol Thru, %	0%	100%	88%	8%	40%	95%	100%	0%
Vol Right, %	0%	0%	12%	54%	20%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	153	87	130	25	190	360	60
LT Vol	100	0	0	50	10	10	0	0
Through Vol	0	153	77	10	10	180	360	0
RT Vol	0	0	10	70	5	0	0	60
Lane Flow Rate	118	180	102	165	36	211	400	67
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.216	0.306	0.171	0.312	0.074	0.342	0.645	0.094
Departure Headway (Hd)	6.621	6.113	6.031	6.821	7.417	5.836	5.809	5.1
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	541	586	593	527	481	616	620	701
Service Time	4.372	3.864	3.782	4.576	5.184	3.579	3.552	2.843
HCM Lane V/C Ratio	0.218	0.307	0.172	0.313	0.075	0.343	0.645	0.096
HCM Control Delay	11.2	11.6	10	12.7	10.8	11.6	18.6	8.4
HCM Lane LOS	B	B	A	B	B	B	C	A
HCM 95th-tile Q	0.8	1.3	0.6	1.3	0.2	1.5	4.7	0.3

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	10	540	60
Future Vol, veh/h	0	10	540	60
Peak Hour Factor	0.92	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	11	600	67
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	15.4
HCM LOS	C

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	60	40	320	600	10
Future Vol, veh/h	10	60	40	320	600	10
Conflicting Peds, #/hr	0	4	0	0	0	14
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	80	80	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	71	50	400	741	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1061	395	767	0	-	0
Stage 1	761	-	-	-	-	-
Stage 2	300	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	219	604	842	-	-	-
Stage 1	422	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	200	594	839	-	-	-
Mov Cap-2 Maneuver	318	-	-	-	-	-
Stage 1	416	-	-	-	-	-
Stage 2	673	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	1.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	839	-	528	-	-
HCM Lane V/C Ratio	0.06	-	0.156	-	-
HCM Control Delay (s)	9.6	-	13.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	5	20	50	60	310	20	80	380	230
Future Vol, veh/h	0	0	0	5	20	50	60	310	20	80	380	230
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	20	0	0	12
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	66	66	66	95	95	95	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	8	30	76	63	326	21	99	469	284

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	915	1446	194	765	0	0	367	0	0
Stage 1	483	483	-	-	-	-	-	-	-
Stage 2	432	963	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	272	131	815	844	-	-	1188	-	-
Stage 1	586	551	-	-	-	-	-	-	-
Stage 2	622	332	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	226	0	799	844	-	-	1188	-	-
Mov Cap-2 Maneuver	226	0	-	-	-	-	-	-	-
Stage 1	532	0	-	-	-	-	-	-	-
Stage 2	570	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	1.5	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	844	-	-	649	1188	-	-
HCM Lane V/C Ratio	0.075	-	-	0.175	0.083	-	-
HCM Control Delay (s)	9.6	-	-	11.7	8.3	-	-
HCM Lane LOS	A	-	-	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.6	0.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	10	40	5	0	10	0	210	10	10	350	0
Future Volume (veh/h)	130	10	40	5	0	10	0	210	10	10	350	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.95	0.98		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	165	13	51	11	0	18	0	231	11	11	398	0
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	1	2	0
Peak Hour Factor	0.79	0.79	0.79	0.46	0.46	0.46	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	262	21	81	18	0	30	0	1037	49	555	1070	0
Arrive On Green	0.21	0.21	0.21	0.03	0.00	0.03	0.00	0.30	0.30	0.30	0.30	0.00
Sat Flow, veh/h	1242	98	384	626	0	1025	0	3523	162	1116	3632	0
Grp Volume(v), veh/h	229	0	0	29	0	0	0	118	124	11	398	0
Grp Sat Flow(s),veh/h/ln	1724	0	0	1651	0	0	0	1770	1823	1116	1770	0
Q Serve(g_s), s	3.2	0.0	0.0	0.5	0.0	0.0	0.0	1.3	1.3	0.2	2.3	0.0
Cycle Q Clear(g_c), s	3.2	0.0	0.0	0.5	0.0	0.0	0.0	1.3	1.3	1.5	2.3	0.0
Prop In Lane	0.72		0.22	0.38		0.62	0.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	364	0	0	48	0	0	0	535	551	555	1070	0
V/C Ratio(X)	0.63	0.00	0.00	0.60	0.00	0.00	0.00	0.22	0.22	0.02	0.37	0.00
Avail Cap(c_a), veh/h	1051	0	0	1007	0	0	0	1079	1112	898	2158	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.4	0.0	0.0	12.6	0.0	0.0	0.0	6.8	6.9	7.4	7.2	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	11.7	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	0.4	0.0	0.0	0.0	0.7	0.7	0.1	1.1	0.0
LnGrp Delay(d),s/veh	11.2	0.0	0.0	24.2	0.0	0.0	0.0	7.1	7.1	7.4	7.4	0.0
LnGrp LOS	B			C				A	A	A	A	
Approach Vol, veh/h		229			29			242			409	
Approach Delay, s/veh		11.2			24.2			7.1			7.4	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		11.9		9.5		11.9		4.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		3.3		5.2		4.3		2.5
Green Ext Time (p_c), s		3.3		1.0		3.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	8.8
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	5	20	5	5	10	10	210	5	20	360	20
Future Vol, veh/h	30	5	20	5	5	10	10	210	5	20	360	20
Conflicting Peds, #/hr	0	0	4	0	0	10	0	0	13	0	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	40	40	40	92	92	92	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	6	25	13	13	25	11	228	5	27	486	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	711	827	266	570	839	140	519	0	0	247	0	0
Stage 1	559	559	-	266	266	-	-	-	-	-	-	-
Stage 2	152	268	-	304	573	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	320	305	732	404	300	882	1043	-	-	1316	-	-
Stage 1	481	509	-	716	687	-	-	-	-	-	-	-
Stage 2	835	686	-	681	502	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	287	288	726	366	283	863	1039	-	-	1303	-	-
Mov Cap-2 Maneuver	287	288	-	366	283	-	-	-	-	-	-	-
Stage 1	474	492	-	700	671	-	-	-	-	-	-	-
Stage 2	780	670	-	628	485	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17	13.3	0.4	0.5
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1039	-	-	368	366	513	1303	-	-
HCM Lane V/C Ratio	0.01	-	-	0.185	0.034	0.073	0.021	-	-
HCM Control Delay (s)	8.5	-	-	17	15.2	12.6	7.8	0.1	-
HCM Lane LOS	A	-	-	C	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.1	0.2	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	500	5	5	360	30	5	5	0	150	0	220
Future Volume (veh/h)	180	500	5	5	360	30	5	5	0	150	0	220
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.97	0.99		1.00	0.94		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	207	575	6	5	379	23	7	7	0	197	0	134
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.87	0.87	0.87	0.95	0.95	0.95	0.75	0.75	0.75	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	605	1106	12	492	761	626	229	191	0	481	0	342
Arrive On Green	0.11	0.60	0.61	0.41	0.41	0.41	0.23	0.23	0.00	0.23	0.00	0.24
Sat Flow, veh/h	1774	1839	19	824	1863	1531	499	844	0	1323	0	1510
Grp Volume(v), veh/h	207	0	581	5	379	23	14	0	0	197	0	134
Grp Sat Flow(s),veh/h/ln	1774	0	1859	824	1863	1531	1343	0	0	1323	0	1510
Q Serve(g_s), s	2.6	0.0	8.4	0.2	7.0	0.4	0.0	0.0	0.0	1.7	0.0	3.5
Cycle Q Clear(g_c), s	2.6	0.0	8.4	0.2	7.0	0.4	3.5	0.0	0.0	5.2	0.0	3.5
Prop In Lane	1.00		0.01	1.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	605	0	1117	492	761	626	420	0	0	481	0	342
V/C Ratio(X)	0.34	0.00	0.52	0.01	0.50	0.04	0.03	0.00	0.00	0.41	0.00	0.39
Avail Cap(c_a), veh/h	1144	0	2264	1159	2269	1866	1030	0	0	852	0	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.0	0.0	5.4	8.2	10.2	8.2	14.0	0.0	0.0	15.8	0.0	15.0
Incr Delay (d2), s/veh	0.3	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.0	0.6	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	4.3	0.0	3.7	0.2	0.1	0.0	0.0	2.3	0.0	1.5
LnGrp Delay(d),s/veh	6.3	0.0	5.7	8.2	10.7	8.3	14.0	0.0	0.0	16.3	0.0	15.7
LnGrp LOS	A		A	A	B	A	B			B		B
Approach Vol, veh/h		788			407			14			331	
Approach Delay, s/veh		5.9			10.5			14.0			16.1	
Approach LOS		A			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		31.9		14.5	8.9	23.0		14.5
Change Period (Y+Rc), s		3.5		3.5	4.0	3.5		3.5
Max Green Setting (Gmax), s		57.0		24.0	19.0	57.0		30.0
Max Q Clear Time (g_c+I1), s		10.4		7.2	4.6	9.0		5.5
Green Ext Time (p_c), s		8.5		1.6	0.6	8.5		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	9.4
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	30	160	10	50	40	1740	70	20	1440	10
Future Volume (veh/h)	10	10	30	160	10	50	40	1740	70	20	1440	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	13	13	7	219	14	63	43	1871	55	23	1636	10
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.77	0.77	0.77	0.73	0.73	0.73	0.93	0.93	0.93	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	55	457	102	0	449	58	1790	52	37	1797	11
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.03	0.51	0.51	0.02	0.50	0.50
Sat Flow, veh/h	0	186	1560	0	0	1532	1774	3509	103	1774	3606	22
Grp Volume(v), veh/h	26	0	7	233	0	63	43	939	987	23	802	844
Grp Sat Flow(s),veh/h/ln	186	0	1560	0	0	1532	1774	1770	1842	1774	1770	1858
Q Serve(g_s), s	0.0	0.0	0.2	0.0	0.0	2.1	1.6	34.8	34.8	0.9	28.4	28.5
Cycle Q Clear(g_c), s	20.0	0.0	0.2	20.0	0.0	2.1	1.6	34.8	34.8	0.9	28.4	28.5
Prop In Lane	0.50		1.00	0.94		1.00	1.00		0.06	1.00		0.01
Lane Grp Cap(c), veh/h	134	0	457	102	0	449	58	903	940	37	882	926
V/C Ratio(X)	0.19	0.00	0.02	2.28	0.00	0.14	0.74	1.04	1.05	0.63	0.91	0.91
Avail Cap(c_a), veh/h	134	0	457	102	0	449	104	903	940	130	882	926
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	17.1	34.1	0.0	17.8	32.7	16.7	16.7	33.1	15.7	15.7
Incr Delay (d2), s/veh	0.7	0.0	0.0	604.2	0.0	0.1	16.8	40.6	43.6	16.2	15.0	14.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.1	19.1	0.0	0.9	1.1	27.0	28.9	0.6	17.3	18.0
LnGrp Delay(d),s/veh	20.4	0.0	17.1	638.3	0.0	17.9	49.6	57.4	60.3	49.3	30.8	30.3
LnGrp LOS	C		B	F		B	D	F	F	D	C	C
Approach Vol, veh/h		33			296			1969			1669	
Approach Delay, s/veh		19.7			506.3			58.7			30.8	
Approach LOS		B			F			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	38.8		24.0	6.2	38.0		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	33.0		16.0	4.0	34.0		20.0
Max Q Clear Time (g_c+I1), s	2.9	36.8		22.0	3.6	30.5		22.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	80.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	5	120	30	10	5	100	1800	150	10	810	730
Future Volume (veh/h)	50	5	120	30	10	5	100	1800	150	10	810	730
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.99	0.99		0.96	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	60	6	54	49	16	1	122	2195	183	11	910	819
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.61	0.61	0.61	0.82	0.82	0.82	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	207	37	103	295	79	4	314	2229	183	157	2389	1032
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	590	243	681	1053	525	24	279	3302	270	148	3539	1529
Grp Volume(v), veh/h	120	0	0	66	0	0	122	1159	1219	11	910	819
Grp Sat Flow(s),veh/h/ln	1514	0	0	1602	0	0	279	1770	1802	148	1770	1529
Q Serve(g_s), s	1.7	0.0	0.0	0.0	0.0	0.0	15.6	28.3	31.0	0.0	5.2	17.2
Cycle Q Clear(g_c), s	3.2	0.0	0.0	1.5	0.0	0.0	20.8	28.3	31.0	31.0	5.2	17.2
Prop In Lane	0.50		0.45	0.74		0.02	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	346	0	0	378	0	0	314	1195	1217	157	2389	1032
V/C Ratio(X)	0.35	0.00	0.00	0.17	0.00	0.00	0.39	0.97	1.00	0.07	0.38	0.79
Avail Cap(c_a), veh/h	634	0	0	661	0	0	314	1195	1217	157	2389	1032
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	0.0	0.0	17.2	0.0	0.0	7.8	7.0	7.5	23.0	3.3	5.2
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.2	0.0	0.0	3.6	19.7	26.3	0.9	0.5	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	0.8	0.0	0.0	1.5	19.7	23.8	0.2	2.6	8.9
LnGrp Delay(d),s/veh	18.5	0.0	0.0	17.4	0.0	0.0	11.4	26.7	33.8	23.8	3.7	11.5
LnGrp LOS	B			B			B	C	F	C	A	B
Approach Vol, veh/h		120			66			2500			1740	
Approach Delay, s/veh		18.5			17.4			29.4			7.5	
Approach LOS		B			B			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		10.9		35.0		10.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		16.0		31.0		16.0
Max Q Clear Time (g_c+I1), s		33.0		5.2		33.0		3.5
Green Ext Time (p_c), s		0.0		0.7		0.0		0.8

Intersection Summary		
HCM 2010 Ctrl Delay		20.3
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	10	10	10	5	720	5	1180	60	70	740	150
Future Volume (veh/h)	150	10	10	10	5	720	5	1180	60	70	740	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.94	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	179	12	12	12	6	861	6	1475	75	77	813	165
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.83	0.83	0.83	0.80	0.80	0.80	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	24	15	506	230	584	11	1124	57	96	1098	223
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.01	0.33	0.33	0.05	0.38	0.38
Sat Flow, veh/h	595	66	42	1035	621	1578	1774	3416	173	1774	2915	592
Grp Volume(v), veh/h	203	0	0	18	0	861	6	761	789	77	494	484
Grp Sat Flow(s),veh/h/ln	702	0	0	1656	0	1578	1774	1770	1819	1774	1770	1737
Q Serve(g_s), s	12.0	0.0	0.0	0.0	0.0	18.0	0.2	16.0	16.0	2.1	11.7	11.7
Cycle Q Clear(g_c), s	12.3	0.0	0.0	0.3	0.0	18.0	0.2	16.0	16.0	2.1	11.7	11.7
Prop In Lane	0.88		0.06	0.67		1.00	1.00		0.10	1.00		0.34
Lane Grp Cap(c), veh/h	399	0	0	736	0	584	11	582	598	96	667	655
V/C Ratio(X)	0.51	0.00	0.00	0.02	0.00	1.47	0.53	1.31	1.32	0.80	0.74	0.74
Avail Cap(c_a), veh/h	399	0	0	736	0	584	146	582	598	146	667	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	0.0	9.7	0.0	15.3	24.1	16.3	16.3	22.7	13.1	13.1
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.0	0.0	222.6	33.1	150.5	154.8	16.3	7.2	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.0	0.2	0.0	43.8	0.2	31.9	33.5	1.4	7.0	6.9
LnGrp Delay(d),s/veh	14.4	0.0	0.0	9.8	0.0	237.9	57.2	166.8	171.1	39.0	20.3	20.5
LnGrp LOS	B			A		F	E	F	F	D	C	C
Approach Vol, veh/h		203			879			1556			1055	
Approach Delay, s/veh		14.4			233.3			168.6			21.8	
Approach LOS		B			F			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	20.0		22.0	4.3	22.3		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	16.0		18.0	4.0	16.0		18.0
Max Q Clear Time (g_c+I1), s	4.1	18.0		14.3	2.2	13.7		20.0
Green Ext Time (p_c), s	0.0	0.0		2.4	0.0	2.2		0.0

Intersection Summary		
HCM 2010 Ctrl Delay	133.6	
HCM 2010 LOS	F	

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	60	610	130	30	800
Future Vol, veh/h	30	60	610	130	30	800
Conflicting Peds, #/hr	0	0	0	10	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	0	25	-	0	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	91	91	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	75	670	143	34	909

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1647	670	0	-	670	0
Stage 1	670	-	-	-	-	-
Stage 2	977	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	109	457	-	0	920	-
Stage 1	509	-	-	0	-	-
Stage 2	365	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	105	457	-	-	920	-
Mov Cap-2 Maneuver	105	-	-	-	-	-
Stage 1	509	-	-	-	-	-
Stage 2	352	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.7	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	105	457	920	-
HCM Lane V/C Ratio	-	0.357	0.164	0.037	-
HCM Control Delay (s)	-	57.2	14.4	9.1	-
HCM Lane LOS	-	F	B	A	-
HCM 95th %tile Q(veh)	-	1.4	0.6	0.1	-

Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	50	720	200	150	670
Future Vol, veh/h	20	50	720	200	150	670
Conflicting Peds, #/hr	0	0	0	6	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	66	791	220	165	736

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1973	511	0	0	1017	0
Stage 1	907	-	-	-	-	-
Stage 2	1066	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	61	509	-	-	680	-
Stage 1	355	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	46	506	-	-	680	-
Mov Cap-2 Maneuver	46	-	-	-	-	-
Stage 1	353	-	-	-	-	-
Stage 2	250	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	54.7	0	2.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	46	506	680	-
HCM Lane V/C Ratio	-	-	0.572	0.13	0.242	-
HCM Control Delay (s)	-	-	158.5	13.2	12	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	2.1	0.4	0.9	-

Intersection	
Int Delay, s/veh	9.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	280	630	130	460	240
Future Vol, veh/h	70	280	630	130	460	240
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	0	0	-	150	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	88	88	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	311	716	148	479	250

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1924	-	0	-	716	0
Stage 1	716	-	-	-	-	-
Stage 2	1208	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	~ 73	0	-	0	885	-
Stage 1	484	0	-	0	-	-
Stage 2	283	0	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	~ 33	-	-	-	885	-
Mov Cap-2 Maneuver	103	-	-	-	-	-
Stage 1	484	-	-	-	-	-
Stage 2	130	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	107	0	9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	103	-	885	-
HCM Lane V/C Ratio	-	0.755	-	0.541	-
HCM Control Delay (s)	-	107	0	13.8	-
HCM Lane LOS	-	F	A	B	-
HCM 95th %tile Q(veh)	-	4	-	3.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	60	20	20	60	120	10	1100	40	30	720	20
Future Volume (veh/h)	60	60	20	20	60	120	10	1100	40	30	720	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.95	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	97	97	16	29	88	123	12	1310	40	34	828	23
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.62	0.62	0.62	0.68	0.68	0.68	0.84	0.84	0.84	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	394	407	67	96	177	217	430	2113	64	362	2121	59
Arrive On Green	0.26	0.26	0.25	0.26	0.26	0.25	1.00	1.00	1.00	0.60	0.60	0.59
Sat Flow, veh/h	1147	1549	256	111	673	824	644	3500	107	401	3514	98
Grp Volume(v), veh/h	97	0	113	240	0	0	12	662	688	34	417	434
Grp Sat Flow(s),veh/h/ln	1147	0	1805	1609	0	0	644	1770	1837	401	1770	1842
Q Serve(g_s), s	0.0	0.0	3.0	1.0	0.0	0.0	0.2	0.0	0.0	2.2	7.3	7.3
Cycle Q Clear(g_c), s	5.1	0.0	3.0	7.6	0.0	0.0	7.6	0.0	0.0	2.2	7.3	7.3
Prop In Lane	1.00		0.14	0.12		0.51	1.00		0.06	1.00		0.05
Lane Grp Cap(c), veh/h	394	0	475	490	0	0	430	1068	1109	362	1068	1112
V/C Ratio(X)	0.25	0.00	0.24	0.49	0.00	0.00	0.03	0.62	0.62	0.09	0.39	0.39
Avail Cap(c_a), veh/h	513	0	662	654	0	0	430	1068	1109	362	1068	1112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.87	0.87	0.87	0.67	0.67	0.67
Uniform Delay (d), s/veh	18.2	0.0	17.4	19.3	0.0	0.0	0.8	0.0	0.0	5.1	6.2	6.2
Incr Delay (d2), s/veh	0.3	0.0	0.3	0.8	0.0	0.0	0.1	2.3	2.3	0.3	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	1.5	3.5	0.0	0.0	0.1	0.7	0.7	0.3	3.7	3.8
LnGrp Delay(d),s/veh	18.5	0.0	17.7	20.1	0.0	0.0	0.9	2.3	2.3	5.5	6.9	6.9
LnGrp LOS	B		B	C			A	A	A	A	A	A
Approach Vol, veh/h		210			240			1362			885	
Approach Delay, s/veh		18.1			20.1			2.3			6.8	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		40.2		19.8		40.2		19.8
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		29.0		21.0		29.0		21.0
Max Q Clear Time (g_c+I1), s		9.6		7.1		9.3		9.6
Green Ext Time (p_c), s		15.4		2.4		15.6		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	6.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	40	80	10	20	20	30	1020	40	10	710	40
Future Volume (veh/h)	70	40	80	10	20	20	30	1020	40	10	710	40
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.92	0.94		0.97	0.99		0.95	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	95	54	85	17	34	17	36	1229	48	11	789	44
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.74	0.74	0.74	0.59	0.59	0.59	0.83	0.83	0.83	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	428	333	363	267	134	554	2206	86	336	1709	95
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.21	0.13	1.00	1.00	1.00	1.00	0.97
Sat Flow, veh/h	1319	1863	1450	1174	1161	581	1774	3465	135	429	3396	189
Grp Volume(v), veh/h	95	54	85	17	0	51	36	627	650	11	411	422
Grp Sat Flow(s),veh/h/ln	1319	1863	1450	1174	0	1742	1774	1770	1831	429	1770	1816
Q Serve(g_s), s	3.7	1.4	2.9	0.7	0.0	1.4	0.5	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	5.1	1.4	2.9	2.1	0.0	1.4	0.5	0.0	0.0	0.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		0.33	1.00		0.07	1.00		0.10
Lane Grp Cap(c), veh/h	392	428	333	363	0	401	554	1127	1166	336	891	914
V/C Ratio(X)	0.24	0.13	0.25	0.05	0.00	0.13	0.06	0.56	0.56	0.03	0.46	0.46
Avail Cap(c_a), veh/h	507	590	459	465	0	551	554	1127	1166	336	891	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.61	0.61	0.61	0.92	0.92	0.92
Uniform Delay (d), s/veh	20.3	18.3	18.9	19.1	0.0	18.5	4.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.1	0.4	0.1	0.0	0.1	0.1	1.2	1.2	0.2	1.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.7	1.2	0.2	0.0	0.7	0.2	0.4	0.4	0.0	0.4	0.4
LnGrp Delay(d),s/veh	20.7	18.4	19.3	19.2	0.0	18.6	5.0	1.2	1.2	0.2	1.6	1.6
LnGrp LOS	C	B	B	B		B	A	A	A	A	A	A
Approach Vol, veh/h		234			68			1313			844	
Approach Delay, s/veh		19.7			18.7			1.3			1.6	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	8.0	34.2		17.8		42.2		17.8
Change Period (Y+Rc), s	4.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	4.0	24.0		18.0		32.0		18.0
Max Q Clear Time (g_c+I1), s	2.5	2.1		4.1		2.0		7.1
Green Ext Time (p_c), s	0.0	11.5		1.3		13.3		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	3.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	100	40	110	110	150	10	910	160	190	560	50
Future Volume (veh/h)	50	100	40	110	110	150	10	910	160	190	560	50
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.88	0.92		0.91	0.97		0.94	0.99		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	60	120	18	121	121	69	11	1034	140	204	602	51
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.83	0.83	0.83	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	384	531	399	390	531	409	467	1392	188	391	1652	140
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.02	0.90	0.86	0.13	1.00	0.97
Sat Flow, veh/h	1123	1863	1400	1147	1863	1435	1774	3105	420	1774	3279	277
Grp Volume(v), veh/h	60	120	18	121	121	69	11	589	585	204	324	329
Grp Sat Flow(s),veh/h/ln	1123	1863	1400	1147	1863	1435	1774	1770	1756	1774	1770	1787
Q Serve(g_s), s	2.6	3.0	0.6	5.4	3.0	2.2	0.2	6.2	6.6	4.0	0.0	0.1
Cycle Q Clear(g_c), s	5.6	3.0	0.6	8.4	3.0	2.2	0.2	6.2	6.6	4.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		0.16
Lane Grp Cap(c), veh/h	384	531	399	390	531	409	467	794	787	391	892	900
V/C Ratio(X)	0.16	0.23	0.05	0.31	0.23	0.17	0.02	0.74	0.74	0.52	0.36	0.37
Avail Cap(c_a), veh/h	401	559	420	408	559	431	565	794	787	391	892	900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88	0.83	0.83	0.83
Uniform Delay (d), s/veh	18.5	16.4	15.5	19.6	16.4	16.1	9.3	2.0	2.2	8.1	0.0	0.1
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.4	0.2	0.2	0.0	5.5	5.6	1.0	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.5	0.2	1.8	1.5	0.9	0.1	3.5	3.6	1.9	0.2	0.3
LnGrp Delay(d),s/veh	18.7	16.6	15.6	20.0	16.6	16.3	9.3	7.5	7.8	9.1	1.0	1.0
LnGrp LOS	B	B	B	C	B	B	A	A	A	A	A	A
Approach Vol, veh/h		198			311			1185			857	
Approach Delay, s/veh		17.2			17.9			7.7			2.9	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	34.2		21.1	8.0	30.9		21.1
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	25.0		17.0	4.0	25.0		17.0
Max Q Clear Time (g_c+I1), s	2.2	2.1		10.4	6.0	8.6		7.6
Green Ext Time (p_c), s	0.0	14.5		1.6	0.0	11.5		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	8.1
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	30	140	60	60	1060	0	0	420	350
Future Volume (veh/h)	0	0	0	30	140	60	60	1060	0	0	420	350
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.88	0.99		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				34	161	18	65	1152	0	0	442	262
Adj No. of Lanes				0	3	0	1	2	0	0	1	1
Peak Hour Factor				0.87	0.87	0.87	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				153	770	85	591	2267	0	0	1193	982
Arrive On Green				0.21	0.19	0.19	0.64	0.64	0.00	0.00	1.00	1.00
Sat Flow, veh/h				794	3997	442	736	3632	0	0	1863	1533
Grp Volume(v), veh/h				78	65	70	65	1152	0	0	442	262
Grp Sat Flow(s),veh/h/ln				1823	1695	1714	736	1770	0	0	1863	1533
Q Serve(g_s), s				2.2	1.9	2.1	2.1	10.4	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				2.2	1.9	2.1	2.1	10.4	0.0	0.0	0.0	0.0
Prop In Lane				0.44		0.26	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				351	327	330	591	2267	0	0	1193	982
V/C Ratio(X)				0.22	0.20	0.21	0.11	0.51	0.00	0.00	0.37	0.27
Avail Cap(c_a), veh/h				668	622	629	591	2267	0	0	1193	982
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.96	0.96
Uniform Delay (d), s/veh				20.2	20.3	20.4	4.2	5.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.3	0.3	0.3	0.4	0.8	0.0	0.0	0.8	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.9	1.0	0.5	5.2	0.0	0.0	0.3	0.2
LnGrp Delay(d),s/veh				20.6	20.6	20.7	4.6	6.6	0.0	0.0	0.8	0.6
LnGrp LOS				C	C	C	A	A			A	A
Approach Vol, veh/h					213			1217			704	
Approach Delay, s/veh					20.6			6.5			0.8	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		43.4		16.6		43.4		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		28.0		22.0		28.0		
Max Q Clear Time (g_c+I1), s		0.0		4.2		0.0		
Green Ext Time (p_c), s		0.0		1.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		6.0
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	280	90	100	250	10	140	150	160	20	130	20
Future Volume (veh/h)	10	280	90	100	250	10	140	150	160	20	130	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		0.94	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	295	87	116	291	6	152	163	139	25	165	19
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.86	0.86	0.86	0.92	0.92	0.92	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	444	592	477	432	708	567	480	300	256	378	529	61
Arrive On Green	0.00	0.32	0.32	0.05	0.38	0.38	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1774	1863	1500	1774	1863	1491	1185	927	790	1069	1634	188
Grp Volume(v), veh/h	11	295	87	116	291	6	152	0	302	25	0	184
Grp Sat Flow(s),veh/h/ln	1774	1863	1500	1774	1863	1491	1185	0	1717	1069	0	1822
Q Serve(g_s), s	0.1	5.0	1.6	1.8	4.4	0.1	4.3	0.0	5.6	0.8	0.0	2.9
Cycle Q Clear(g_c), s	0.1	5.0	1.6	1.8	4.4	0.1	7.2	0.0	5.6	6.3	0.0	2.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.46	1.00		0.10
Lane Grp Cap(c), veh/h	444	592	477	432	708	567	480	0	557	378	0	590
V/C Ratio(X)	0.02	0.50	0.18	0.27	0.41	0.01	0.32	0.00	0.54	0.07	0.00	0.31
Avail Cap(c_a), veh/h	1035	1395	1124	943	1395	1117	678	0	843	612	0	988
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.4	10.7	9.6	9.2	8.8	7.5	12.6	0.0	10.7	13.3	0.0	9.8
Incr Delay (d2), s/veh	0.0	0.6	0.2	0.3	0.4	0.0	0.4	0.0	0.8	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.6	0.7	0.8	2.3	0.0	1.4	0.0	2.7	0.2	0.0	1.5
LnGrp Delay(d),s/veh	10.4	11.3	9.7	9.5	9.2	7.5	12.9	0.0	11.6	13.4	0.0	10.1
LnGrp LOS	B	B	A	A	A	A	B		B	B		B
Approach Vol, veh/h		393			413			454			209	
Approach Delay, s/veh		11.0			9.3			12.0			10.5	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	3.4	18.7		16.5	5.9	16.3		16.5
Change Period (Y+Rc), s	3.0	4.0		4.0	3.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	29.0		19.0	14.0	29.0		21.0
Max Q Clear Time (g_c+I1), s	2.1	6.4		9.2	3.8	7.0		8.3
Green Ext Time (p_c), s	0.0	4.3		2.9	0.2	4.2		3.3

Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	370	50	280	230	30	40	490	210	10	240	60
Future Volume (veh/h)	120	370	50	280	230	30	40	490	210	10	240	60
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	128	394	38	329	271	35	44	538	196	11	264	54
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.85	0.85	0.85	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	145	664	531	353	883	719	239	376	137	90	436	89
Arrive On Green	0.08	0.36	0.36	0.20	0.47	0.47	0.29	0.29	0.30	0.29	0.29	0.30
Sat Flow, veh/h	1774	1863	1488	1774	1863	1517	1052	1280	466	720	1483	303
Grp Volume(v), veh/h	128	394	38	329	271	35	44	0	734	11	0	318
Grp Sat Flow(s),veh/h/ln	1774	1863	1488	1774	1863	1517	1052	0	1746	720	0	1786
Q Serve(g_s), s	5.7	13.8	1.3	14.6	7.2	1.0	3.0	0.0	23.5	0.0	0.0	12.2
Cycle Q Clear(g_c), s	5.7	13.8	1.3	14.6	7.2	1.0	15.2	0.0	23.5	23.5	0.0	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.17
Lane Grp Cap(c), veh/h	145	664	531	353	883	719	239	0	514	90	0	525
V/C Ratio(X)	0.88	0.59	0.07	0.93	0.31	0.05	0.18	0.00	1.43	0.12	0.00	0.61
Avail Cap(c_a), veh/h	400	664	531	400	883	719	239	0	514	90	0	525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.3	21.0	17.0	31.5	12.9	11.3	30.7	0.0	28.1	40.0	0.0	24.2
Incr Delay (d2), s/veh	15.5	3.9	0.3	26.9	0.9	0.1	0.4	0.0	204.1	0.6	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	7.8	0.6	9.8	3.9	0.4	0.9	0.0	40.2	0.3	0.0	6.3
LnGrp Delay(d),s/veh	51.8	24.8	17.2	58.3	13.8	11.4	31.1	0.0	232.3	40.5	0.0	26.2
LnGrp LOS	D	C	B	E	B	B	C		F	D		C
Approach Vol, veh/h		560			635			778			329	
Approach Delay, s/veh		30.5			36.8			220.9			26.6	
Approach LOS		C			D			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	32.5		27.5	10.5	41.9		27.5
Change Period (Y+Rc), s	3.0	3.5		3.5	3.0	3.5		3.5
Max Green Setting (Gmax), s	6.9	29.0		24.0	19.0	29.0		24.0
Max Q Clear Time (g_c+I1), s	15.6	15.8		25.5	7.7	9.2		25.5
Green Ext Time (p_c), s	0.3	3.8		0.0	0.3	4.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	96.0
HCM 2010 LOS	F

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations			↕				↕				↕				↕	
Traffic Vol, veh/h	0	10	50	10	0	80	110	30	0	10	90	90	0	30	30	30
Future Vol, veh/h	0	10	50	10	0	80	110	30	0	10	90	90	0	30	30	30
Peak Hour Factor	0.92	0.81	0.81	0.81	0.92	0.86	0.86	0.86	0.92	0.90	0.90	0.90	0.92	0.71	0.71	0.71
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	12	62	12	0	93	128	35	0	11	100	100	0	42	42	42
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.8	10.4	9.5	9
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	5%	14%	36%	33%
Vol Thru, %	47%	71%	50%	33%
Vol Right, %	47%	14%	14%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	190	70	220	90
LT Vol	10	10	80	30
Through Vol	90	50	110	30
RT Vol	90	10	30	30
Lane Flow Rate	211	86	256	127
Geometry Grp	1	1	1	1
Degree of Util (X)	0.273	0.12	0.343	0.173
Departure Headway (Hd)	4.66	5.006	4.83	4.901
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	766	710	739	726
Service Time	2.723	3.086	2.895	2.972
HCM Lane V/C Ratio	0.275	0.121	0.346	0.175
HCM Control Delay	9.5	8.8	10.4	9
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	1.1	0.4	1.5	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	60	500	100	80	410	0	0	130	210
Future Volume (veh/h)	0	0	0	60	500	100	80	410	0	0	130	210
Number				5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.58	0.86		1.00	1.00		0.71
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				62	521	98	98	500	0	0	141	212
Adj No. of Lanes				0	3	0	1	1	0	0	1	1
Peak Hour Factor				0.96	0.96	0.96	0.82	0.82	0.82	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				202	1767	315	396	714	0	0	714	430
Arrive On Green				0.48	0.48	0.47	0.77	0.77	0.00	0.00	0.13	0.13
Sat Flow, veh/h				417	3656	652	876	1863	0	0	1863	1122
Grp Volume(v), veh/h				274	229	179	98	500	0	0	141	212
Grp Sat Flow(s),veh/h/ln				1842	1695	1189	876	1863	0	0	1863	1122
Q Serve(g_s), s				5.4	4.8	5.6	3.2	8.1	0.0	0.0	4.1	10.6
Cycle Q Clear(g_c), s				5.4	4.8	5.6	7.3	8.1	0.0	0.0	4.1	10.6
Prop In Lane				0.23		0.55	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				890	819	574	396	714	0	0	714	430
V/C Ratio(X)				0.31	0.28	0.31	0.25	0.70	0.00	0.00	0.20	0.49
Avail Cap(c_a), veh/h				890	819	574	396	714	0	0	714	430
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				9.4	9.3	9.6	6.1	5.3	0.0	0.0	17.9	20.8
Incr Delay (d2), s/veh				0.9	0.8	1.4	1.5	5.7	0.0	0.0	0.6	4.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.0	2.4	2.0	0.9	4.7	0.0	0.0	2.2	3.8
LnGrp Delay(d),s/veh				10.3	10.1	11.0	7.6	10.9	0.0	0.0	18.6	24.8
LnGrp LOS				B	B	B	A	B			B	C
Approach Vol, veh/h					681			598			353	
Approach Delay, s/veh					10.4			10.4			22.3	
Approach LOS					B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		28.0		22.0				22.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary		
HCM 2010 Ctrl Delay		13.0
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	50	480	60	70	170	0	0	70	100
Future Volume (veh/h)	0	0	0	50	480	60	70	170	0	0	70	100
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.43	0.88		1.00	1.00		0.83
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1863
Adj Flow Rate, veh/h				53	511	58	89	215	0	0	80	98
Adj No. of Lanes				0	3	0	0	1	0	0	1	1
Peak Hour Factor				0.94	0.94	0.94	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				130	1294	137	280	637	0	0	993	701
Arrive On Green				0.11	0.11	0.10	0.53	0.53	0.00	0.00	0.53	0.53
Sat Flow, veh/h				389	3883	410	379	1195	0	0	1863	1315
Grp Volume(v), veh/h				251	209	162	304	0	0	0	80	98
Grp Sat Flow(s),veh/h/ln				1843	1695	1144	1574	0	0	0	1863	1315
Q Serve(g_s), s				7.6	6.9	7.9	0.8	0.0	0.0	0.0	1.3	2.3
Cycle Q Clear(g_c), s				7.6	6.9	7.9	5.6	0.0	0.0	0.0	1.3	2.3
Prop In Lane				0.21		0.36	0.29		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				614	565	381	917	0	0	0	993	701
V/C Ratio(X)				0.41	0.37	0.42	0.33	0.00	0.00	0.00	0.08	0.14
Avail Cap(c_a), veh/h				614	565	381	917	0	0	0	993	701
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				21.2	20.9	21.4	7.8	0.0	0.0	0.0	6.8	7.1
Incr Delay (d2), s/veh				2.0	1.9	3.4	1.0	0.0	0.0	0.0	0.2	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.2	3.5	2.9	3.0	0.0	0.0	0.0	0.7	0.9
LnGrp Delay(d),s/veh				23.2	22.7	24.8	8.8	0.0	0.0	0.0	7.0	7.5
LnGrp LOS				C	C	C	A				A	A
Approach Vol, veh/h					622			304			178	
Approach Delay, s/veh					23.5			8.8			7.3	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		36.0				36.0		24.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		31.0				31.0		19.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		16.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	80	440	60	90	330	0	0	120	70
Future Volume (veh/h)	0	0	0	80	440	60	90	330	0	0	120	70
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.86	0.92		1.00	1.00		0.84
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				83	458	56	103	379	0	0	156	74
Adj No. of Lanes				0	3	0	0	1	0	0	1	0
Peak Hour Factor				0.96	0.96	0.96	0.87	0.87	0.87	0.77	0.77	0.77
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				320	1878	231	176	531	0	0	448	212
Arrive On Green				0.47	0.47	0.45	0.40	0.40	0.00	0.00	0.40	0.38
Sat Flow, veh/h				686	4023	494	258	1329	0	0	1120	531
Grp Volume(v), veh/h				221	185	190	482	0	0	0	0	230
Grp Sat Flow(s),veh/h/ln				1828	1695	1680	1587	0	0	0	0	1651
Q Serve(g_s), s				4.4	3.9	4.1	9.9	0.0	0.0	0.0	0.0	5.9
Cycle Q Clear(g_c), s				4.4	3.9	4.1	15.8	0.0	0.0	0.0	0.0	5.9
Prop In Lane				0.38		0.29	0.21		0.00	0.00		0.32
Lane Grp Cap(c), veh/h				853	791	784	708	0	0	0	0	660
V/C Ratio(X)				0.26	0.23	0.24	0.68	0.00	0.00	0.00	0.00	0.35
Avail Cap(c_a), veh/h				853	791	784	708	0	0	0	0	660
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				9.7	9.6	9.7	15.4	0.0	0.0	0.0	0.0	12.7
Incr Delay (d2), s/veh				0.7	0.7	0.7	5.2	0.0	0.0	0.0	0.0	1.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.4	2.0	2.0	7.9	0.0	0.0	0.0	0.0	2.9
LnGrp Delay(d),s/veh				10.4	10.3	10.5	20.7	0.0	0.0	0.0	0.0	14.1
LnGrp LOS				B	B	B	C					B
Approach Vol, veh/h					597			482			230	
Approach Delay, s/veh					10.4			20.7			14.1	
Approach LOS					B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.0		32.0		28.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		23.0		27.0		23.0		
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		
Green Ext Time (p_c), s		0.0		0.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		14.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	610	330	40	0	0	0	0	400	50	110	360	0
Future Volume (veh/h)	610	330	40	0	0	0	0	400	50	110	360	0
Number	5	2	12				3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	687	284	34				0	488	39	124	404	0
Adj No. of Lanes	2	1	0				0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95				0.82	0.82	0.82	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1558	711	85				0	726	58	291	796	0
Arrive On Green	0.44	0.44	0.44				0.00	0.43	0.41	0.43	0.43	0.00
Sat Flow, veh/h	3548	1618	194				0	1698	136	869	1863	0
Grp Volume(v), veh/h	687	0	318				0	0	527	124	404	0
Grp Sat Flow(s),veh/h/ln	1774	0	1812				0	0	1833	869	1863	0
Q Serve(g_s), s	8.1	0.0	7.2				0.0	0.0	13.9	8.0	9.5	0.0
Cycle Q Clear(g_c), s	8.1	0.0	7.2				0.0	0.0	13.9	21.9	9.5	0.0
Prop In Lane	1.00		0.11				0.00		0.07	1.00		0.00
Lane Grp Cap(c), veh/h	1558	0	796				0	0	784	291	796	0
V/C Ratio(X)	0.44	0.00	0.40				0.00	0.00	0.67	0.43	0.51	0.00
Avail Cap(c_a), veh/h	1558	0	796				0	0	794	296	807	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.7	0.0	11.4				0.0	0.0	13.8	22.6	12.6	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.5				0.0	0.0	2.2	1.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	3.9				0.0	0.0	7.4	2.0	4.9	0.0
LnGrp Delay(d),s/veh	12.6	0.0	12.9				0.0	0.0	16.0	23.6	13.1	0.0
LnGrp LOS	B		B						B	C	B	
Approach Vol, veh/h		1005						527			528	
Approach Delay, s/veh		12.7						16.0			15.5	
Approach LOS		B						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		30.4		29.6				29.6
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		25.0		25.0				25.0
Max Q Clear Time (g_c+I1), s		10.1		23.9				15.9
Green Ext Time (p_c), s		5.2		0.7				4.8

Intersection Summary	
HCM 2010 Ctrl Delay	14.3
HCM 2010 LOS	B

Notes

Intersection	
Intersection Delay, s/veh	18
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Vol, veh/h	0	0	0	0	0	10	160	20	0	10	390	0	0	0	260	170
Future Vol, veh/h	0	0	0	0	0	10	160	20	0	10	390	0	0	0	260	170
Peak Hour Factor	0.92	1.00	1.00	1.00	0.92	0.69	0.69	0.69	0.92	0.88	0.88	0.88	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	14	232	29	0	11	443	0	0	0	310	202
Number of Lanes	0	0	0	0	0	0	2	0	0	0	1	0	0	0	1	1

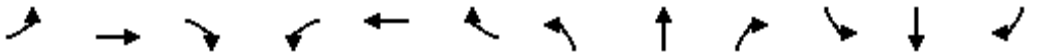
Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	12.2	26.7	13.5
HCM LOS	B	D	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	3%	11%	0%	0%	0%
Vol Thru, %	97%	89%	80%	100%	0%
Vol Right, %	0%	0%	20%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	400	90	100	260	170
LT Vol	10	10	0	0	0
Through Vol	390	80	80	260	0
RT Vol	0	0	20	0	170
Lane Flow Rate	455	130	145	310	202
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.77	0.255	0.276	0.524	0.303
Departure Headway (Hd)	6.101	7.051	6.852	6.097	5.385
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	591	509	523	591	666
Service Time	4.143	4.806	4.606	3.843	3.131
HCM Lane V/C Ratio	0.77	0.255	0.277	0.525	0.303
HCM Control Delay	26.7	12.2	12.2	15.4	10.5
HCM Lane LOS	D	B	B	C	B
HCM 95th-tile Q	7.1	1	1.1	3	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	80	10	120	20	10	10	440	220	40	350	10
Future Volume (veh/h)	10	80	10	120	20	10	10	440	220	40	350	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.96	0.99		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	11	91	2	135	22	5	12	524	225	47	407	12
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.84	0.84	0.84	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	303	6	323	42	8	704	882	379	458	1297	38
Arrive On Green	0.17	0.17	0.16	0.17	0.17	0.16	0.69	0.69	0.68	0.69	0.69	0.68
Sat Flow, veh/h	102	1753	36	1234	244	47	960	1272	546	710	1870	55
Grp Volume(v), veh/h	104	0	0	162	0	0	12	0	749	47	0	419
Grp Sat Flow(s),veh/h/ln	1892	0	0	1525	0	0	960	0	1818	710	0	1925
Q Serve(g_s), s	0.0	0.0	0.0	2.6	0.0	0.0	0.3	0.0	13.0	2.2	0.0	5.1
Cycle Q Clear(g_c), s	2.8	0.0	0.0	5.5	0.0	0.0	5.4	0.0	13.0	15.2	0.0	5.1
Prop In Lane	0.11		0.02	0.83		0.03	1.00		0.30	1.00		0.03
Lane Grp Cap(c), veh/h	393	0	0	374	0	0	704	0	1261	458	0	1336
V/C Ratio(X)	0.26	0.00	0.00	0.43	0.00	0.00	0.02	0.00	0.59	0.10	0.00	0.31
Avail Cap(c_a), veh/h	783	0	0	669	0	0	704	0	1261	458	0	1336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	0.0	0.0	22.6	0.0	0.0	4.7	0.0	4.9	8.8	0.0	3.6
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.8	0.0	0.0	0.0	0.0	2.1	0.4	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	2.6	0.0	0.0	0.1	0.0	7.0	0.5	0.0	2.9
LnGrp Delay(d),s/veh	22.1	0.0	0.0	23.4	0.0	0.0	4.7	0.0	6.9	9.2	0.0	4.2
LnGrp LOS	C			C			A		A	A		A
Approach Vol, veh/h		104			162			761			466	
Approach Delay, s/veh		22.1			23.4			6.9			4.7	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		45.6		14.4		45.6		14.4
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		28.0		22.0		22.0		22.0
Max Q Clear Time (g_c+I1), s		15.0		4.8		17.2		7.5
Green Ext Time (p_c), s		7.3		1.0		3.3		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	9.1
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	310	100	0	0	0	170	0	940	0	500	260
Future Volume (vph)	0	310	100	0	0	0	170	0	940	0	500	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.5	3.5				4.0		4.0		4.0	3.5
Lane Util. Factor		0.95	1.00				1.00		1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.97				1.00		0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00				1.00		1.00		1.00	1.00
Frt		1.00	0.85				1.00		0.85		1.00	0.85
Flt Protected		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (prot)		3539	1533				1770		1563		1863	1551
Flt Permitted		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (perm)		3539	1533				1770		1563		1863	1551
Peak-hour factor, PHF	0.94	0.94	0.94	1.00	1.00	1.00	0.83	0.83	0.83	0.89	0.89	0.89
Adj. Flow (vph)	0	330	106	0	0	0	205	0	1133	0	562	292
RTOR Reduction (vph)	0	0	71	0	0	0	0	0	30	0	0	111
Lane Group Flow (vph)	0	330	35	0	0	0	205	0	1103	0	562	181
Confl. Peds. (#/hr)			6			6			1			11
Confl. Bikes (#/hr)												15
Turn Type		NA	Perm				Prot		Perm		NA	custom
Protected Phases		2					3				4	2
Permitted Phases			2						8			4
Actuated Green, G (s)		12.8	12.8				13.1		43.7		26.4	39.2
Effective Green, g (s)		13.3	13.3				13.3		43.9		26.6	40.2
Actuated g/C Ratio		0.21	0.21				0.21		0.68		0.41	0.62
Clearance Time (s)		4.0	4.0				4.2		4.2		4.2	4.0
Vehicle Extension (s)		3.0	3.0				3.0		3.0		3.0	3.0
Lane Grp Cap (vph)		727	315				363		1060		765	963
v/s Ratio Prot		c0.09					0.12				0.30	0.04
v/s Ratio Perm			0.02						c0.71			0.08
v/c Ratio		0.45	0.11				0.56		1.04		0.73	0.19
Uniform Delay, d1		22.5	20.9				23.1		10.4		16.1	5.3
Progression Factor		1.00	1.00				1.00		1.00		1.00	1.00
Incremental Delay, d2		0.5	0.2				2.0		38.8		3.7	0.1
Delay (s)		23.0	21.0				25.1		49.2		19.8	5.3
Level of Service		C	C				C		D		B	A
Approach Delay (s)		22.5			0.0			45.5			14.8	
Approach LOS		C			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	64.7	Sum of lost time (s)	11.5
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	5	10	60	5	10	10	910	20	5	600	10
Future Volume (veh/h)	20	5	10	60	5	10	10	910	20	5	600	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	24	6	12	83	7	14	11	1046	23	6	714	12
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.72	0.72	0.72	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	260	74	97	428	32	349	408	1153	25	190	1160	19
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	716	315	412	1344	135	1492	725	1814	40	526	1825	31
Grp Volume(v), veh/h	42	0	0	90	0	14	11	0	1069	6	0	726
Grp Sat Flow(s),veh/h/ln	1443	0	0	1479	0	1492	725	0	1854	526	0	1856
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.0	30.4	0.6	0.0	14.4
Cycle Q Clear(g_c), s	2.5	0.0	0.0	2.5	0.0	0.4	14.9	0.0	30.4	31.0	0.0	14.4
Prop In Lane	0.57		0.29	0.92		1.00	1.00		0.02	1.00		0.02
Lane Grp Cap(c), veh/h	430	0	0	459	0	349	408	0	1178	190	0	1179
V/C Ratio(X)	0.10	0.00	0.00	0.20	0.00	0.04	0.03	0.00	0.91	0.03	0.00	0.62
Avail Cap(c_a), veh/h	520	0	0	567	0	462	421	0	1210	200	0	1211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	0.0	18.9	0.0	18.1	11.2	0.0	9.6	23.0	0.0	6.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	9.9	0.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	1.3	0.0	0.2	0.1	0.0	18.4	0.1	0.0	7.6
LnGrp Delay(d),s/veh	18.5	0.0	0.0	19.1	0.0	18.2	11.2	0.0	19.5	23.1	0.0	7.6
LnGrp LOS	B			B		B	B		B	C		A
Approach Vol, veh/h		42			104			1080			732	
Approach Delay, s/veh		18.5			19.0			19.4			7.7	
Approach LOS		B			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		42.9		18.4		42.9		18.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		18.0		40.0		19.0
Max Q Clear Time (g_c+I1), s		32.4		4.5		33.0		4.5
Green Ext Time (p_c), s		6.4		0.6		5.9		0.6

Intersection Summary		
HCM 2010 Ctrl Delay		15.0
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	240	330	550	110	20	360	930	690	40	690	40
Future Volume (veh/h)	60	240	330	550	110	20	360	930	690	40	690	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		1.00	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	65	258	220	777	0	0	414	1069	536	48	821	38
Adj No. of Lanes	1	1	1	2	1	0	2	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.83	0.83	0.83	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	331	512	746	392	0	529	1302	889	60	853	39
Arrive On Green	0.18	0.18	0.18	0.21	0.00	0.00	0.15	0.37	0.37	0.03	0.25	0.25
Sat Flow, veh/h	1774	1863	1510	3548	1863	0	3442	3539	1511	1774	3441	159
Grp Volume(v), veh/h	65	258	220	777	0	0	414	1069	536	48	422	437
Grp Sat Flow(s),veh/h/ln	1774	1863	1510	1774	1863	0	1721	1770	1511	1774	1770	1830
Q Serve(g_s), s	2.4	10.1	8.7	16.0	0.0	0.0	8.8	20.8	17.7	2.0	17.9	17.9
Cycle Q Clear(g_c), s	2.4	10.1	8.7	16.0	0.0	0.0	8.8	20.8	17.7	2.0	17.9	17.9
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	315	331	512	746	392	0	529	1302	889	60	439	454
V/C Ratio(X)	0.21	0.78	0.43	1.04	0.00	0.00	0.78	0.82	0.60	0.80	0.96	0.96
Avail Cap(c_a), veh/h	373	392	561	746	392	0	723	1302	889	93	439	454
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	29.9	19.9	30.1	0.0	0.0	31.0	21.8	10.5	36.5	28.3	28.3
Incr Delay (d2), s/veh	0.3	8.2	0.6	44.3	0.0	0.0	3.9	5.9	3.0	22.7	33.2	32.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	5.9	3.7	12.4	0.0	0.0	4.5	11.2	11.8	1.4	12.7	13.1
LnGrp Delay(d),s/veh	27.0	38.1	20.5	74.4	0.0	0.0	34.8	27.7	13.5	59.2	61.5	60.9
LnGrp LOS	C	D	C	F			C	C	B	E	E	E
Approach Vol, veh/h		543			777			2019			907	
Approach Delay, s/veh		29.6			74.4			25.4			61.1	
Approach LOS		C			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	32.0		17.5	15.7	22.9		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	28.0		16.0	16.0	16.0		16.0
Max Q Clear Time (g_c+I1), s	4.0	22.8		12.1	10.8	19.9		18.0
Green Ext Time (p_c), s	0.0	4.7		1.0	0.9	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	42.5
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1030	90	140	770	10	510	10	190	20	10	10
Future Volume (veh/h)	20	1030	90	140	770	10	510	10	190	20	10	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	1096	85	151	828	11	623	0	194	22	25	6
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.93	0.93	0.93	0.83	0.83	0.83	0.66	0.66	0.66
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	32	1516	117	183	2075	28	839	0	538	305	320	271
Arrive On Green	0.02	0.32	0.32	0.10	0.40	0.40	0.24	0.00	0.24	0.17	0.17	0.17
Sat Flow, veh/h	1774	4799	372	1774	5170	69	3548	0	1583	1774	1863	1578
Grp Volume(v), veh/h	21	774	407	151	543	296	623	0	194	22	25	6
Grp Sat Flow(s),veh/h/ln	1774	1695	1780	1774	1695	1848	1774	0	1583	1774	1863	1578
Q Serve(g_s), s	1.1	18.8	18.9	7.8	10.6	10.6	15.1	0.0	8.6	1.0	1.0	0.3
Cycle Q Clear(g_c), s	1.1	18.8	18.9	7.8	10.6	10.6	15.1	0.0	8.6	1.0	1.0	0.3
Prop In Lane	1.00		0.21	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	32	1071	563	183	1361	742	839	0	538	305	320	271
V/C Ratio(X)	0.66	0.72	0.72	0.82	0.40	0.40	0.74	0.00	0.36	0.07	0.08	0.02
Avail Cap(c_a), veh/h	95	1071	563	210	1361	742	839	0	538	305	320	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	28.2	28.2	40.9	19.8	19.8	32.9	0.0	23.1	32.3	32.3	32.0
Incr Delay (d2), s/veh	20.6	4.2	7.9	20.4	0.9	1.6	5.9	0.0	1.9	0.5	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	9.4	10.5	4.9	5.1	5.8	8.0	0.0	4.0	0.5	0.6	0.1
LnGrp Delay(d),s/veh	66.0	32.4	36.1	61.2	20.7	21.5	38.8	0.0	25.0	32.7	32.8	32.1
LnGrp LOS	E	C	D	E	C	C	D		C	C	C	C
Approach Vol, veh/h		1202			990			817			53	
Approach Delay, s/veh		34.3			27.1			35.5			32.7	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.6	33.4		20.0	5.7	41.3		26.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	28.0		16.0	5.0	34.0		22.0
Max Q Clear Time (g_c+I1), s	9.8	20.9		3.0	3.1	12.6		17.1
Green Ext Time (p_c), s	0.1	5.8		0.1	0.0	13.7		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	32.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	440	790	0	0	830	170	100	5	90	0	0	0
Future Volume (veh/h)	440	790	0	0	830	170	100	5	90	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900			
Adj Flow Rate, veh/h	454	814	0	0	954	134	110	5	48			
Adj No. of Lanes	2	2	0	0	2	0	1	1	0			
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.91	0.91	0.91			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	1036	2930	0	0	1505	211	153	13	123			
Arrive On Green	0.30	0.83	0.00	0.00	0.48	0.48	0.09	0.09	0.09			
Sat Flow, veh/h	3442	3632	0	0	3203	437	1774	149	1430			
Grp Volume(v), veh/h	454	814	0	0	543	545	110	0	53			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1777	1774	0	1579			
Q Serve(g_s), s	9.9	4.8	0.0	0.0	21.2	21.3	5.6	0.0	3.0			
Cycle Q Clear(g_c), s	9.9	4.8	0.0	0.0	21.2	21.3	5.6	0.0	3.0			
Prop In Lane	1.00		0.00	0.00		0.25	1.00		0.91			
Lane Grp Cap(c), veh/h	1036	2930	0	0	856	860	153	0	136			
V/C Ratio(X)	0.44	0.28	0.00	0.00	0.63	0.63	0.72	0.00	0.39			
Avail Cap(c_a), veh/h	1036	2930	0	0	856	860	305	0	272			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.75	0.75	1.00	0.00	1.00			
Uniform Delay (d), s/veh	26.2	1.8	0.0	0.0	17.9	17.9	41.4	0.0	40.2			
Incr Delay (d2), s/veh	0.3	0.2	0.0	0.0	2.7	2.7	6.2	0.0	1.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.7	2.4	0.0	0.0	10.9	10.9	3.0	0.0	1.3			
LnGrp Delay(d),s/veh	26.5	2.0	0.0	0.0	20.5	20.5	47.7	0.0	42.0			
LnGrp LOS	C	A			C	C	D		D			
Approach Vol, veh/h		1268			1088			163				
Approach Delay, s/veh		10.8			20.5			45.8				
Approach LOS		B			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		81.0			32.0	49.0		12.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		69.0			20.0	45.0		16.0
Max Q Clear Time (g_c+I1), s		6.8			11.9	23.3		7.6
Green Ext Time (p_c), s		10.1			4.5	7.4		0.4

Intersection Summary		
HCM 2010 Ctrl Delay		17.3
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	110	0	210	50	1570	0	0	1020	730
Future Volume (veh/h)	0	0	0	110	0	210	50	1570	0	0	1020	730
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				131	0	177	60	1869	0	0	1097	785
Adj No. of Lanes				0	1	1	1	2	0	0	2	1
Peak Hour Factor				0.84	0.84	0.84	0.84	0.84	0.84	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				695	0	620	1064	3598	0	0	1277	554
Arrive On Green				0.39	0.00	0.39	0.60	1.00	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	3632	1535
Grp Volume(v), veh/h				131	0	177	60	1869	0	0	1097	785
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1770	1535
Q Serve(g_s), s				4.7	0.0	7.4	1.4	0.0	0.0	0.0	27.8	35.0
Cycle Q Clear(g_c), s				4.7	0.0	7.4	1.4	0.0	0.0	0.0	27.8	35.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				695	0	620	1064	3598	0	0	1277	554
V/C Ratio(X)				0.19	0.00	0.29	0.06	0.52	0.00	0.00	0.86	1.42
Avail Cap(c_a), veh/h				695	0	620	1064	3598	0	0	1277	554
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.82	0.82	0.00	0.00	0.84	0.84
Uniform Delay (d), s/veh				19.4	0.0	20.2	8.0	0.0	0.0	0.0	28.7	31.0
Incr Delay (d2), s/veh				0.6	0.0	1.2	0.1	0.4	0.0	0.0	6.5	196.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.4	0.0	3.4	0.7	0.2	0.0	0.0	14.7	45.0
LnGrp Delay(d),s/veh				20.0	0.0	21.4	8.1	0.4	0.0	0.0	35.3	227.7
LnGrp LOS				B		C	A	A			D	F
Approach Vol, veh/h					308			1929			1882	
Approach Delay, s/veh					20.8			0.7			115.5	
Approach LOS					C			A			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	65.0	39.0				104.0		42.0
Change Period (Y+Rc), s	4.9	* 4.9				4.9		4.2
Max Green Setting (Gmax), s	12.5	* 34				50.1		37.8
Max Q Clear Time (g_c+I1), s	13.4	37.0				2.0		9.4
Green Ext Time (p_c), s	7.6	0.0				26.3		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	54.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	20	30	420	20	470	50	1660	340	410	1180	10
Future Volume (veh/h)	40	20	30	420	20	470	50	1660	340	410	1180	10
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	59	29	10	537	0	324	59	1953	298	441	1269	11
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	2	2	0
Peak Hour Factor	0.68	0.68	0.68	0.81	0.81	0.81	0.85	0.85	0.85	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	42	21	55	835	0	493	78	1618	1075	302	1769	15
Arrive On Green	0.04	0.04	0.04	0.24	0.00	0.24	0.04	0.46	0.46	0.09	0.49	0.49
Sat Flow, veh/h	1208	594	1570	3548	0	1502	1774	3539	1536	3442	3595	31
Grp Volume(v), veh/h	88	0	10	537	0	324	59	1953	298	441	625	655
Grp Sat Flow(s),veh/h/ln	1802	0	1570	1774	0	1502	1774	1770	1536	1721	1770	1856
Q Serve(g_s), s	4.0	0.0	0.7	15.5	0.0	21.2	3.7	52.0	8.4	10.0	31.5	31.5
Cycle Q Clear(g_c), s	4.0	0.0	0.7	15.5	0.0	21.2	3.7	52.0	8.4	10.0	31.5	31.5
Prop In Lane	0.67		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	63	0	55	835	0	493	78	1618	1075	302	871	914
V/C Ratio(X)	1.39	0.00	0.18	0.64	0.00	0.66	0.76	1.21	0.28	1.46	0.72	0.72
Avail Cap(c_a), veh/h	63	0	55	904	0	522	94	1618	1075	302	871	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.9	0.0	53.3	39.2	0.0	33.2	53.8	30.9	6.7	51.9	22.7	22.7
Incr Delay (d2), s/veh	246.9	0.0	1.6	1.4	0.0	2.8	24.6	99.4	0.6	223.5	5.0	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.3	7.8	0.0	9.1	2.4	47.5	6.5	14.1	16.5	17.2
LnGrp Delay(d),s/veh	301.8	0.0	54.9	40.6	0.0	36.0	78.4	130.3	7.3	275.4	27.7	27.5
LnGrp LOS	F		D	D		D	E	F	A	F	C	C
Approach Vol, veh/h		98			861			2310			1721	
Approach Delay, s/veh		276.6			38.9			113.1			91.1	
Approach LOS		F			D			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	62.0		31.8	15.0	58.0		9.0
Change Period (Y+Rc), s	6.0	* 6		5.0	5.0	6.0		5.0
Max Green Setting (Gmax), s	6.0	* 56		29.0	10.0	52.0		4.0
Max Q Clear Time (g_c+I1), s	5.7	33.5		23.2	12.0	54.0		6.0
Green Ext Time (p_c), s	0.2	9.5		2.1	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	95.9
HCM 2010 LOS	F

Notes

Intersection	
Int Delay, s/veh	53.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	30	70	1900	1620	20
Future Vol, veh/h	20	30	70	1900	1620	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	180	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	88	88	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	45	80	2159	1976	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3227	1000	2000	0	-	0
Stage 1	1988	-	-	-	-	-
Stage 2	1239	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 7	241	283	-	-	-
Stage 1	92	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 5	241	283	-	-	-
Mov Cap-2 Maneuver	~ 5	-	-	-	-	-
Stage 1	92	-	-	-	-	-
Stage 2	169	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 3010.9	0.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	283	-	12	-	-
HCM Lane V/C Ratio	0.281	-	6.313	-	-
HCM Control Delay (s)	22.6	-	$ 3010.9	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	1.1	-	10.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	15.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	100	1970	170	90	1660
Future Vol, veh/h	60	100	1970	170	90	1660
Conflicting Peds, #/hr	0	0	0	14	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	93	93	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	85	141	2118	183	101	1865

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3359	1165	0	0	2315	0
Stage 1	2224	-	-	-	-	-
Stage 2	1135	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 6	187	-	-	213	-
Stage 1	~ 68	-	-	-	-	-
Stage 2	269	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 3	185	-	-	213	-
Mov Cap-2 Maneuver	~ 43	-	-	-	-	-
Stage 1	~ 67	-	-	-	-	-
Stage 2	141	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	288.1	0	1.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	43	185	213	-
HCM Lane V/C Ratio	-	-	1.965	0.761	0.475	-
HCM Control Delay (s)	-	-	$ 654.1	68.5	36.3	-
HCM Lane LOS	-	-	F	F	E	-
HCM 95th %tile Q(veh)	-	-	8.8	5	2.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Appendix F.2

Intersection Bicycle LOS Worksheets for 2035 No Project Conditions

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	91	6	12	8
Total Flow Rate (veh/h)	418	78	1949	2082
Effct. Green for Bike (s)	16.5	10.1	70.4	81.5
Cross Street Width (ft)	82.0	73.9	69.4	52.1
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	206	126	880	1019
Bicycle Delay (s/bike)	67.4	70.4	25.2	19.3
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.16	1.75	4.23	4.07
Bicycle LOS	C	A	D	D

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	74	9	17	0
Total Flow Rate (veh/h)	1024	544	1768	1796
Effct. Green for Bike (s)	16.8	12.5	21.1	20.1
Cross Street Width (ft)	87.8	85.7	63.1	61.6
Through Lanes Number	1	2	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	517	385	649	618
Bicycle Delay (s/bike)	18.6	21.3	15.0	15.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.52	2.25	3.98	2.91
Bicycle LOS	D	B	D	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	23	5	52	1
Total Flow Rate (veh/h)	1027	123	1169	184
Effct. Green for Bike (s)	25.3	9.0	37.0	15.6
Cross Street Width (ft)	60.2	71.4	36.3	60.7
Through Lanes Number	1	1	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	359	128	525	221
Bicycle Delay (s/bike)	48.0	61.9	39.4	55.8
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	4.18	2.85	3.08	2.79
Bicycle LOS	D	C	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	26	6
Total Flow Rate (veh/h)	644	39	443	267
Effct. Green for Bike (s)	16.6	5.7	10.2	10.2
Cross Street Width (ft)	58.5	61.2	24.0	12.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	553	190	340	340
Bicycle Delay (s/bike)	15.7	24.6	20.9	20.7
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.52	2.56	1.01	0.68
Bicycle LOS	D	B	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	6	0
Total Flow Rate (veh/h)	617	598	26	285
Effct. Green for Bike (s)	42.4	22.3	8.9	8.9
Cross Street Width (ft)	55.3	62.1	49.9	36.3
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	725	381	152	152
Bicycle Delay (s/bike)	23.8	38.3	50.1	49.9
Bicycle Compliance	Fair	Poor	Poor	Poor
Bicycle LOS Score	3.42	2.42	2.37	2.59
Bicycle LOS	C	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	0	22	3
Total Flow Rate (veh/h)	54	125	1891	1769
Effct. Green for Bike (s)	10.1	10.7	43.4	40.3
Cross Street Width (ft)	72.8	72.5	38.1	38.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	224	238	964	896
Bicycle Delay (s/bike)	35.6	34.9	12.2	13.7
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.76	2.88	2.42	2.32
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	24	6
Total Flow Rate (veh/h)	561	91	1781	1618
Effct. Green for Bike (s)	16.0	16.0	31.0	31.0
Cross Street Width (ft)	59.9	72.0	23.9	26.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	582	582	1127	1127
Bicycle Delay (s/bike)	13.8	13.8	5.3	5.3
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	3.40	2.81	2.32	2.23
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	19	6
Total Flow Rate (veh/h)	156	929	730	1585
Effct. Green for Bike (s)	18.1	18.1	16.1	16.1
Cross Street Width (ft)	59.9	61.1	35.9	23.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	724	724	644	644
Bicycle Delay (s/bike)	10.2	10.2	11.6	11.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.73	4.03	1.64	2.16
Bicycle LOS	B	D	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	15	1	20	5
Total Flow Rate (veh/h)	67	195	720	1424
Effct. Green for Bike (s)	9.5	9.5	40.5	40.5
Cross Street Width (ft)	60.1	59.9	32.9	35.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	317	317	1350	1350
Bicycle Delay (s/bike)	21.4	21.3	3.2	3.2
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.59	2.80	1.58	2.21
Bicycle LOS	B	C	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	22	6
Total Flow Rate (veh/h)	159	126	620	1282
Effct. Green for Bike (s)	9.7	9.7	47.3	32.0
Cross Street Width (ft)	61.3	60.1	36.1	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	285	285	1391	941
Bicycle Delay (s/bike)	25.0	25.0	3.2	9.6
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.76	2.69	1.55	2.28
Bicycle LOS	C	B	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	3	6	1
Total Flow Rate (veh/h)	126	399	595	1250
Effct. Green for Bike (s)	14.0	14.0	27.8	34.4
Cross Street Width (ft)	61.2	60.9	48.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	467	467	927	1147
Bicycle Delay (s/bike)	17.7	17.7	8.7	5.5
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.70	3.15	1.71	2.25
Bicycle LOS	B	C	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	4	22	6
Total Flow Rate (veh/h)	0	295	568	1127
Effct. Green for Bike (s)	0.0	8.3	41.7	41.7
Cross Street Width (ft)	48.1	60.0	36.0	38.1
Through Lanes Number	0	3	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	277	1390	1390
Bicycle Delay (s/bike)	0.0	22.3	2.8	2.8
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.64	1.51	2.93
Bicycle LOS		B	A	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	9	4	1	4
Total Flow Rate (veh/h)	314	646	565	261
Effct. Green for Bike (s)	10.6	24.3	15.8	15.8
Cross Street Width (ft)	35.9	38.6	60.1	47.9
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	283	648	421	421
Bicycle Delay (s/bike)	27.8	17.2	23.4	23.4
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.63	3.22	2.34	2.72
Bicycle LOS	B	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	1	26	10
Total Flow Rate (veh/h)	433	611	584	325
Effct. Green for Bike (s)	29.1	36.7	24.1	24.1
Cross Street Width (ft)	38.0	38.8	48.2	48.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	710	895	588	588
Bicycle Delay (s/bike)	17.1	12.5	20.7	20.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.86	3.16	1.97	1.55
Bicycle LOS	C	C	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	8	1	12
Total Flow Rate (veh/h)	0	626	284	360
Effct. Green for Bike (s)	0.0	28.0	22.0	22.0
Cross Street Width (ft)	35.9	48.1	36.1	37.4
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	933	733	733
Bicycle Delay (s/bike)	0.0	8.6	12.0	12.1
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.64	2.58	2.73
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	9	8	5
Total Flow Rate (veh/h)	0	578	219	197
Effct. Green for Bike (s)	0.0	19.0	31.0	31.0
Cross Street Width (ft)	24.0	36.0	36.0	38.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	633	1033	1033
Bicycle Delay (s/bike)	0.0	14.1	7.0	7.0
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.43	2.47	2.47
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	6	3	4
Total Flow Rate (veh/h)	0	686	283	221
Effct. Green for Bike (s)	0.0	27.0	23.0	23.0
Cross Street Width (ft)	23.9	24.1	36.0	36.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	900	767	767
Bicycle Delay (s/bike)	0.0	9.1	11.4	11.4
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.31	2.58	2.48
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	15	0	5	0
Total Flow Rate (veh/h)	749	0	248	667
Effct. Green for Bike (s)	28.9	0.0	21.1	21.1
Cross Street Width (ft)	34.7	48.2	38.5	35.9
Through Lanes Number	2	0	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	963	0	703	703
Bicycle Delay (s/bike)	8.1	0.0	12.6	12.6
Bicycle Compliance	Good		Fair	Fair
Bicycle LOS Score	1.42	0.00	1.49	2.14
Bicycle LOS	A		A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	0	4	6
Total Flow Rate (veh/h)	64	270	712	408
Effct. Green for Bike (s)	16.0	16.0	16.0	16.0
Cross Street Width (ft)	38.0	38.0	26.0	26.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	14.0	14.0	14.0	14.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	800	800	800	800
Bicycle Delay (s/bike)	7.2	7.2	7.2	7.2
Bicycle Compliance	Good	Good	Good	Good
Bicycle LOS Score	1.82	2.16	2.70	2.20
Bicycle LOS	A	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	12
Total Flow Rate (veh/h)	1072	0	666	690
Effct. Green for Bike (s)	25.4	0.0	0.0	28.5
Cross Street Width (ft)	37.7	25.0	24.1	51.5
Through Lanes Number	2	0	0	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	470	0	0	528
Bicycle Delay (s/bike)	31.6	0.0	0.0	29.4
Bicycle Compliance	Poor			Fair
Bicycle LOS Score	3.02	0.00	0.00	2.63
Bicycle LOS	C			B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	9	3	9	8
Total Flow Rate (veh/h)	64	87	831	884
Effct. Green for Bike (s)	10.9	16.7	37.8	37.8
Cross Street Width (ft)	39.5	37.8	36.2	30.8
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	16.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	325	499	1128	1128
Bicycle Delay (s/bike)	23.6	18.9	6.4	6.4
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.41	1.21	2.41	3.49
Bicycle LOS	A	A	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	15	5	6	4
Total Flow Rate (veh/h)	742	739	1236	943
Effct. Green for Bike (s)	27.0	30.0	53.8	38.7
Cross Street Width (ft)	87.2	73.8	37.1	62.5
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	397	441	791	569
Bicycle Delay (s/bike)	44.0	41.4	24.9	34.9
Bicycle Compliance	Poor	Poor	Fair	Poor
Bicycle LOS Score	4.12	3.91	2.07	2.22
Bicycle LOS	D	D	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	13	3	1	0
Total Flow Rate (veh/h)	804	640	1181	48
Effct. Green for Bike (s)	27.0	41.4	20.0	16.0
Cross Street Width (ft)	48.7	48.2	84.8	86.6
Through Lanes Number	3	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	581	890	430	344
Bicycle Delay (s/bike)	23.6	14.3	28.7	31.9
Bicycle Compliance	Fair	Fair	Fair	Poor
Bicycle LOS Score	1.67	1.58	4.81	2.96
Bicycle LOS	A	A	E	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	12	6	0	0
Total Flow Rate (veh/h)	1455	839	210	0
Effct. Green for Bike (s)	74.6	53.6	10.4	0.0
Cross Street Width (ft)	38.7	35.1	92.8	91.2
Through Lanes Number	2	2	1	0
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1604	1153	224	0
Bicycle Delay (s/bike)	1.8	8.4	36.7	0.0
Bicycle Compliance	Good	Good	Poor	
Bicycle LOS Score	2.28	1.72	3.33	0.00
Bicycle LOS	B	A	C	

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	1	5
Total Flow Rate (veh/h)	0	872	1119	1400
Effct. Green for Bike (s)	0.0	36.2	51.7	43.9
Cross Street Width (ft)	60.2	73.8	24.0	14.8
Through Lanes Number	0	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	746	1066	905
Bicycle Delay (s/bike)	0.0	19.1	10.6	14.6
Bicycle Compliance		Fair	Fair	Fair
Bicycle LOS Score	0.00	4.13	1.99	2.08
Bicycle LOS		D	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	1	18
Total Flow Rate (veh/h)	42	1012	1095	2258
Effct. Green for Bike (s)	4.1	23.3	39.5	61.7
Cross Street Width (ft)	81.6	80.9	63.0	56.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	69	395	669	1046
Bicycle Delay (s/bike)	55.0	38.0	26.1	13.6
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.88	3.40	2.35	3.22
Bicycle LOS	C	C	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	15	65	1	1
Total Flow Rate (veh/h)	432	513	1893	1933
Effct. Green for Bike (s)	19.8	17.8	73.1	73.1
Cross Street Width (ft)	82.0	73.9	69.4	52.1
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	247	222	914	914
Bicycle Delay (s/bike)	61.9	65.3	23.6	23.6
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.17	2.46	4.18	3.95
Bicycle LOS	C	B	D	D

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	20	69	0	3
Total Flow Rate (veh/h)	639	765	2000	1860
Effct. Green for Bike (s)	16.1	13.9	21.0	20.0
Cross Street Width (ft)	87.8	85.7	63.1	61.5
Through Lanes Number	1	2	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	495	428	646	615
Bicycle Delay (s/bike)	18.6	20.8	14.9	15.6
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.89	2.43	4.18	2.96
Bicycle LOS	C	B	D	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	5	29	12	60
Total Flow Rate (veh/h)	784	233	870	521
Effct. Green for Bike (s)	17.5	14.9	51.2	27.7
Cross Street Width (ft)	60.2	71.1	36.3	60.8
Through Lanes Number	1	1	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	248	211	726	393
Bicycle Delay (s/bike)	54.2	57.2	28.8	46.9
Bicycle Compliance	Poor	Poor	Fair	Poor
Bicycle LOS Score	3.77	3.03	2.83	3.35
Bicycle LOS	D	C	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	10	6
Total Flow Rate (veh/h)	229	33	242	409
Effct. Green for Bike (s)	10.0	5.8	13.3	13.3
Cross Street Width (ft)	58.1	61.2	24.0	12.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	333	193	443	443
Bicycle Delay (s/bike)	20.8	24.5	18.3	18.2
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.83	2.55	0.84	0.79
Bicycle LOS	C	B	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	1	3	9
Total Flow Rate (veh/h)	788	416	14	486
Effct. Green for Bike (s)	32.6	16.9	13.3	13.3
Cross Street Width (ft)	54.0	62.1	49.8	36.3
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	557	289	227	227
Bicycle Delay (s/bike)	30.5	42.8	46.0	46.2
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	3.69	2.12	2.34	2.92
Bicycle LOS	D	B	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	4	10	3	8
Total Flow Rate (veh/h)	65	301	1989	1670
Effct. Green for Bike (s)	8.4	16.9	38.7	37.6
Cross Street Width (ft)	72.9	72.6	38.1	38.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	187	376	860	836
Bicycle Delay (s/bike)	37.1	29.8	14.6	15.3
Bicycle Compliance	Poor	Fair	Fair	Fair
Bicycle LOS Score	2.78	3.17	2.50	2.24
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	9	12
Total Flow Rate (veh/h)	209	73	2500	1741
Effct. Green for Bike (s)	9.0	9.0	34.2	34.2
Cross Street Width (ft)	60.0	72.0	23.9	26.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	327	327	1244	1244
Bicycle Delay (s/bike)	19.2	19.2	4.0	4.0
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.82	2.78	2.92	2.33
Bicycle LOS	C	C	C	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	8	9
Total Flow Rate (veh/h)	203	885	1556	1055
Effct. Green for Bike (s)	18.1	18.1	16.1	19.1
Cross Street Width (ft)	59.9	61.1	35.9	23.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	724	724	644	764
Bicycle Delay (s/bike)	10.2	10.2	11.5	9.6
Bicycle Compliance	Fair	Fair	Fair	Good
Bicycle LOS Score	2.81	3.95	2.32	1.72
Bicycle LOS	C	D	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	4	13	6	6
Total Flow Rate (veh/h)	226	293	1370	885
Effct. Green for Bike (s)	16.2	16.2	35.8	35.8
Cross Street Width (ft)	60.1	59.9	32.5	36.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	540	540	1193	1193
Bicycle Delay (s/bike)	16.0	16.1	4.9	4.9
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.85	2.96	2.12	1.77
Bicycle LOS	C	C	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	6	6
Total Flow Rate (veh/h)	257	85	1313	844
Effct. Green for Bike (s)	10.8	10.8	44.1	25.0
Cross Street Width (ft)	61.3	60.1	36.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	360	360	1470	833
Bicycle Delay (s/bike)	20.2	20.2	2.1	10.2
Bicycle Compliance	Fair	Fair	Good	Fair
Bicycle LOS Score	2.92	2.62	2.12	1.92
Bicycle LOS	C	B	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	6	1	4
Total Flow Rate (veh/h)	228	407	1227	860
Effct. Green for Bike (s)	15.0	15.0	26.1	35.4
Cross Street Width (ft)	61.2	60.8	48.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	500	500	870	1180
Bicycle Delay (s/bike)	16.9	16.9	9.6	5.1
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.87	3.16	2.23	1.93
Bicycle LOS	C	C	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	4	4	9
Total Flow Rate (veh/h)	0	264	1217	810
Effct. Green for Bike (s)	0.0	8.3	41.7	41.7
Cross Street Width (ft)	48.0	60.0	36.0	38.2
Through Lanes Number	0	3	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	277	1390	1390
Bicycle Delay (s/bike)	0.0	22.3	2.8	2.8
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.62	2.04	2.41
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	13	0	1
Total Flow Rate (veh/h)	401	419	489	215
Effct. Green for Bike (s)	13.3	20.4	13.1	13.1
Cross Street Width (ft)	35.9	38.6	60.1	48.0
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	355	544	349	349
Bicycle Delay (s/bike)	25.4	20.0	25.5	25.6
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.77	2.84	2.21	2.65
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	6	5	18
Total Flow Rate (veh/h)	575	635	813	341
Effct. Green for Bike (s)	28.5	37.5	23.5	23.5
Cross Street Width (ft)	38.1	38.7	48.1	48.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	695	915	573	573
Bicycle Delay (s/bike)	17.5	12.1	20.9	21.1
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.09	3.20	2.35	1.57
Bicycle LOS	C	C	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	18	4	13
Total Flow Rate (veh/h)	0	687	598	369
Effct. Green for Bike (s)	0.0	29.0	23.0	23.0
Cross Street Width (ft)	36.0	48.1	36.1	37.4
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	967	767	767
Bicycle Delay (s/bike)	0.0	8.1	11.4	11.5
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.67	3.10	2.74
Bicycle LOS		B	C	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	14	10	10
Total Flow Rate (veh/h)	0	628	304	194
Effct. Green for Bike (s)	0.0	20.0	32.0	32.0
Cross Street Width (ft)	24.0	36.0	36.0	38.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	667	1067	1067
Bicycle Delay (s/bike)	0.0	13.4	6.6	6.6
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.46	2.61	2.46
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	9	10	1
Total Flow Rate (veh/h)	0	603	482	247
Effct. Green for Bike (s)	0.0	28.0	24.0	24.0
Cross Street Width (ft)	23.9	24.0	36.0	36.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	933	800	800
Bicycle Delay (s/bike)	0.0	8.6	10.9	10.8
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.26	2.91	2.52
Bicycle LOS		B	C	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	0	5	6
Total Flow Rate (veh/h)	1031	0	549	528
Effct. Green for Bike (s)	29.1	0.0	22.9	22.9
Cross Street Width (ft)	34.2	48.2	38.5	36.0
Through Lanes Number	2	0	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	970	0	763	763
Bicycle Delay (s/bike)	8.0	0.0	11.5	11.5
Bicycle Compliance	Good		Fair	Fair
Bicycle LOS Score	1.65	0.00	1.98	1.91
Bicycle LOS	A		A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	4	8	1	8
Total Flow Rate (veh/h)	113	168	798	466
Effct. Green for Bike (s)	13.0	13.2	41.9	41.9
Cross Street Width (ft)	38.0	37.9	26.0	26.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	14.0	14.0	14.0	14.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	433	440	1397	1397
Bicycle Delay (s/bike)	18.4	18.3	2.7	2.7
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.90	1.99	2.85	2.30
Bicycle LOS	A	A	C	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	15
Total Flow Rate (veh/h)	436	0	1338	854
Effct. Green for Bike (s)	12.3	0.0	0.0	26.6
Cross Street Width (ft)	37.6	25.1	24.2	52.2
Through Lanes Number	2	0	0	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	276	0	0	598
Bicycle Delay (s/bike)	33.0	0.0	0.0	22.0
Bicycle Compliance	Poor			Fair
Bicycle LOS Score	2.49	0.00	0.00	2.91
Bicycle LOS	B			C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	8	5	14
Total Flow Rate (veh/h)	42	104	1080	732
Effct. Green for Bike (s)	12.8	15.6	44.8	44.8
Cross Street Width (ft)	39.5	37.8	36.2	30.8
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	16.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	382	466	1337	1337
Bicycle Delay (s/bike)	22.0	19.8	3.7	3.7
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.38	1.24	2.82	3.24
Bicycle LOS	A	A	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	15	15	3
Total Flow Rate (veh/h)	678	820	2276	917
Effct. Green for Bike (s)	14.2	16.1	29.7	16.1
Cross Street Width (ft)	87.1	73.6	37.1	62.5
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	355	402	742	402
Bicycle Delay (s/bike)	27.2	25.7	15.9	25.6
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	4.01	4.04	2.93	2.20
Bicycle LOS	D	D	C	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	12	0	0
Total Flow Rate (veh/h)	1213	990	855	60
Effct. Green for Bike (s)	28.5	39.4	22.0	16.0
Cross Street Width (ft)	48.7	48.2	84.9	86.6
Through Lanes Number	3	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	613	847	473	344
Bicycle Delay (s/bike)	22.5	15.5	27.1	31.9
Bicycle Compliance	Fair	Fair	Fair	Poor
Bicycle LOS Score	1.90	1.77	4.27	2.98
Bicycle LOS	A	A	E	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	4	10	1	0
Total Flow Rate (veh/h)	1268	1149	214	0
Effct. Green for Bike (s)	73.9	49.9	11.1	0.0
Cross Street Width (ft)	38.8	35.1	92.6	91.2
Through Lanes Number	2	2	1	0
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	6.0	0.0
Curb Is Present?	Yes	Yes	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1589	1073	239	0
Bicycle Delay (s/bike)	2.0	10.0	36.1	0.0
Bicycle Compliance	Good	Fair	Poor	
Bicycle LOS Score	2.13	1.97	2.04	0.00
Bicycle LOS	B	A	B	

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	9	9
Total Flow Rate (veh/h)	0	381	1929	1882
Effct. Green for Bike (s)	0.0	38.0	51.0	35.0
Cross Street Width (ft)	60.2	73.7	24.0	14.8
Through Lanes Number	0	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	784	1052	722
Bicycle Delay (s/bike)	0.0	17.9	11.0	19.9
Bicycle Compliance		Fair	Fair	Fair
Bicycle LOS Score	0.00	3.32	2.66	2.48
Bicycle LOS		C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	1	17	4
Total Flow Rate (veh/h)	132	1124	2412	1721
Effct. Green for Bike (s)	4.0	23.9	52.1	58.5
Cross Street Width (ft)	81.6	80.9	62.9	56.1
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	69	412	898	1009
Bicycle Delay (s/bike)	54.1	36.6	17.8	14.3
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.03	3.58	3.44	2.77
Bicycle LOS	C	D	C	C

Appendix F.3

Intersection Pedestrian LOS Worksheets for 2035 No Project Conditions

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	
Level of Service	

Crosswalk	
Length (ft)	80
Lanes Crossed	4
Veh Vol Crossed	3040
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	25.86
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	3599140096.00
Avg Ped Delay (s)	3599140096.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	198994000
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	3040
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	198994000.00
Avg Ped Delay (s)	198994000.00

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.1	69.4	82.0	73.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	0.0	8.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	5	0
Ped. Right-Left Flow Rate (p/h)	10	0	46	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	60	20	170	80
Veh. RTOR Flow in Walk (v/h)	10	2	8	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	1173.5	0.0	1348.0	7290.0
Right Corner Quality of Service	A	-	A	A
Ped. Circulation Area (sq.ft)	771.8	0.0	77.7	0.0
Crosswalk Circulation Code	A	-	A	-
Pedestrian Delay (s/p)	69.4	80.0	72.2	80.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.32	2.48	3.11	3.12
Pedestrian Crosswalk LOS	B	B	C	C

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	21.7
Level of Service	D

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	530
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.83
Prob of Blocked Lane	0.59
Delay for adq Gap	26.01
Avg Ped Delay (s)	21.65

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	23.1
Level of Service	D

Crosswalk	
Length (ft)	33
Lanes Crossed	2
Veh Vol Crossed	530
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.43
Prob of Delayed X-ing	0.84
Prob of Blocked Lane	0.60
Delay for adq Gap	27.53
Avg Ped Delay (s)	23.11

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	61.6	63.1	87.8	85.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	7	7
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	29	8	21
Ped. Right-Left Flow Rate (p/h)	4	2	6	5
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	270	250	60	70
Veh. RTOR Flow in Walk (v/h)	63	10	0	4
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	3626.9	1266.8	1561.8	2271.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2139.0	435.5	1408.4	746.3
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	24.1	24.1	24.1	24.1
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.70	2.58	3.08	3.08
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.7	36.3	60.2	71.4
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	21	0	111	0
Ped. Right-Left Flow Rate (p/h)	105	24	7	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	4	14
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	310	10	30	30
Veh. RTOR Flow in Walk (v/h)	31	3	5	6
85th percentile speed (mph)	30	25	35	25
Right Corner Area per Ped (sq.ft)	230.4	2960.3	495.6	509.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	7.7	318.3	67.2	0.0
Crosswalk Circulation Code	F	A	A	-
Pedestrian Delay (s/p)	61.8	61.8	61.8	70.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.68	2.10	2.73	2.52
Pedestrian Crosswalk LOS	B	B	B	B

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	2
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	90
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.26
Prob of Blocked Lane	0.14
Delay for adq Gap	7.81
Avg Ped Delay (s)	2.04

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	2
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	90
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.26
Prob of Blocked Lane	0.14
Delay for adq Gap	7.81
Avg Ped Delay (s)	2.04

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	2912.7
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1090
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.82
Delay for adq Gap	2916.00
Avg Ped Delay (s)	2912.72

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	2912.7
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1090
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.82
Delay for adq Gap	2916.00
Avg Ped Delay (s)	2912.72

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	598.5
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	790
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.71
Delay for adq Gap	602.87
Avg Ped Delay (s)	598.47

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	598.5
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	790
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.71
Delay for adq Gap	602.87
Avg Ped Delay (s)	598.47

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	24.0	58.5	61.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	4	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	4	4	0
Ped. Right-Left Flow Rate (p/h)	13	5	11	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	5
Veh. Perm. R. Flow in Walk (v/h)	80	10	10	0
Veh. RTOR Flow in Walk (v/h)	0	2	0	0
85th percentile speed (mph)	30	25	35	35
Right Corner Area per Ped (sq.ft)	2414.6	8084.9	3020.6	4856.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	420.7	1817.4	1397.5	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	21.7	21.7	21.7	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.03	1.73	2.35	2.58
Pedestrian Crosswalk LOS	B	A	B	B

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	12.2	
Level of Service	C	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	340	190
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.65	0.44
Prob of Blocked Lane	0.41	0.25
Delay for adq Gap	12.90	8.88
Avg Ped Delay (s)	8.33	3.91

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	162.9
Level of Service	F

Crosswalk	
Length (ft)	69
Lanes Crossed	4
Veh Vol Crossed	530
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.71
Prob of Delayed X-ing	0.96
Prob of Blocked Lane	0.57
Delay for adq Gap	168.91
Avg Ped Delay (s)	162.95

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	155.3	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	530	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	0.96	
Prob of Blocked Lane	0.56	
Delay for adq Gap	161.24	
Avg Ped Delay (s)	155.31	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	12	
Level of Service	C	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	230	300
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.50	0.60
Prob of Blocked Lane	0.30	0.37
Delay for adq Gap	9.82	11.68
Avg Ped Delay (s)	4.96	7.01

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.3	49.9	55.3	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	8	1
Ped. Right-Left Flow Rate (p/h)	7	1	5	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	176	0	5	60
Veh. Perm. R. Flow in Walk (v/h)	10	60	0	180
Veh. RTOR Flow in Walk (v/h)	0	8	0	95
85th percentile speed (mph)	30	30	25	35
Right Corner Area per Ped (sq.ft)	3597.4	36386.5	5184.5	9112.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	208.0	7562.7	725.2	3642.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	50.8	50.8	50.8	50.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.65	2.39	1.75	2.43
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	38.1	72.8	72.5
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	1	0	1
Ped. Right-Left Flow Rate (p/h)	4	5	0	6
Ped. R. Sidewalk Flow Rate (p/h)	0	5	0	0
Veh. Perm. L. Flow in Walk (v/h)	15	70	0	0
Veh. Perm. R. Flow in Walk (v/h)	10	20	160	20
Veh. RTOR Flow in Walk (v/h)	7	5	35	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18179.4	4034.8	12142.4	6602.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2995.7	1587.2	0.0	2031.3
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	36.5	36.5	45.0	36.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.02	2.16	3.08	2.98
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.9	23.9	59.9	72.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	7	0	2
Ped. Right-Left Flow Rate (p/h)	1	5	0	4
Ped. R. Sidewalk Flow Rate (p/h)	2	1	0	0
Veh. Perm. L. Flow in Walk (v/h)	40	30	60	5
Veh. Perm. R. Flow in Walk (v/h)	370	10	30	510
Veh. RTOR Flow in Walk (v/h)	228	3	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18219.0	3828.0	6061.0	9097.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.3	1357.5	0.0	2057.0
Crosswalk Circulation Code	F	A	-	A
Pedestrian Delay (s/p)	19.2	19.2	19.2	19.2
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.66	1.81	3.02	2.98
Pedestrian Crosswalk LOS	B	A	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	23.9	35.9	59.9	61.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	4	0	1
Ped. Right-Left Flow Rate (p/h)	1	7	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	70	20	0	0
Veh. Perm. R. Flow in Walk (v/h)	20	750	10	150
Veh. RTOR Flow in Walk (v/h)	0	26	1	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	36439.5	6061.0	6619.6	14575.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	7771.5	0.1	0.0	21816.4
Crosswalk Circulation Code	A	F	-	A
Pedestrian Delay (s/p)	16.8	16.8	16.8	16.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.96	2.29	2.70	2.91
Pedestrian Crosswalk LOS	A	B	B	C

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	20.2	
Level of Service	D	

Crosswalk		
Length (ft)	16	16
Lanes Crossed	1	1
Veh Vol Crossed	930	400
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	7.57	7.57
Prob of Delayed X-ing	0.86	0.57
Prob of Blocked Lane	0.86	0.57
Delay for adq Gap	18.55	7.56
Avg Ped Delay (s)	15.93	4.30

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	62	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	1	2
Veh Vol Crossed	400	930
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.71	0.94
Prob of Blocked Lane	0.71	0.76
Delay for adq Gap	14.96	54.68
Avg Ped Delay (s)	10.55	51.49

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	25.3	
Level of Service	D	

Crosswalk		
Length (ft)	28	16
Lanes Crossed	2	1
Veh Vol Crossed	620	340
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	7.57
Prob of Delayed X-ing	0.85	0.51
Prob of Blocked Lane	0.61	0.51
Delay for adq Gap	25.66	6.82
Avg Ped Delay (s)	21.80	3.49

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	572.2
Level of Service	F

Crosswalk	
Length (ft)	56
Lanes Crossed	3
Veh Vol Crossed	960
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	19.00
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.82
Delay for adq Gap	575.80
Avg Ped Delay (s)	572.17

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	123.1
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	800
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.82
Delay for adq Gap	127.14
Avg Ped Delay (s)	123.15

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	123.1
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	800
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.82
Delay for adq Gap	127.14
Avg Ped Delay (s)	123.15

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	35.9	32.9	60.1	59.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	10.0	10.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	6	26	19	8
Ped. Right-Left Flow Rate (p/h)	2	1	1	5
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	10	20	20	60
Veh. Perm. R. Flow in Walk (v/h)	10	80	20	70
Veh. RTOR Flow in Walk (v/h)	4	35	2	6
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	2584.1	1816.7	1536.7	3458.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2817.1	684.5	1131.0	1559.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	20.8	20.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.00	1.91	2.64	2.73
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	36.1	61.3	60.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	7.0	7.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	5	69	13
Ped. Right-Left Flow Rate (p/h)	18	11	8	1
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	7
Veh. Perm. L. Flow in Walk (v/h)	60	5	4	30
Veh. Perm. R. Flow in Walk (v/h)	30	30	10	90
Veh. RTOR Flow in Walk (v/h)	6	6	0	3
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	721.7	2404.2	771.0	1775.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	956.9	1200.7	184.0	819.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	23.9	23.9	27.4	27.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.28	1.99	2.59	2.66
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	48.0	61.2	60.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	20	17	6	12
Ped. Right-Left Flow Rate (p/h)	14	4	54	45
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	20	120	1	70
Veh. Perm. R. Flow in Walk (v/h)	20	130	70	50
Veh. RTOR Flow in Walk (v/h)	12	75	20	14
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	770.1	929.2	876.7	782.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	695.6	812.7	323.8	318.8
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	21.7	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.22	2.53	2.60	2.71
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.1	36.0	48.1	60.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Pretimed	Pretimed
Corresponding Signal Phase	2	6	0	4
Effective Walk Time (s)	13.0	13.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	20	12	8	39
Ped. Right-Left Flow Rate (p/h)	5	2	4	1
Ped. R. Sidewalk Flow Rate (p/h)	4	5	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	10	40	0
Veh. Perm. R. Flow in Walk (v/h)	0	40	0	440
Veh. RTOR Flow in Walk (v/h)	0	28	0	64
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	1767.9	1218.3	2787.5	1097.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1116.6	1827.7	0.0	360.3
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	18.4	18.4	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.29	2.11	2.43	2.55
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	60.1	35.9	38.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	8	4	6	2
Effective Walk Time (s)	8.0	8.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	5	6	5	2
Ped. Right-Left Flow Rate (p/h)	2	11	12	6
Ped. R. Sidewalk Flow Rate (p/h)	2	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	100	10
Veh. Perm. R. Flow in Walk (v/h)	100	10	120	10
Veh. RTOR Flow in Walk (v/h)	27	7	28	5
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	2794.0	2896.6	2124.7	4833.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1624.2	876.5	387.7	1850.2
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	29.9	29.9	29.0	29.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.36	2.50	2.51	2.13
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.1	48.2	38.0	38.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	8	7	4
Ped. Right-Left Flow Rate (p/h)	0	2	8	1
Ped. R. Sidewalk Flow Rate (p/h)	1	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	60	10
Veh. Perm. R. Flow in Walk (v/h)	30	10	160	50
Veh. RTOR Flow in Walk (v/h)	4	0	30	8
85th percentile speed (mph)	30	30	25	25
Right Corner Area per Ped (sq.ft)	4033.8	4843.3	2889.3	9096.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	6180.9	1297.9	285.6	2086.3
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	33.4	33.4	33.4	33.4
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.36	2.40	2.36	2.17
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	37.4	36.1	35.9	48.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	4	8	0	2
Effective Walk Time (s)	11.0	11.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	35	24	17	37
Ped. Right-Left Flow Rate (p/h)	14	25	24	42
Ped. R. Sidewalk Flow Rate (p/h)	1	14	2	18
Veh. Perm. L. Flow in Walk (v/h)	0	40	30	0
Veh. Perm. R. Flow in Walk (v/h)	0	40	0	150
Veh. RTOR Flow in Walk (v/h)	0	4	0	51
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	790.2	502.5	776.1	486.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	478.3	410.7	0.0	254.8
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	20.0	20.0	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.28	2.29	2.12	2.17
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.0	36.0	24.0	36.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	26	17	26	68
Ped. Right-Left Flow Rate (p/h)	36	44	35	40
Ped. R. Sidewalk Flow Rate (p/h)	17	11	10	17
Veh. Perm. L. Flow in Walk (v/h)	0	50	50	0
Veh. Perm. R. Flow in Walk (v/h)	0	30	0	60
Veh. RTOR Flow in Walk (v/h)	0	2	0	12
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	506.8	388.1	538.8	380.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	310.2	259.4	0.0	152.9
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	21.7	21.7	30.0	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.24	2.28	1.93	2.04
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.0	23.9	24.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	4
Effective Walk Time (s)	12.0	12.0	0.0	17.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	14	10	12	37
Ped. Right-Left Flow Rate (p/h)	20	8	14	17
Ped. R. Sidewalk Flow Rate (p/h)	4	2	0	17
Veh. Perm. L. Flow in Walk (v/h)	0	150	70	0
Veh. Perm. R. Flow in Walk (v/h)	0	40	0	50
Veh. RTOR Flow in Walk (v/h)	0	5	0	11
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	1124.5	972.9	1639.4	688.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	746.6	998.9	0.0	539.2
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	19.2	19.2	30.0	15.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.21	2.47	2.06	1.89
Pedestrian Crosswalk LOS	B	B	B	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	35.9	38.5	34.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	0
Effective Walk Time (s)	11.0	11.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	5	1	7	0
Ped. Right-Left Flow Rate (p/h)	15	7	6	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	280	0	0	140
Veh. Perm. R. Flow in Walk (v/h)	30	0	20	0
Veh. RTOR Flow in Walk (v/h)	6	0	9	0
85th percentile speed (mph)	25	30	25	25
Right Corner Area per Ped (sq.ft)	2192.4	9090.6	3463.1	3308.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	554.8	2967.5	1715.2	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	20.0	20.0	20.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.53	2.09	2.02	2.58
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.1	26.0	38.0	38.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	12	8	2
Ped. Right-Left Flow Rate (p/h)	5	6	1	5
Ped. R. Sidewalk Flow Rate (p/h)	2	1	1	0
Veh. Perm. L. Flow in Walk (v/h)	10	150	5	10
Veh. Perm. R. Flow in Walk (v/h)	10	5	190	5
Veh. RTOR Flow in Walk (v/h)	5	3	29	0
85th percentile speed (mph)	25	25	25	30
Right Corner Area per Ped (sq.ft)	4039.2	2799.2	2596.6	5199.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3582.7	1019.3	2409.9	4071.2
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	12.0	12.0	12.0	12.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.74	2.11	2.31	2.21
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	51.5	24.1	37.7	25.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	2	3	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	0	2	0
Effective Walk Time (s)	11.0	0.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	7	0	0
Ped. Right-Left Flow Rate (p/h)	2	0	0	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	2	7
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	310	0	440	160
Veh. RTOR Flow in Walk (v/h)	32	0	40	0
85th percentile speed (mph)	30	30	30	45
Right Corner Area per Ped (sq.ft)	18197.8	6627.3	8047.5	4834.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1209.0	0.1	0.0	0.1
Crosswalk Circulation Code	A	F	-	F
Pedestrian Delay (s/p)	43.6	54.0	43.6	54.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.52	2.34	2.51	2.24
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	30.8	36.2	39.5	37.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	1	0	13
Ped. Right-Left Flow Rate (p/h)	1	7	1	8
Ped. R. Sidewalk Flow Rate (p/h)	0	1	5	0
Veh. Perm. L. Flow in Walk (v/h)	30	40	5	5
Veh. Perm. R. Flow in Walk (v/h)	5	5	20	10
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18217.7	2409.1	5202.7	3024.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	6163.4	2395.2	14661.2	704.6
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	23.4	23.4	26.0	26.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.79	2.02	2.51	2.50
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	62.5	37.1	87.2	73.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	7	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	4	6	4
Ped. Right-Left Flow Rate (p/h)	4	4	4	5
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	450	10	470	40
Veh. RTOR Flow in Walk (v/h)	199	0	184	7
85th percentile speed (mph)	40	30	35	30
Right Corner Area per Ped (sq.ft)	4810.6	4253.4	3805.6	5175.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	1012.1	94.6	982.6
Crosswalk Circulation Code	F	A	A	A
Pedestrian Delay (s/p)	59.3	59.3	59.3	59.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.90	2.44	3.40	2.62
Pedestrian Crosswalk LOS	C	B	C	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	86.6	84.8	48.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	7	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	9.0	0.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	4	1
Ped. Right-Left Flow Rate (p/h)	2	0	10	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	60	10	490	10
Veh. RTOR Flow in Walk (v/h)	12	1	49	6
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	4538.5	72852.6	5173.3	18225.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	6702.3	0.0	0.0	12894.4
Crosswalk Circulation Code	A	-	F	A
Pedestrian Delay (s/p)	37.9	46.5	37.9	37.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.95	2.98	2.55	2.17
Pedestrian Crosswalk LOS	C	C	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	91.2	92.8	38.7	35.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	6	4	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	Actuated	Actuated	None
Corresponding Signal Phase	0	8	2	6
Effective Walk Time (s)	0.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	8	11	0
Ped. Right-Left Flow Rate (p/h)	0	0	1	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	190	150	0
Veh. RTOR Flow in Walk (v/h)	0	39	34	0
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	6031.5	9112.5	3451.1	0.0
Right Corner Quality of Service	A	A	A	-
Ped. Circulation Area (sq.ft)	0.0	1402.9	578.8	0.0
Crosswalk Circulation Code	-	A	A	-
Pedestrian Delay (s/p)	46.5	37.9	37.9	46.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.92	2.90	1.87	1.97
Pedestrian Crosswalk LOS	C	C	A	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	14.8	24.0	60.2	73.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	No signal	Actuated	Actuated
Corresponding Signal Phase	2	6	0	8
Effective Walk Time (s)	0.0	50.1	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	250	0	530
Veh. RTOR Flow in Walk (v/h)	0	110	0	0
85th percentile speed (mph)	30	30	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	48.5	11.3	48.5	39.9
Pedestrian Compliance Code	Poor	Fair	Poor	Poor
Pedestrian Crosswalk Score	2.06	2.25	2.88	2.94
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	56.7	63.0	81.6	80.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	5	5	6
Number of Right-Turn Islands	0	1	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	5	0	6
Ped. Right-Left Flow Rate (p/h)	2	2	0	8
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	10	420	290	10
Veh. RTOR Flow in Walk (v/h)	10	225	64	0
85th percentile speed (mph)	30	40	45	35
Right Corner Area per Ped (sq.ft)	18193.0	3447.0	10368.5	4014.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2318.5	0.0	0.0	706.4
Crosswalk Circulation Code	A	F	-	A
Pedestrian Delay (s/p)	51.3	51.3	51.3	51.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.00	3.07	3.39	3.12
Pedestrian Crosswalk LOS	B	C	C	C

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	131691000	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	2970	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	1.00	
Prob of Blocked Lane	0.99	
Delay for adq Gap	131691000.00	
Avg Ped Delay (s)	131691000.00	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	719.5	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	1920	1050
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	1.00	0.96
Prob of Blocked Lane	0.95	0.80
Delay for adq Gap	650.97	73.35
Avg Ped Delay (s)	649.13	70.39

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	73089800
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2870
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	73089800.00
Avg Ped Delay (s)	73089800.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	73089800
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2870
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	73089800.00
Avg Ped Delay (s)	73089800.00

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	
Level of Service	

Crosswalk	
Length (ft)	80
Lanes Crossed	4
Veh Vol Crossed	3030
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	25.86
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	3360750080.00
Avg Ped Delay (s)	3360750080.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	187591008
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	3030
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	187591008.00
Avg Ped Delay (s)	187591008.00

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.1	69.4	82.0	73.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	0.0	8.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	0	31	1
Ped. Right-Left Flow Rate (p/h)	7	0	7	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	80	170	90	30
Veh. RTOR Flow in Walk (v/h)	23	22	0	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	1418.3	72800.0	1853.0	6046.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	649.6	0.0	147.1	0.1
Crosswalk Circulation Code	A	-	A	F
Pedestrian Delay (s/p)	69.4	80.0	72.2	80.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.34	2.52	3.14	3.15
Pedestrian Crosswalk LOS	B	B	C	C

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	17
Level of Service	C

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	460
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.79
Prob of Blocked Lane	0.54
Delay for adq Gap	21.52
Avg Ped Delay (s)	16.96

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	18
Level of Service	C

Crosswalk	
Length (ft)	33
Lanes Crossed	2
Veh Vol Crossed	460
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.43
Prob of Delayed X-ing	0.80
Prob of Blocked Lane	0.55
Delay for adq Gap	22.68
Avg Ped Delay (s)	18.05

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	61.5	63.1	87.8	85.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	7	7
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	12	18	15
Ped. Right-Left Flow Rate (p/h)	5	31	12	27
Ped. R. Sidewalk Flow Rate (p/h)	0	0	2	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	170	270	90	150
Veh. RTOR Flow in Walk (v/h)	76	58	2	67
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	2005.7	841.3	962.4	1501.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2566.5	302.3	637.4	424.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	24.1	24.1	24.1	24.1
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.70	2.67	3.09	3.21
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.8	36.3	60.2	71.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	84	12	55	0
Ped. Right-Left Flow Rate (p/h)	25	14	90	0
Ped. R. Sidewalk Flow Rate (p/h)	1	0	8	13
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	400	20	40	110
Veh. RTOR Flow in Walk (v/h)	15	2	5	7
85th percentile speed (mph)	30	25	35	25
Right Corner Area per Ped (sq.ft)	261.7	2762.3	363.3	544.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	281.1	53.6	0.0
Crosswalk Circulation Code	F	A	B	-
Pedestrian Delay (s/p)	61.8	61.8	61.8	70.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.65	2.09	2.75	2.50
Pedestrian Crosswalk LOS	B	B	B	B

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	3.4
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	140
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.38
Prob of Blocked Lane	0.21
Delay for adq Gap	8.97
Avg Ped Delay (s)	3.38

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	3.4
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	140
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.38
Prob of Blocked Lane	0.21
Delay for adq Gap	8.97
Avg Ped Delay (s)	3.38

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	1180.9
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	920
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.76
Delay for adq Gap	1184.71
Avg Ped Delay (s)	1180.87

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	1180.9
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	920
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.76
Delay for adq Gap	1184.71
Avg Ped Delay (s)	1180.87

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	356.4
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	690
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.66
Delay for adq Gap	361.33
Avg Ped Delay (s)	356.42

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	356.4
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	690
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.66
Delay for adq Gap	361.33
Avg Ped Delay (s)	356.42

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	24.0	58.1	61.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	4	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	4	5	0
Ped. Right-Left Flow Rate (p/h)	1	11	10	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	10
Veh. Perm. R. Flow in Walk (v/h)	40	10	10	0
Veh. RTOR Flow in Walk (v/h)	0	3	0	0
85th percentile speed (mph)	30	25	35	35
Right Corner Area per Ped (sq.ft)	3636.9	4840.1	2417.4	14558.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1885.7	1088.7	1395.9	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	21.7	21.7	21.7	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.63	1.73	2.31	2.50
Pedestrian Crosswalk LOS	A	A	B	B

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	13.9	
Level of Service	C	

Crosswalk		
Length (ft)	29	29
Lanes Crossed	2	2
Veh Vol Crossed	210	350
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	11.29
Prob of Delayed X-ing	0.48	0.67
Prob of Blocked Lane	0.28	0.42
Delay for adq Gap	9.71	13.87
Avg Ped Delay (s)	4.68	9.24

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	191
Level of Service	F

Crosswalk	
Length (ft)	69
Lanes Crossed	4
Veh Vol Crossed	560
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.71
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.59
Delay for adq Gap	196.70
Avg Ped Delay (s)	190.96

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	191.4	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	570	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	0.97	
Prob of Blocked Lane	0.59	
Delay for adq Gap	197.05	
Avg Ped Delay (s)	191.39	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	14	
Level of Service	C	

Crosswalk		
Length (ft)	29	28
Lanes Crossed	2	2
Veh Vol Crossed	360	210
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	11.00
Prob of Delayed X-ing	0.68	0.47
Prob of Blocked Lane	0.43	0.27
Delay for adq Gap	14.23	9.34
Avg Ped Delay (s)	9.63	4.42

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.3	49.8	54.0	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	5	30	11	6
Ped. Right-Left Flow Rate (p/h)	1	1	4	4
Ped. R. Sidewalk Flow Rate (p/h)	1	1	2	2
Veh. Perm. L. Flow in Walk (v/h)	117	5	5	150
Veh. Perm. R. Flow in Walk (v/h)	5	30	0	220
Veh. RTOR Flow in Walk (v/h)	0	9	0	118
85th percentile speed (mph)	30	30	25	35
Right Corner Area per Ped (sq.ft)	3279.0	1725.1	1473.8	4018.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	659.2	265.2	624.8	31.1
Crosswalk Circulation Code	A	A	A	C
Pedestrian Delay (s/p)	50.8	50.8	50.8	50.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.60	2.46	1.75	2.61
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	38.1	72.9	72.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	0	0	10
Ped. Right-Left Flow Rate (p/h)	1	2	0	4
Ped. R. Sidewalk Flow Rate (p/h)	0	5	5	0
Veh. Perm. L. Flow in Walk (v/h)	10	160	0	0
Veh. Perm. R. Flow in Walk (v/h)	30	50	70	10
Veh. RTOR Flow in Walk (v/h)	25	4	19	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	14570.9	3445.4	10414.3	3817.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2284.4	2504.6	0.0	1031.2
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	36.5	36.5	45.0	36.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.03	2.31	3.09	3.01
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.7	23.9	60.0	72.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	7	8	1	12
Ped. Right-Left Flow Rate (p/h)	4	10	4	7
Ped. R. Sidewalk Flow Rate (p/h)	5	6	0	0
Veh. Perm. L. Flow in Walk (v/h)	50	30	100	10
Veh. Perm. R. Flow in Walk (v/h)	120	5	150	730
Veh. RTOR Flow in Walk (v/h)	75	4	0	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	3465.7	1683.0	3157.0	2418.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	984.7	918.7	3340.5	381.2
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	19.2	19.2	19.2	19.2
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.44	1.87	3.12	3.10
Pedestrian Crosswalk LOS	B	A	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	23.9	35.9	59.9	61.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	6	1	0
Ped. Right-Left Flow Rate (p/h)	1	15	0	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	11
Veh. Perm. L. Flow in Walk (v/h)	150	10	0	0
Veh. Perm. R. Flow in Walk (v/h)	10	720	60	150
Veh. RTOR Flow in Walk (v/h)	0	5	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	36429.0	2903.4	3307.9	4551.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	11881.8	0.0	24039.7	5451.8
Crosswalk Circulation Code	A	F	A	A
Pedestrian Delay (s/p)	16.8	16.8	16.8	16.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.08	2.27	2.74	2.97
Pedestrian Crosswalk LOS	B	B	B	C

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	22	
Level of Service	D	

Crosswalk		
Length (ft)	17	17
Lanes Crossed	1	1
Veh Vol Crossed	610	800
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	7.86	7.86
Prob of Delayed X-ing	0.74	0.83
Prob of Blocked Lane	0.74	0.83
Delay for adq Gap	11.67	16.28
Avg Ped Delay (s)	8.59	13.44

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	48.1	
Level of Service	F	

Crosswalk		
Length (ft)	29	17
Lanes Crossed	1	2
Veh Vol Crossed	800	610
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	7.86
Prob of Delayed X-ing	0.92	0.74
Prob of Blocked Lane	0.92	0.49
Delay for adq Gap	42.97	11.67
Avg Ped Delay (s)	39.47	8.59

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	41.5	
Level of Service	E	

Crosswalk		
Length (ft)	29	17
Lanes Crossed	2	1
Veh Vol Crossed	720	670
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	7.86
Prob of Delayed X-ing	0.90	0.77
Prob of Blocked Lane	0.68	0.77
Delay for adq Gap	35.17	12.96
Avg Ped Delay (s)	31.49	9.96

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	3953.2
Level of Service	F

Crosswalk	
Length (ft)	56
Lanes Crossed	3
Veh Vol Crossed	1390
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	19.00
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.91
Delay for adq Gap	3955.83
Avg Ped Delay (s)	3953.25

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	158.6
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	870
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.98
Prob of Blocked Lane	0.85
Delay for adq Gap	162.33
Avg Ped Delay (s)	158.56

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	158.6
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	870
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.98
Prob of Blocked Lane	0.85
Delay for adq Gap	162.33
Avg Ped Delay (s)	158.56

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	32.5	60.1	59.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	10.0	10.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	7	17	4	12
Ped. Right-Left Flow Rate (p/h)	1	20	18	13
Ped. R. Sidewalk Flow Rate (p/h)	5	15	4	1
Veh. Perm. L. Flow in Walk (v/h)	60	20	10	30
Veh. Perm. R. Flow in Walk (v/h)	20	120	40	20
Veh. RTOR Flow in Walk (v/h)	10	36	7	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	2079.2	936.2	1143.0	2129.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2523.9	451.6	1016.7	894.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	20.8	20.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.11	1.96	2.67	2.72
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	36.0	61.3	60.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	7.0	7.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	12	14	7	10
Ped. Right-Left Flow Rate (p/h)	19	17	49	10
Ped. R. Sidewalk Flow Rate (p/h)	0	0	2	0
Veh. Perm. L. Flow in Walk (v/h)	70	10	25	0
Veh. Perm. R. Flow in Walk (v/h)	80	20	40	40
Veh. RTOR Flow in Walk (v/h)	17	10	0	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	830.1	1415.3	799.1	1417.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	651.2	713.0	265.7	776.9
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	23.4	23.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.31	2.00	2.68	2.64
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	48.0	61.2	60.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	20	21	52	42
Ped. Right-Left Flow Rate (p/h)	33	15	48	33
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	50	110	5	172
Veh. Perm. R. Flow in Walk (v/h)	40	150	160	50
Veh. RTOR Flow in Walk (v/h)	25	87	37	3
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	461.9	643.1	522.6	558.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	415.6	464.9	170.1	206.9
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	21.7	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.30	2.57	2.66	2.87
Pedestrian Crosswalk LOS	B	B	B	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	36.0	48.0	60.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Pretimed	Pretimed
Corresponding Signal Phase	2	6	0	4
Effective Walk Time (s)	13.0	13.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	12	15	23	19
Ped. Right-Left Flow Rate (p/h)	24	11	35	49
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	4
Veh. Perm. L. Flow in Walk (v/h)	0	30	60	0
Veh. Perm. R. Flow in Walk (v/h)	0	60	0	350
Veh. RTOR Flow in Walk (v/h)	0	44	0	101
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	760.5	767.8	838.1	661.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	775.4	923.1	0.0	246.5
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	18.4	18.4	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.20	2.15	2.55	2.66
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.0	60.1	35.9	38.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	8	4	6	2
Effective Walk Time (s)	8.0	8.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	5	4	6	6
Ped. Right-Left Flow Rate (p/h)	4	4	13	14
Ped. R. Sidewalk Flow Rate (p/h)	4	0	1	2
Veh. Perm. L. Flow in Walk (v/h)	0	0	140	20
Veh. Perm. R. Flow in Walk (v/h)	90	10	160	20
Veh. RTOR Flow in Walk (v/h)	8	5	32	5
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	2266.6	2590.4	2581.4	2329.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1299.4	1864.8	181.4	701.3
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	29.9	29.9	29.0	29.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.35	2.48	2.46	2.10
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.1	48.1	38.1	38.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	7	7	24	11
Ped. Right-Left Flow Rate (p/h)	5	13	4	6
Ped. R. Sidewalk Flow Rate (p/h)	7	0	2	5
Veh. Perm. L. Flow in Walk (v/h)	0	0	40	10
Veh. Perm. R. Flow in Walk (v/h)	50	30	210	60
Veh. RTOR Flow in Walk (v/h)	14	0	32	11
85th percentile speed (mph)	30	30	25	25
Right Corner Area per Ped (sq.ft)	1525.3	1943.2	1448.8	2128.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	976.4	616.4	113.0	589.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	33.4	33.4	33.4	33.4
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.38	2.44	2.44	2.25
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	37.4	36.1	36.0	48.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	4	8	0	2
Effective Walk Time (s)	11.0	11.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	123	99	182	206
Ped. Right-Left Flow Rate (p/h)	82	100	212	199
Ped. R. Sidewalk Flow Rate (p/h)	1	35	20	0
Veh. Perm. L. Flow in Walk (v/h)	0	60	80	0
Veh. Perm. R. Flow in Walk (v/h)	0	100	0	210
Veh. RTOR Flow in Walk (v/h)	0	6	0	15
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	106.7	102.1	101.9	106.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	112.2	83.9	0.0	43.7
Crosswalk Circulation Code	A	A	F	B
Pedestrian Delay (s/p)	20.0	20.0	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.33	2.35	2.26	2.20
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.0	36.0	24.0	36.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	143	79	96	302
Ped. Right-Left Flow Rate (p/h)	137	137	177	193
Ped. R. Sidewalk Flow Rate (p/h)	4	20	18	11
Veh. Perm. L. Flow in Walk (v/h)	0	50	70	0
Veh. Perm. R. Flow in Walk (v/h)	0	60	0	100
Veh. RTOR Flow in Walk (v/h)	0	6	0	14
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	117.8	83.5	126.5	81.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	66.9	66.5	0.0	28.7
Crosswalk Circulation Code	A	A	F	C
Pedestrian Delay (s/p)	21.7	21.7	30.0	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.27	2.31	1.99	2.07
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.0	23.9	24.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	4
Effective Walk Time (s)	12.0	12.0	0.0	17.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	60	44	90	38
Ped. Right-Left Flow Rate (p/h)	49	38	108	67
Ped. R. Sidewalk Flow Rate (p/h)	6	5	0	4
Veh. Perm. L. Flow in Walk (v/h)	0	80	90	0
Veh. Perm. R. Flow in Walk (v/h)	0	60	0	70
Veh. RTOR Flow in Walk (v/h)	0	6	0	13
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	218.4	371.1	242.1	321.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	230.8	241.3	0.0	264.9
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	19.2	19.2	30.0	15.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.23	2.33	2.13	1.98
Pedestrian Crosswalk LOS	B	B	B	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	38.5	34.2	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	0
Effective Walk Time (s)	11.0	11.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	25	15	19	0
Ped. Right-Left Flow Rate (p/h)	2	10	18	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	610	0	0	110
Veh. Perm. R. Flow in Walk (v/h)	40	0	50	0
Veh. RTOR Flow in Walk (v/h)	8	0	18	0
85th percentile speed (mph)	25	30	25	25
Right Corner Area per Ped (sq.ft)	1130.9	2906.0	1162.5	2492.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	948.1	565.1	0.0
Crosswalk Circulation Code	F	A	A	-
Pedestrian Delay (s/p)	20.0	20.0	20.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	3.08	2.09	2.12	2.62
Pedestrian Crosswalk LOS	C	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.1	26.0	38.0	37.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	11	11	2	2
Ped. Right-Left Flow Rate (p/h)	4	8	1	12
Ped. R. Sidewalk Flow Rate (p/h)	1	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	10	120	10	40
Veh. Perm. R. Flow in Walk (v/h)	10	10	220	10
Veh. RTOR Flow in Walk (v/h)	8	5	31	0
85th percentile speed (mph)	25	25	25	30
Right Corner Area per Ped (sq.ft)	3827.9	2200.6	3298.3	2408.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	961.8	472.5	2846.0	1092.0
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	22.5	22.5	22.5	22.5
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.79	2.11	2.35	2.31
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.2	24.2	37.6	25.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	2	3	2
Number of Right-Turn Islands	1	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	0	2	0
Effective Walk Time (s)	11.0	0.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	7	1	1	2
Ped. Right-Left Flow Rate (p/h)	4	0	5	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	6
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	100	0	940	260
Veh. RTOR Flow in Walk (v/h)	5	0	18	0
85th percentile speed (mph)	30	30	30	45
Right Corner Area per Ped (sq.ft)	4275.5	10398.4	10374.2	3146.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1288.4	0.4	0.1	0.1
Crosswalk Circulation Code	A	F	F	F
Pedestrian Delay (s/p)	34.2	44.5	36.0	44.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.40	2.44	2.62	2.35
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	30.8	36.2	39.5	37.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	6	1	6
Ped. Right-Left Flow Rate (p/h)	2	5	0	7
Ped. R. Sidewalk Flow Rate (p/h)	0	2	0	1
Veh. Perm. L. Flow in Walk (v/h)	20	60	10	5
Veh. Perm. R. Flow in Walk (v/h)	10	10	20	10
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	10401.3	2790.7	6060.4	3627.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3116.7	1653.4	14477.7	1139.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	23.4	23.4	26.0	26.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.76	2.05	2.56	2.53
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	62.5	37.1	87.1	73.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	7	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	4.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	7	11	0
Ped. Right-Left Flow Rate (p/h)	6	1	5	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	330	20	690	40
Veh. RTOR Flow in Walk (v/h)	126	3	224	8
85th percentile speed (mph)	40	30	35	30
Right Corner Area per Ped (sq.ft)	3283.2	6071.7	3017.8	6060.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1285.0	1706.7	230.1	1616.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	31.5	31.5	31.5	36.1
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.81	2.56	3.58	2.72
Pedestrian Crosswalk LOS	C	B	D	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	86.6	84.9	48.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	7	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	9.0	0.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	0	1	0
Ped. Right-Left Flow Rate (p/h)	1	0	4	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	4
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	90	10	190	10
Veh. RTOR Flow in Walk (v/h)	10	0	29	6
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	10400.7	0.0	14542.1	12142.1
Right Corner Quality of Service	A	-	A	A
Ped. Circulation Area (sq.ft)	6414.0	0.0	1460.4	0.0
Crosswalk Circulation Code	A	-	A	-
Pedestrian Delay (s/p)	37.9	46.5	37.9	37.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.11	3.04	2.45	2.17
Pedestrian Crosswalk LOS	C	C	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	91.2	92.6	38.8	35.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	6	4	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	Actuated	Actuated	None
Corresponding Signal Phase	0	8	2	6
Effective Walk Time (s)	0.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	2	0
Ped. Right-Left Flow Rate (p/h)	0	1	1	1
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	170	90	0
Veh. RTOR Flow in Walk (v/h)	0	53	46	0
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	24268.4	36426.3	18213.1	72841.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	11592.7	3073.1	0.3
Crosswalk Circulation Code	-	A	A	F
Pedestrian Delay (s/p)	46.5	37.9	37.9	46.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.97	2.88	1.89	2.04
Pedestrian Crosswalk LOS	C	C	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	14.8	24.0	60.2	73.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	Actuated	Actuated
Corresponding Signal Phase	2	6	0	8
Effective Walk Time (s)	0.0	0.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	2	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	210	0	730
Veh. RTOR Flow in Walk (v/h)	0	61	0	0
85th percentile speed (mph)	30	30	35	35
Right Corner Area per Ped (sq.ft)	72900.0	36389.4	36450.0	72839.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.5	0.2	0.0	0.0
Crosswalk Circulation Code	F	F	-	-
Pedestrian Delay (s/p)	48.5	48.5	48.5	39.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.26	2.00	3.03	3.22
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	56.1	62.9	81.6	80.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	5	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	8.0	8.0	9.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	11	0	14
Ped. Right-Left Flow Rate (p/h)	2	8	1	17
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	30	470	340	10
Veh. RTOR Flow in Walk (v/h)	23	207	87	0
85th percentile speed (mph)	30	40	45	35
Right Corner Area per Ped (sq.ft)	14554.9	1430.3	3607.4	1991.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2215.1	0.0	4672.4	323.8
Crosswalk Circulation Code	A	F	A	A
Pedestrian Delay (s/p)	50.3	50.3	49.3	50.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.06	3.13	3.68	3.28
Pedestrian Crosswalk LOS	B	C	D	C

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)		
Level of Service		

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	3520	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	1.00	
Prob of Blocked Lane	1.00	
Delay for adq Gap	3419160064.00	
Avg Ped Delay (s)	3419160064.00	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	916.9	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	1620	1900
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.99	1.00
Prob of Blocked Lane	0.92	0.95
Delay for adq Gap	302.64	618.28
Avg Ped Delay (s)	300.50	616.42

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	
Level of Service	

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	3630
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	6579380224.00
Avg Ped Delay (s)	6579380224.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	
Level of Service	

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	3630
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	6579380224.00
Avg Ped Delay (s)	6579380224.00

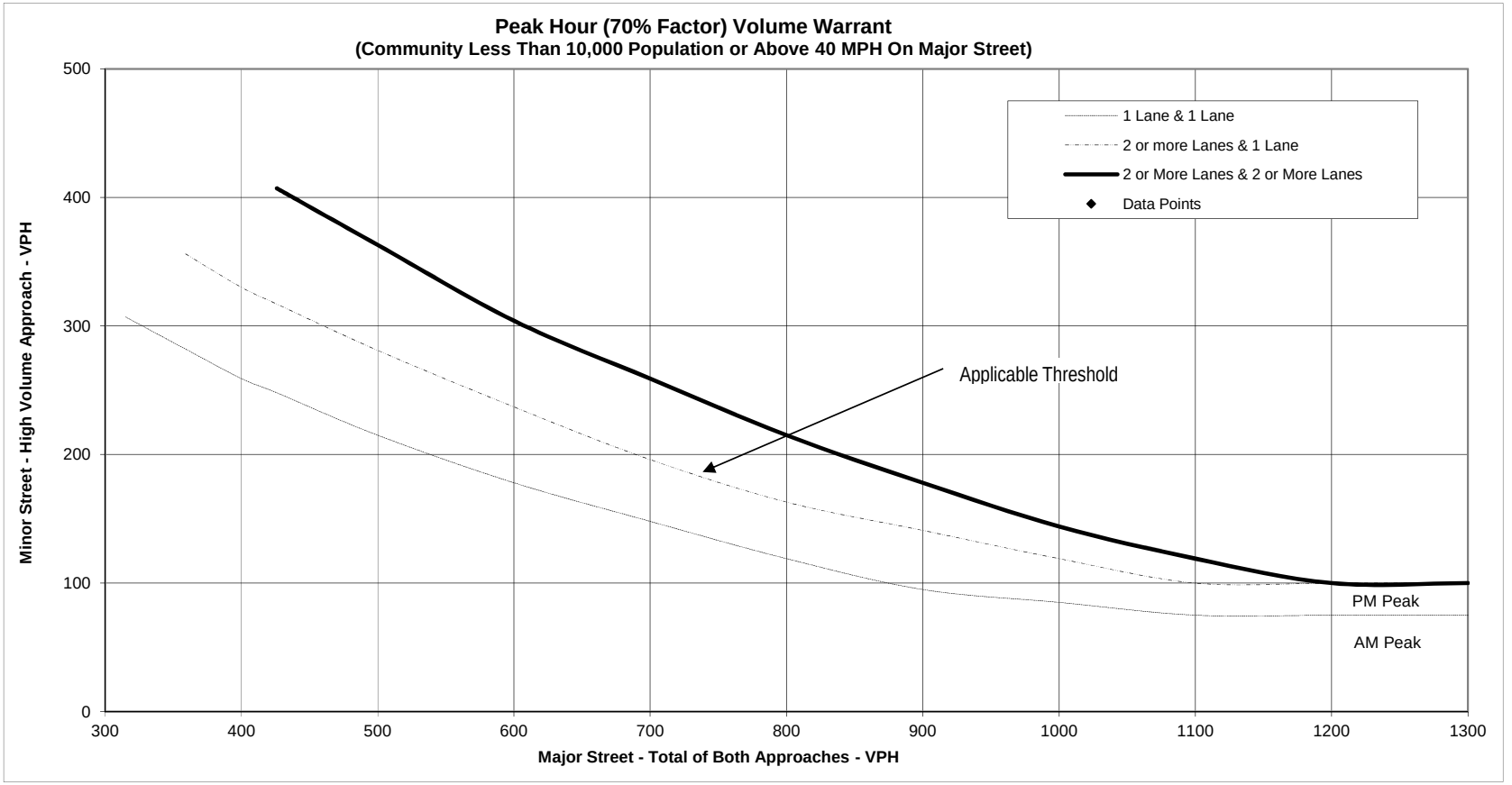
Appendix F.4

Intersection Peak Hour Signal Warrant Worksheets for 2035 No Project Conditions

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2035 No Project
Intersection: Hwy 1/Stenner Creek Rd
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Hwy 1
Major Street (Orientation): North-South
Minor Street (Name): Stenner Creek Rd.
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	15	15	1400	1660	3,060	No
PM Peak	0	90	90	1835	1210	3,045	No

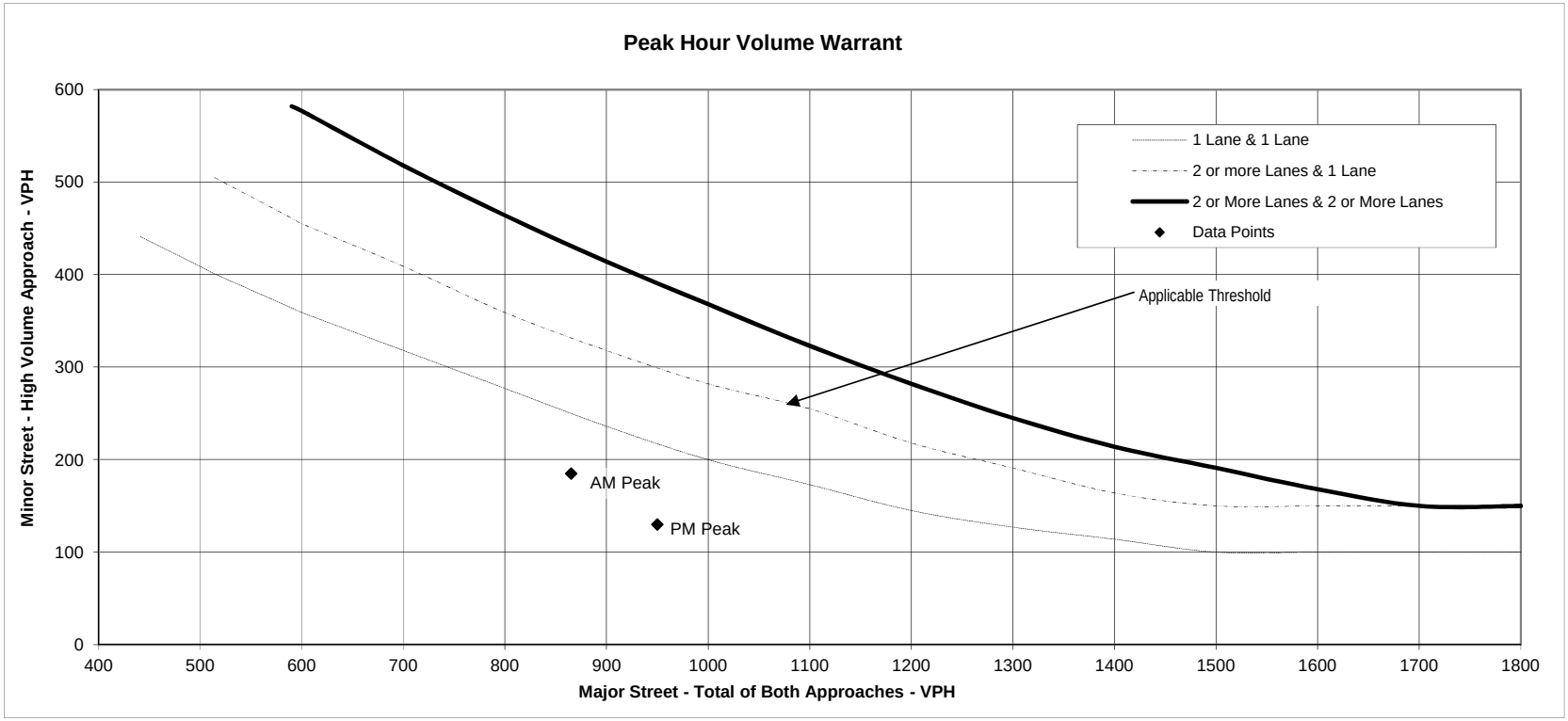


Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

PEAK HOUR VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2035 No Project
Intersection: Grand Ave/Slack St
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Grand Ave
Major Street (Orientation): North-South
Minor Street (Name): Slack St
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	185	25	185	725	140	865	No
PM Peak	130	25	130	340	610	950	No

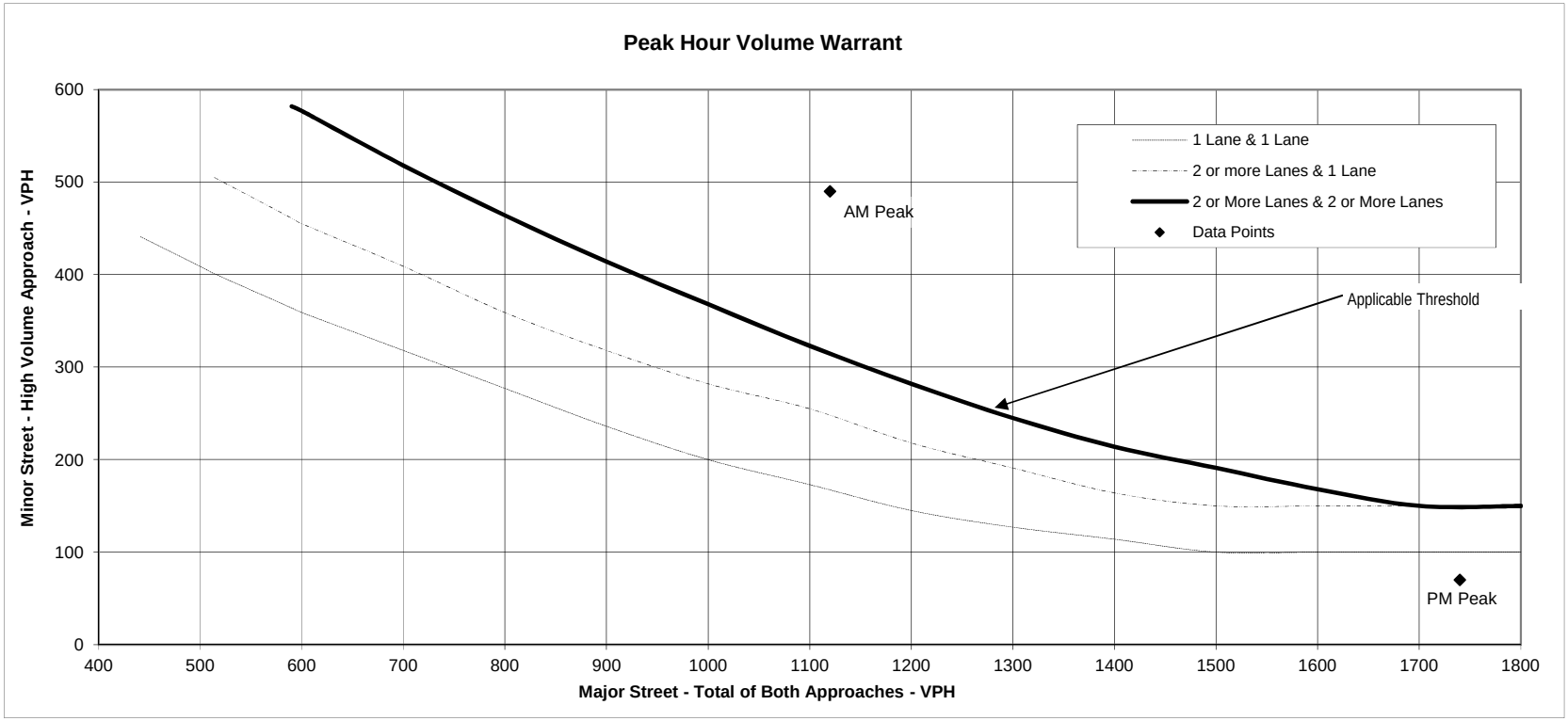


Note: 150 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 100 VPH as the threshold for a minor street approach with one lane

PEAK HOUR VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2035 No Project
Intersection: California Blvd/Taft St
Approach Type: 2 or More Lanes & 2 or More Lanes
Major Street (Name): California Blvd
Major Street (Orientation): North-South
Minor Street (Name): Taft St
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	490	490	730	390	1,120	Yes
PM Peak	0	70	70	920	820	1,740	No

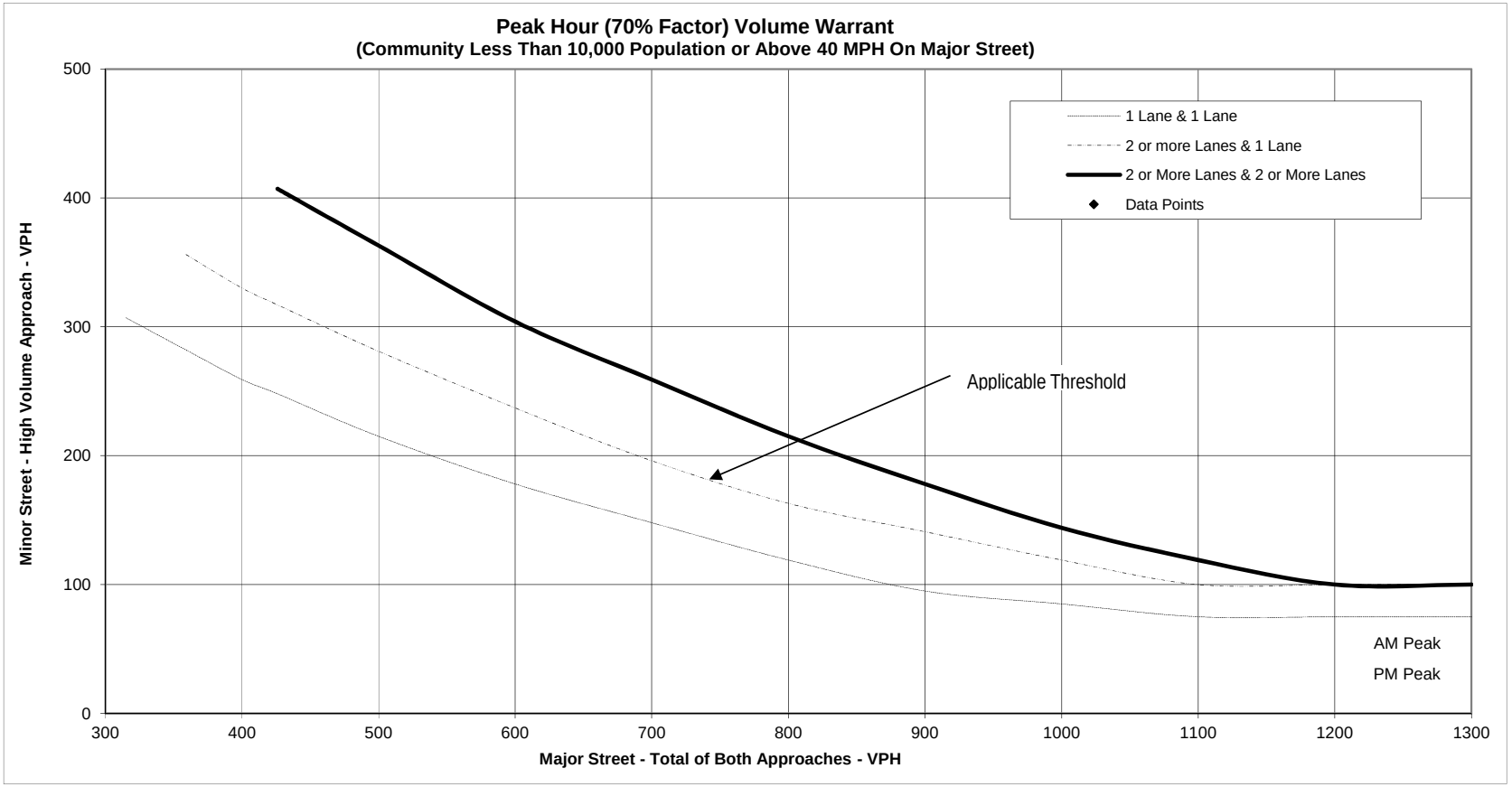


Note: 150 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 100 VPH as the threshold for a minor street approach with one lane

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2035 No Project
Intersection: Broad St/Rockview Pl
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Broad St
Major Street (Orientation): North-South
Minor Street (Name): Rockview Pl
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	60	0	60	1090	1930	3,020	No
PM Peak	50	0	50	1970	1640	3,610	No

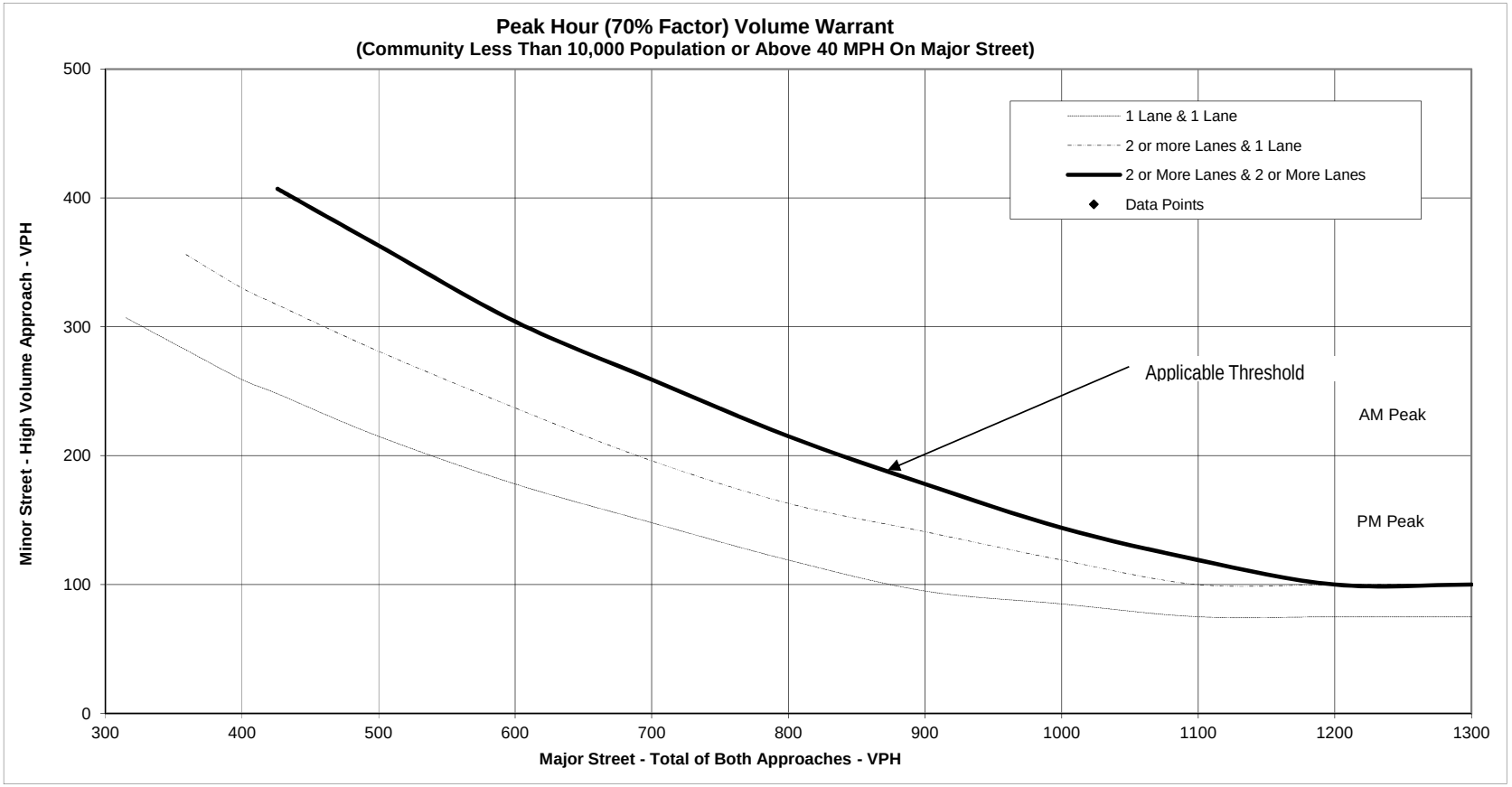


Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2035 No Project
Intersection: Broad St/Capitolio Wy
Approach Type: 2 or More Lanes & 2 or More Lanes
Major Street (Name): Broad St
Major Street (Orientation): North-South
Minor Street (Name): Capitolio Wy
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	250	250	1100	2000	3,100	Yes
PM Peak	0	160	160	2140	1750	3,890	Yes



Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

Appendix F.5

Freeway LOS Worksheets for 2035 No Project Conditions

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 1_2016_AM_Peak_US-101_NB_Marsh_St_to_Osos_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Direction:	US-101 NB
From/To:	Marsh St to Osos St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	3140	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	826	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1727	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1727	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	63.5	mi/h
Number of lanes, N	2	
Density, D	27.2	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 1_2016_PM_Peak_US-101_SB_Marsh_St_to_Osos_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Direction:	US-101 SB
From/To:	Marsh St to Osos St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	4520	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1189	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2486	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	2486	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	48.3	mi/h
Number of lanes, N	2	
Density, D	51.5	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 10_2016_AM_Peak_US-101_NB_Broad_St_to_Marsh_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Direction:	US-101 NB
From/To:	Broad St to Marsh St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	4140	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1089	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2277	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	2277	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	54.1	mi/h
Number of lanes, N	2	
Density, D	42.1	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 10_2016_PM_Peak_US-101_SB_Broad_St_to_Marsh_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Direction:	US-101 SB
From/To:	Broad St to Marsh St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	3970	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1045	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2184	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	2184	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	56.3	mi/h
Number of lanes, N	2	
Density, D	38.8	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.3

File Name: 3_2016_AM_Peak_US-101_NB_Osos_St_to_Toro_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Osos St to Toro St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	510	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1783	207	627	23	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	469	54	165	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1961	220	667	24	pc/h

Volume ratio, VR 0.309

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	887	lc/h
Weaving lane changes, LCW	1000	lc/h
Non-weaving vehicle index, INW	172	
Non-weaving lane change, LCNW	108	lc/h
Total lane changes, LCALL	1108	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.417	
Average weaving speed, SW	50.3	mi/h
Average non-weaving speed, SNW	54.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.8	mi/h
Weaving segment density, D	18.1	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.495	
Weaving segment flow rate, v	2872	pc/h
Weaving segment capacity, cW	5612	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5679	510	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1954	c
		Maximum	Analyzed	
v/c ratio		1.00	0.495	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 3_2016_PM_Peak_US-101_NB_Osos_St_to_Toro_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Osos St to Toro St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	510	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3345	495	505	55	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	880	130	133	14	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3680	526	537	58	pc/h

Volume ratio, VR 0.221

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1063	lc/h
Weaving lane changes, LCW	1176	lc/h
Non-weaving vehicle index, INW	324	
Non-weaving lane change, LCNW	469	lc/h
Total lane changes, LCALL	1645	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.569	
Average weaving speed, SW	46.9	mi/h
Average non-weaving speed, SNW	49.7	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	49.0	mi/h
Weaving segment density, D	32.6	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.797	
Weaving segment flow rate, v	4801	pc/h
Weaving segment capacity, cW	5813	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4756	510	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2025	c
		Maximum	Analyzed	
v/c ratio		1.00	0.797	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 4_2016_AM_Peak_US-101_NB_Toro_St_to_California_Blvd.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Toro St to California Blvd
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	740	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1574	216	416	24	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	414	57	109	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1731	230	442	26	pc/h

Volume ratio, VR 0.277

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	672	lc/h
Weaving lane changes, LCW	835	lc/h
Non-weaving vehicle index, INW	221	
Non-weaving lane change, LCNW	185	lc/h
Total lane changes, LCALL	1020	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.291	
Average weaving speed, SW	53.7	mi/h
Average non-weaving speed, SNW	56.3	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	55.5	mi/h
Weaving segment density, D	14.6	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.409	
Weaving segment flow rate, v	2429	pc/h
Weaving segment capacity, cW	5736	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5335	740	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1998	c
		Maximum	Analyzed	
v/c ratio		1.00	0.409	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 4_2016_PM_Peak_US-101_NB_Toro_St_to_California_Blvd.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Toro St to California Blvd
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	740	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3525	315	315	35	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	928	83	83	9	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3878	335	335	37	pc/h

Volume ratio, VR 0.146

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	670	lc/h
Weaving lane changes, LCW	833	lc/h
Non-weaving vehicle index, INW	493	
Non-weaving lane change, LCNW	630	lc/h
Total lane changes, LCALL	1463	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.387	
Average weaving speed, SW	51.1	mi/h
Average non-weaving speed, SNW	52.8	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.6	mi/h
Weaving segment density, D	29.1	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.731	
Weaving segment flow rate, v	4585	pc/h
Weaving segment capacity, cW	6032	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	3993	740	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2101	c
		Maximum	Analyzed	
v/c ratio		1.00	0.731	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 5_2016_AM_Peak_US-101_NB_California_Blvd_to_Grand_Ave.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	California Blvd to Grand Ave
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	530	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1340	90	450	10	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	353	24	118	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1474	96	478	11	pc/h
Volume ratio, VR		0.279			

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	574	lc/h
Weaving lane changes, LCW	674	lc/h
Non-weaving vehicle index, INW	94	
Non-weaving lane change, LCNW	15	lc/h
Total lane changes, LCALL	689	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.278	
Average weaving speed, SW	54.1	mi/h
Average non-weaving speed, SNW	57.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	56.6	mi/h
Weaving segment density, D	12.1	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.350	
Weaving segment flow rate, v	2059	pc/h
Weaving segment capacity, cW	5687	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5357	530	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1981	c
		Maximum	Analyzed	
v/c ratio		1.00	0.350	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 5_2016_PM_Peak_US-101_NB_California_Blvd_to_Grand_Ave.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	California Blvd to Grand Ave
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	530	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3669	571	171	19	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	966	150	45	5	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4036	607	182	20	pc/h

Volume ratio, VR 0.163

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	789	lc/h
Weaving lane changes, LCW	889	lc/h
Non-weaving vehicle index, INW	258	
Non-weaving lane change, LCNW	545	lc/h
Total lane changes, LCALL	1434	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.496	
Average weaving speed, SW	48.4	mi/h
Average non-weaving speed, SNW	51.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	51.0	mi/h
Weaving segment density, D	31.6	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.784	
Weaving segment flow rate, v	4845	pc/h
Weaving segment capacity, cW	5948	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4160	530	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2072	c
		Maximum	Analyzed	
v/c ratio		1.00	0.784	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 6_2016_AM_Peak_US-101_SB_Grand_Ave_to_Taft_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Grand Ave to Taft St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	670	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3288	252	532	28	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	865	66	140	7	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3617	268	566	30	pc/h

Volume ratio, VR 0.186

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	834	lc/h
Weaving lane changes, LCW	961	lc/h
Non-weaving vehicle index, INW	293	
Non-weaving lane change, LCNW	537	lc/h
Total lane changes, LCALL	1498	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.426	
Average weaving speed, SW	50.1	mi/h
Average non-weaving speed, SNW	51.8	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	51.5	mi/h
Weaving segment density, D	29.0	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.728	
Weaving segment flow rate, v	4481	pc/h
Weaving segment capacity, cW	5928	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4395	670	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2065	c
		Maximum	Analyzed	
v/c ratio		1.00	0.728	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 6_2016_PM_Peak_US-101_SB_Grand_Ave_to_Taft_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Grand Ave to Taft St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	670	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1669	301	81	9	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	439	79	21	2	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1836	320	86	10	pc/h

Volume ratio, VR 0.180

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	406	lc/h
Weaving lane changes, LCW	533	lc/h
Non-weaving vehicle index, INW	148	
Non-weaving lane change, LCNW	166	lc/h
Total lane changes, LCALL	699	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.234	
Average weaving speed, SW	55.5	mi/h
Average non-weaving speed, SNW	58.5	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	57.9	mi/h
Weaving segment density, D	13.0	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.365	
Weaving segment flow rate, v	2252	pc/h
Weaving segment capacity, cW	5943	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4336	670	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2070	c
		Maximum	Analyzed	
v/c ratio		1.00	0.365	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 7_2016_AM_Peak_US-101_SB_Taft_St_to_Montalban_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Taft St to Montalban St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	390	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3144	216	386	24	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	827	57	102	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3458	230	410	26	pc/h

Volume ratio, VR 0.155

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	640	lc/h
Weaving lane changes, LCW	714	lc/h
Non-weaving vehicle index, INW	231	
Non-weaving lane change, LCNW	351	lc/h
Total lane changes, LCALL	1065	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.499	
Average weaving speed, SW	48.3	mi/h
Average non-weaving speed, SNW	53.8	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.9	mi/h
Weaving segment density, D	26.0	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.669	
Weaving segment flow rate, v	4124	pc/h
Weaving segment capacity, cW	5934	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4083	390	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2068	c
		Maximum	Analyzed	
v/c ratio		1.00	0.669	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 7_2016_PM_Peak_US-101_SB_Taft_St_to_Montalban_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Taft St to Montalban St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	390	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1880	740	90	10	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	495	195	24	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2068	787	96	11	pc/h

Volume ratio, VR 0.298

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	883	lc/h
Weaving lane changes, LCW	957	lc/h
Non-weaving vehicle index, INW	138	
Non-weaving lane change, LCNW	62	lc/h
Total lane changes, LCALL	1019	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.482	
Average weaving speed, SW	48.7	mi/h
Average non-weaving speed, SNW	53.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.3	mi/h
Weaving segment density, D	18.9	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.510	
Weaving segment flow rate, v	2962	pc/h
Weaving segment capacity, cW	5610	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5564	390	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1954	c
		Maximum	Analyzed	
v/c ratio		1.00	0.510	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 8_2016_AM_Peak_US-101_SB_Lemon_St_to_Olive_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Lemon St to Olive St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	360	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3009	471	351	39	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	792	124	92	10	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3310	501	373	41	pc/h

Volume ratio, VR 0.207

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	874	lc/h
Weaving lane changes, LCW	934	lc/h
Non-weaving vehicle index, INW	205	
Non-weaving lane change, LCNW	308	lc/h
Total lane changes, LCALL	1242	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.600	
Average weaving speed, SW	46.2	mi/h
Average non-weaving speed, SNW	51.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	50.7	mi/h
Weaving segment density, D	27.8	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.701	
Weaving segment flow rate, v	4225	pc/h
Weaving segment capacity, cW	5813	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4606	360	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2025	c
		Maximum	Analyzed	
v/c ratio		1.00	0.701	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 8_2016_PM_Peak_US-101_SB_Lemon_St_to_Olive_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Lemon St to Olive St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	360	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2467	743	153	17	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	649	196	40	4	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2714	790	163	18	pc/h

Volume ratio, VR 0.259

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	953	lc/h
Weaving lane changes, LCW	1013	lc/h
Non-weaving vehicle index, INW	167	
Non-weaving lane change, LCNW	180	lc/h
Total lane changes, LCALL	1193	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.582	
Average weaving speed, SW	46.6	mi/h
Average non-weaving speed, SNW	52.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	50.7	mi/h
Weaving segment density, D	24.2	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.625	
Weaving segment flow rate, v	3685	pc/h
Weaving segment capacity, cW	5696	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5144	360	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1984	c
		Maximum	Analyzed	
v/c ratio		1.00	0.625	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 9_2016_AM_Peak_US-101_SB_Olive_St_to_Broad_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Olive St to Broad St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	540	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3174	446	306	34	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.95	
Peak 15-min volume, v15	844	119	81	9	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3529	479	329	36	pc/h

Volume ratio, VR 0.185

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	808	lc/h
Weaving lane changes, LCW	963	lc/h
Non-weaving vehicle index, INW	520	
Non-weaving lane change, LCNW	449	lc/h
Total lane changes, LCALL	1412	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.482	
Average weaving speed, SW	48.7	mi/h
Average non-weaving speed, SNW	52.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	51.5	mi/h
Weaving segment density, D	28.3	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.714	
Weaving segment flow rate, v	4373	pc/h
Weaving segment capacity, cW	5902	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4381	540	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2056	c
		Maximum	Analyzed	
v/c ratio		1.00	0.714	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 9_2016_PM_Peak_US-101_SB_Olive_St_to_Broad_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Olive St to Broad St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	540	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3012	648	198	22	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.95	
Peak 15-min volume, v15	801	172	53	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3348	696	213	23	pc/h

Volume ratio, VR 0.212

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	909	lc/h
Weaving lane changes, LCW	1064	lc/h
Non-weaving vehicle index, INW	491	
Non-weaving lane change, LCNW	409	lc/h
Total lane changes, LCALL	1473	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.499	
Average weaving speed, SW	48.4	mi/h
Average non-weaving speed, SNW	51.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	50.9	mi/h
Weaving segment density, D	28.0	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.707	
Weaving segment flow rate, v	4280	pc/h
Weaving segment capacity, cW	5842	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4663	540	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2035	c
		Maximum	Analyzed	
v/c ratio		1.00	0.707	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Appendix G

Analysis Worksheets for 2035 Plus Project Conditions

Appendix G.1

Intersection Auto LOS Worksheets for 2035 Plus Project Conditions

Intersection	
Int Delay, s/veh	22.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	110	15	1430	30	40	1570
Future Vol, veh/h	110	15	1430	30	40	1570
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	67	67	90	90	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	164	22	1589	33	45	1784

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2573	795	0	0	1590	0
Stage 1	1590	-	-	-	-	-
Stage 2	983	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 21	330	-	-	409	-
Stage 1	~ 153	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 19	330	-	-	409	-
Mov Cap-2 Maneuver	~ 99	-	-	-	-	-
Stage 1	~ 153	-	-	-	-	-
Stage 2	287	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 431.6	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	108	409	-
HCM Lane V/C Ratio	-	-	1.727	0.111	-
HCM Control Delay (s)	-	-	$ 431.6	14.9	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q(veh)	-	-	14.6	0.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	130	50	20	20	20	50	1410	140	160	1760	100
Future Volume (veh/h)	100	130	50	20	20	20	50	1410	140	160	1760	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.81	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1976	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	115	182	53	26	26	23	62	1762	166	186	2047	116
Adj No. of Lanes	1	2	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.79	0.79	0.79	0.76	0.76	0.76	0.80	0.80	0.80	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	318	479	130	122	128	105	80	1792	788	210	2052	887
Arrive On Green	0.18	0.18	0.18	0.07	0.07	0.07	0.04	0.51	0.51	0.12	0.58	0.58
Sat Flow, veh/h	1774	2672	723	1774	1863	1535	1774	3539	1556	1774	3539	1530
Grp Volume(v), veh/h	115	123	112	26	26	23	62	1762	166	186	2047	116
Grp Sat Flow(s),veh/h/ln	1774	1863	1533	1774	1863	1535	1774	1770	1556	1774	1770	1530
Q Serve(g_s), s	7.8	7.9	8.9	1.9	1.8	1.9	4.8	67.2	8.1	14.2	79.2	4.7
Cycle Q Clear(g_c), s	7.8	7.9	8.9	1.9	1.8	1.9	4.8	67.2	8.1	14.2	79.2	4.7
Prop In Lane	1.00		0.47	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	318	334	275	122	128	105	80	1792	788	210	2052	887
V/C Ratio(X)	0.36	0.37	0.41	0.21	0.20	0.22	0.78	0.98	0.21	0.89	1.00	0.13
Avail Cap(c_a), veh/h	413	434	357	271	285	235	258	1804	793	232	2052	887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	49.5	49.9	60.5	60.4	60.5	64.9	33.3	18.7	59.6	28.8	13.1
Incr Delay (d2), s/veh	0.3	0.3	0.4	0.3	0.3	0.4	5.9	17.2	0.0	27.5	19.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	4.1	3.8	0.9	0.9	0.8	2.5	37.1	3.5	8.6	43.9	2.0
LnGrp Delay(d),s/veh	49.7	49.8	50.3	60.8	60.7	60.9	70.9	50.5	18.8	87.2	48.1	13.2
LnGrp LOS	D	D	D	E	E	E	E	D	B	F	D	B
Approach Vol, veh/h		350			75			1990			2349	
Approach Delay, s/veh		49.9			60.8			48.5			49.5	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.7	75.6		28.6	9.7	85.6		13.4
Change Period (Y+Rc), s	3.5	6.0		4.0	3.5	6.0		4.0
Max Green Setting (Gmax), s	18.0	70.0		32.0	20.0	70.0		21.0
Max Q Clear Time (g_c+I1), s	16.2	69.2		10.9	6.8	81.2		3.9
Green Ext Time (p_c), s	0.1	0.3		1.2	0.1	0.0		0.1

Intersection Summary		
HCM 2010 Ctrl Delay		49.3
HCM 2010 LOS		D

Notes

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	60	370	50	70	80	10
Future Vol, veh/h	60	370	50	70	80	10
Conflicting Peds, #/hr	0	0	0	18	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	68	68	69	69	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	88	544	72	101	100	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	192	0	-	0	862	142
Stage 1	-	-	-	-	141	-
Stage 2	-	-	-	-	721	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1381	-	-	-	325	906
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	482	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1380	-	-	-	285	890
Mov Cap-2 Maneuver	-	-	-	-	285	-
Stage 1	-	-	-	-	871	-
Stage 2	-	-	-	-	431	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	22.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1380	-	-	-	285	890
HCM Lane V/C Ratio	0.064	-	-	-	0.351	0.014
HCM Control Delay (s)	7.8	0	-	-	24.3	9.1
HCM Lane LOS	A	A	-	-	C	A
HCM 95th %tile Q(veh)	0.2	-	-	-	1.5	0

Intersection	
Intersection Delay, s/veh	14.3
Intersection LOS	B

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Lane Configurations									
Traffic Vol, veh/h	0	380	120	0	50	70	0	50	280
Future Vol, veh/h	0	380	120	0	50	70	0	50	280
Peak Hour Factor	0.92	0.80	0.80	0.92	0.64	0.64	0.92	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	475	150	0	78	109	0	60	337
Number of Lanes	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay	14.8	11.1	15
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	51%	0%	100%
Vol Right, %	0%	100%	0%	49%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	50	280	253	247	50	70
LT Vol	50	0	0	0	50	0
Through Vol	0	0	253	127	0	70
RT Vol	0	280	0	120	0	0
Lane Flow Rate	60	337	317	308	78	109
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.119	0.551	0.533	0.49	0.155	0.201
Departure Headway (Hd)	7.095	5.881	6.062	5.717	7.126	6.615
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	505	611	595	629	502	541
Service Time	4.844	3.63	3.807	3.462	4.886	4.375
HCM Lane V/C Ratio	0.119	0.552	0.533	0.49	0.155	0.201
HCM Control Delay	10.8	15.7	15.6	13.9	11.2	11
HCM Lane LOS	B	C	C	B	B	B
HCM 95th-tile Q	0.4	3.4	3.1	2.7	0.5	0.7

Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	90	50	0	310	210	0	30	100
Future Vol, veh/h	0	90	50	0	310	210	0	30	100
Peak Hour Factor	0.92	0.88	0.88	0.92	0.90	0.90	0.92	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	102	57	0	344	233	0	35	118
Number of Lanes	0	1	0	0	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	10.1	11.2	9.5
HCM LOS	B	B	A

Lane	NBLn1	NBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	64%	23%
Vol Thru, %	100%	0%	0%	77%
Vol Right, %	0%	100%	36%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	310	210	140	130
LT Vol	0	0	90	30
Through Vol	310	0	0	100
RT Vol	0	210	50	0
Lane Flow Rate	344	233	159	153
Geometry Grp	7	7	2	5
Degree of Util (X)	0.489	0.285	0.236	0.216
Departure Headway (Hd)	5.107	4.403	5.342	5.077
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	703	812	668	704
Service Time	2.856	2.151	3.401	3.137
HCM Lane V/C Ratio	0.489	0.287	0.238	0.217
HCM Control Delay	12.7	8.9	10.1	9.5
HCM Lane LOS	B	A	B	A
HCM 95th-tile Q	2.7	1.2	0.9	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	460	230	170	230	300	290	1170	50	280	1370	60
Future Volume (veh/h)	140	460	230	170	230	300	290	1170	50	280	1370	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.95	1.00		0.95	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	167	548	210	189	256	320	337	1360	58	301	1473	62
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	459	353	164	436	370	371	1143	485	318	1089	484
Arrive On Green	0.09	0.25	0.25	0.09	0.25	0.25	0.11	0.32	0.32	0.09	0.31	0.31
Sat Flow, veh/h	1774	1863	1435	1774	1770	1503	3442	3539	1502	3442	3539	1574
Grp Volume(v), veh/h	167	548	210	189	256	320	337	1360	58	301	1473	62
Grp Sat Flow(s),veh/h/ln	1774	1863	1435	1774	1770	1503	1721	1770	1502	1721	1770	1574
Q Serve(g_s), s	6.0	16.0	8.4	6.0	8.3	13.3	6.3	21.0	1.8	5.7	20.0	1.8
Cycle Q Clear(g_c), s	6.0	16.0	8.4	6.0	8.3	13.3	6.3	21.0	1.8	5.7	20.0	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	459	353	164	436	370	371	1143	485	318	1089	484
V/C Ratio(X)	1.02	1.20	0.59	1.15	0.59	0.86	0.91	1.19	0.12	0.95	1.35	0.13
Avail Cap(c_a), veh/h	164	459	353	164	436	370	371	1143	485	318	1089	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	24.5	21.6	29.5	21.6	23.5	28.7	22.0	15.5	29.3	22.5	16.2
Incr Delay (d2), s/veh	75.6	107.5	2.7	117.8	2.1	18.8	25.6	94.2	0.5	36.7	164.8	0.5
Initial Q Delay(d3),s/veh	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	21.8	3.6	8.3	4.3	7.4	4.3	25.1	0.8	4.3	34.6	0.9
LnGrp Delay(d),s/veh	105.3	132.0	24.3	147.3	23.7	42.2	54.3	116.2	16.0	66.1	187.3	16.8
LnGrp LOS	F	F	C	F	C	D	D	F	B	E	F	B
Approach Vol, veh/h		925			765			1755			1836	
Approach Delay, s/veh		102.7			62.0			101.0			161.7	
Approach LOS		F			E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.0	10.0	20.0	11.0	24.0	10.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	21.0	6.0	16.0	7.0	20.0	6.0	16.0
Max Q Clear Time (g_c+I1), s	7.7	23.0	8.0	18.0	8.3	22.0	8.0	15.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary		
HCM 2010 Ctrl Delay		116.7
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	230	350	50	90	10	430	510	30	10	100	70
Future Volume (veh/h)	160	230	350	50	90	10	430	510	30	10	100	70
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.75	1.00		0.97	1.00		0.91	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	219	315	431	56	100	8	518	614	30	15	154	90
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	1	1
Peak Hour Factor	0.73	0.73	0.73	0.90	0.90	0.90	0.83	0.83	0.83	0.65	0.65	0.65
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	506	532	629	148	142	11	628	1438	70	24	469	787
Arrive On Green	0.29	0.29	0.29	0.08	0.08	0.08	0.18	0.42	0.42	0.01	0.25	0.25
Sat Flow, veh/h	1774	1863	1193	1774	1699	136	3442	3416	167	1774	1863	1331
Grp Volume(v), veh/h	219	315	431	56	0	108	518	318	326	15	154	90
Grp Sat Flow(s),veh/h/ln	1774	1863	1193	1774	0	1835	1721	1770	1813	1774	1863	1331
Q Serve(g_s), s	10.2	14.8	29.0	3.0	0.0	5.8	14.7	12.9	12.9	0.9	6.9	3.4
Cycle Q Clear(g_c), s	10.2	14.8	29.0	3.0	0.0	5.8	14.7	12.9	12.9	0.9	6.9	3.4
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	506	532	629	148	0	153	628	745	763	24	469	787
V/C Ratio(X)	0.43	0.59	0.68	0.38	0.00	0.71	0.82	0.43	0.43	0.62	0.33	0.11
Avail Cap(c_a), veh/h	506	532	629	454	0	469	914	766	785	384	678	936
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.6	31.2	22.5	44.1	0.0	45.4	40.0	20.8	20.8	49.9	31.0	11.7
Incr Delay (d2), s/veh	0.6	1.8	3.1	1.6	0.0	5.8	4.1	0.4	0.4	23.4	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	7.9	10.5	1.6	0.0	3.2	7.3	6.3	6.5	0.6	3.6	2.0
LnGrp Delay(d),s/veh	30.2	33.0	25.6	45.7	0.0	51.2	44.1	21.2	21.2	73.2	31.4	11.7
LnGrp LOS	C	C	C	D		D	D	C	C	E	C	B
Approach Vol, veh/h		965			164			1162			259	
Approach Delay, s/veh		29.1			49.3			31.4			27.0	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.5	30.6		13.5	6.4	47.8		34.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	27.0	37.0		26.0	22.0	44.0		29.0
Max Q Clear Time (g_c+I1), s	16.7	8.9		7.8	2.9	14.9		31.0
Green Ext Time (p_c), s	1.8	6.1		0.7	0.0	6.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.2
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	40	220	20	40	130	40
Future Vol, veh/h	40	220	20	40	130	40
Conflicting Peds, #/hr	0	143	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	82	82	71	71
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	282	24	49	183	56

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	476	0	433	335
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	98	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1086	-	580	707
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	926	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1086	-	489	611
Mov Cap-2 Maneuver	-	-	-	-	489	-
Stage 1	-	-	-	-	626	-
Stage 2	-	-	-	-	905	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.8	18
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	513	-	-	1086	-
HCM Lane V/C Ratio	0.467	-	-	0.022	-
HCM Control Delay (s)	18	-	-	8.4	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2.5	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	54.6
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	130	5	220	0	10	5	10	0	110	530	5
Future Vol, veh/h	0	130	5	220	0	10	5	10	0	110	530	5
Peak Hour Factor	0.92	0.86	0.86	0.86	0.92	0.50	0.50	0.50	0.92	0.66	0.66	0.66
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	151	6	256	0	20	10	20	0	167	803	8
Number of Lanes	0	0	1	0	0	0	1	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	1
HCM Control Delay	53.7	14	74.1
HCM LOS	F	B	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	37%	40%	8%	0%	0%
Vol Thru, %	0%	100%	97%	1%	20%	93%	100%	0%
Vol Right, %	0%	0%	3%	62%	40%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	110	353	182	355	25	133	247	40
LT Vol	110	0	0	130	10	10	0	0
Through Vol	0	353	177	5	5	123	247	0
RT Vol	0	0	5	220	10	0	0	40
Lane Flow Rate	167	535	275	413	50	175	325	53
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.385	1.158	0.594	0.918	0.131	0.397	0.732	0.108
Departure Headway (Hd)	8.309	7.788	7.768	8.249	9.852	8.479	8.44	7.708
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	433	466	465	442	366	428	432	468
Service Time	6.059	5.538	5.518	5.949	7.552	6.179	6.14	5.408
HCM Lane V/C Ratio	0.386	1.148	0.591	0.934	0.137	0.409	0.752	0.113
HCM Control Delay	16.2	119.2	21.3	53.7	14	16.7	30.9	11.3
HCM Lane LOS	C	F	C	F	B	C	D	B
HCM 95th-tile Q	1.8	19.4	3.8	10.2	0.4	1.9	5.8	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	10	370	40
Future Vol, veh/h	0	10	370	40
Peak Hour Factor	0.92	0.76	0.76	0.76
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	13	487	53
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	24.5
HCM LOS	C

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	30	40	710	690	10
Future Vol, veh/h	10	30	40	710	690	10
Conflicting Peds, #/hr	0	1	0	0	0	13
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	80	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	33	50	888	932	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1496	487	959	0	-	0
Stage 1	952	-	-	-	-	-
Stage 2	544	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	113	526	713	-	-	-
Stage 1	335	-	-	-	-	-
Stage 2	546	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	102	519	712	-	-	-
Mov Cap-2 Maneuver	226	-	-	-	-	-
Stage 1	331	-	-	-	-	-
Stage 2	501	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.4	0.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	712	-	392	-	-
HCM Lane V/C Ratio	0.07	-	0.113	-	-
HCM Control Delay (s)	10.4	-	15.4	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	-	-

Intersection	
Int Delay, s/veh	55.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	5	60	170	70	530	10	10	440	300
Future Vol, veh/h	0	0	0	5	60	170	70	530	10	10	440	300
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	0	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	93	93	93	74	74	74	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	5	65	183	95	716	14	15	677	462

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	1285	2096	369	1149	0	0	734	0	0
Stage 1	916	916	-	-	-	-	-	-	-
Stage 2	369	1180	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	122	~ 51	628	604	-	-	867	-	-
Stage 1	293	349	-	-	-	-	-	-	-
Stage 2	623	262	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	105	~ 42	626	604	-	-	867	-	-
Mov Cap-2 Maneuver	105	~ 42	-	-	-	-	-	-	-
Stage 1	246	293	-	-	-	-	-	-	-
Stage 2	612	257	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 481.2	1.4	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	604	-	-	134	867	-	-
HCM Lane V/C Ratio	0.157	-	-	1.886	0.018	-	-
HCM Control Delay (s)	12.1	-	-	$ 481.2	9.2	-	-
HCM Lane LOS	B	-	-	F	A	-	-
HCM 95th %tile Q(veh)	0.6	-	-	19.7	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	10	50	5	0	10	0	300	10	5	430	0
Future Volume (veh/h)	370	10	50	5	0	10	0	300	10	5	430	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.93	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	487	13	66	13	0	21	0	380	13	7	589	0
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	1	2	0
Peak Hour Factor	0.76	0.76	0.76	0.39	0.39	0.39	0.79	0.79	0.79	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	560	15	76	20	0	32	0	1027	35	385	1044	0
Arrive On Green	0.37	0.37	0.37	0.03	0.00	0.03	0.00	0.29	0.29	0.29	0.29	0.00
Sat Flow, veh/h	1505	40	204	631	0	1020	0	3576	119	980	3632	0
Grp Volume(v), veh/h	566	0	0	34	0	0	0	193	200	7	589	0
Grp Sat Flow(s),veh/h/ln	1749	0	0	1651	0	0	0	1770	1832	980	1770	0
Q Serve(g_s), s	12.0	0.0	0.0	0.8	0.0	0.0	0.0	3.4	3.5	0.2	5.6	0.0
Cycle Q Clear(g_c), s	12.0	0.0	0.0	0.8	0.0	0.0	0.0	3.4	3.5	3.7	5.6	0.0
Prop In Lane	0.86		0.12	0.38		0.62	0.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h	651	0	0	52	0	0	0	522	540	385	1044	0
V/C Ratio(X)	0.87	0.00	0.00	0.65	0.00	0.00	0.00	0.37	0.37	0.02	0.56	0.00
Avail Cap(c_a), veh/h	702	0	0	663	0	0	0	711	736	490	1421	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.6	0.0	0.0	19.1	0.0	0.0	0.0	11.1	11.1	12.6	11.9	0.0
Incr Delay (d2), s/veh	10.8	0.0	0.0	13.0	0.0	0.0	0.0	0.4	0.4	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	0.0	0.0	0.5	0.0	0.0	0.0	1.7	1.8	0.1	2.8	0.0
LnGrp Delay(d),s/veh	22.4	0.0	0.0	32.1	0.0	0.0	0.0	11.5	11.5	12.6	12.4	0.0
LnGrp LOS	C			C				B	B	B	B	
Approach Vol, veh/h		566			34			393			596	
Approach Delay, s/veh		22.4			32.1			11.5			12.4	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		15.8		18.8		15.8		5.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		5.5		14.0		7.6		2.8
Green Ext Time (p_c), s		4.6		0.8		3.9		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	16.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	0	20	0	5	5	50	280	0	5	360	120
Future Vol, veh/h	20	0	20	0	5	5	50	280	0	5	360	120
Conflicting Peds, #/hr	0	0	15	0	0	4	0	0	0	0	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	50	50	50	75	75	75	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	0	25	0	10	10	67	373	0	6	424	141

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	846	1024	308	746	1094	191	576	0	0	373	0	0
Stage 1	517	517	-	507	507	-	-	-	-	-	-	-
Stage 2	329	507	-	239	587	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	256	234	688	302	213	818	993	-	-	1182	-	-
Stage 1	509	532	-	516	538	-	-	-	-	-	-	-
Stage 2	658	538	-	743	495	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	226	214	671	270	195	815	979	-	-	1177	-	-
Mov Cap-2 Maneuver	226	214	-	270	195	-	-	-	-	-	-	-
Stage 1	469	522	-	481	501	-	-	-	-	-	-	-
Stage 2	591	501	-	699	486	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.5	17.2	1.4	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	979	-	-	338	-	315	1177	-	-
HCM Lane V/C Ratio	0.068	-	-	0.148	-	0.063	0.005	-	-
HCM Control Delay (s)	8.9	-	-	17.5	0	17.2	8.1	0	-
HCM Lane LOS	A	-	-	C	A	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.5	-	0.2	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	240	10	0	460	90	5	5	0	80	5	300
Future Volume (veh/h)	230	240	10	0	460	90	5	5	0	80	5	300
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.99		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	284	296	12	0	500	85	13	13	0	93	6	164
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.81	0.81	0.81	0.92	0.92	0.92	0.38	0.38	0.38	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	582	1162	47	159	802	681	187	146	0	446	11	289
Arrive On Green	0.14	0.65	0.65	0.00	0.43	0.43	0.19	0.19	0.00	0.19	0.19	0.19
Sat Flow, veh/h	1774	1777	72	1067	1863	1581	354	761	0	1393	55	1508
Grp Volume(v), veh/h	284	0	308	0	500	85	26	0	0	93	0	170
Grp Sat Flow(s),veh/h/ln	1774	0	1849	1067	1863	1581	1115	0	0	1393	0	1564
Q Serve(g_s), s	3.4	0.0	3.1	0.0	9.5	1.5	0.0	0.0	0.0	0.0	0.0	4.5
Cycle Q Clear(g_c), s	3.4	0.0	3.1	0.0	9.5	1.5	4.5	0.0	0.0	2.3	0.0	4.5
Prop In Lane	1.00		0.04	1.00		1.00	0.50		0.00	1.00		0.96
Lane Grp Cap(c), veh/h	582	0	1210	159	802	681	333	0	0	446	0	300
V/C Ratio(X)	0.49	0.00	0.25	0.00	0.62	0.12	0.08	0.00	0.00	0.21	0.00	0.57
Avail Cap(c_a), veh/h	1085	0	2324	1040	2341	1988	1018	0	0	916	0	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.3	0.0	3.3	0.0	10.1	7.8	15.1	0.0	0.0	15.7	0.0	16.6
Incr Delay (d2), s/veh	0.6	0.0	0.1	0.0	0.8	0.1	0.1	0.0	0.0	0.2	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	1.6	0.0	5.0	0.7	0.3	0.0	0.0	1.0	0.0	2.1
LnGrp Delay(d),s/veh	7.0	0.0	3.4	0.0	10.9	7.9	15.2	0.0	0.0	16.0	0.0	18.3
LnGrp LOS	A		A		B	A	B			B		B
Approach Vol, veh/h		592			585			26			263	
Approach Delay, s/veh		5.1			10.4			15.2			17.5	
Approach LOS		A			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		33.2		12.2	10.1	23.0		12.2
Change Period (Y+Rc), s		3.5		3.5	4.0	3.5		3.5
Max Green Setting (Gmax), s		57.0		24.0	19.0	57.0		30.0
Max Q Clear Time (g_c+I1), s		5.1		6.5	5.4	11.5		6.5
Green Ext Time (p_c), s		7.0		1.4	0.9	7.0		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	9.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	20	10	70	10	20	60	1510	170	20	1750	20
Future Volume (veh/h)	15	20	10	70	10	20	60	1510	170	20	1750	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	18	24	4	88	12	19	65	1641	145	21	1842	21
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.83	0.83	0.83	0.80	0.80	0.80	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	72	449	98	7	454	82	1701	148	34	1760	20
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.05	0.52	0.52	0.02	0.49	0.49
Sat Flow, veh/h	0	248	1555	0	25	1572	1774	3281	286	1774	3583	41
Grp Volume(v), veh/h	42	0	4	100	0	19	65	875	911	21	908	955
Grp Sat Flow(s),veh/h/ln	248	0	1555	26	0	1572	1774	1770	1798	1774	1770	1854
Q Serve(g_s), s	0.0	0.0	0.1	0.0	0.0	0.6	2.5	32.6	34.2	0.8	34.0	34.0
Cycle Q Clear(g_c), s	20.0	0.0	0.1	20.0	0.0	0.6	2.5	32.6	34.2	0.8	34.0	34.0
Prop In Lane	0.43		1.00	0.88		1.00	1.00		0.16	1.00		0.02
Lane Grp Cap(c), veh/h	146	0	449	105	0	454	82	918	932	34	869	911
V/C Ratio(X)	0.29	0.00	0.01	0.95	0.00	0.04	0.79	0.95	0.98	0.62	1.04	1.05
Avail Cap(c_a), veh/h	146	0	449	105	0	454	103	918	932	128	869	911
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	17.5	33.2	0.0	17.7	32.7	15.9	16.3	33.7	17.6	17.6
Incr Delay (d2), s/veh	1.1	0.0	0.0	71.8	0.0	0.0	27.0	20.4	24.5	16.7	42.8	43.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	4.0	0.0	0.3	1.8	21.0	23.0	0.6	26.8	28.2
LnGrp Delay(d),s/veh	21.1	0.0	17.6	105.0	0.0	17.7	59.7	36.3	40.8	50.4	60.4	61.0
LnGrp LOS	C		B	F		B	E	D	D	D	F	F
Approach Vol, veh/h		46			119			1851			1884	
Approach Delay, s/veh		20.8			91.1			39.3			60.6	
Approach LOS		C			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	39.9		24.0	7.2	38.0		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	33.0		16.0	4.0	34.0		20.0
Max Q Clear Time (g_c+I1), s	2.8	36.2		22.0	4.5	36.0		22.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	50.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	5	430	30	10	10	60	1380	30	5	1050	550
Future Volume (veh/h)	40	5	430	30	10	10	60	1380	30	5	1050	550
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	54	7	224	55	18	13	73	1683	37	5	1129	591
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.74	0.74	0.74	0.55	0.55	0.55	0.82	0.82	0.82	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	32	287	282	88	45	262	2158	47	213	2159	942
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	200	136	1235	714	380	195	282	3537	78	282	3539	1543
Grp Volume(v), veh/h	285	0	0	86	0	0	73	840	880	5	1129	591
Grp Sat Flow(s),veh/h/ln	1572	0	0	1288	0	0	282	1770	1845	282	1770	1543
Q Serve(g_s), s	4.8	0.0	0.0	0.0	0.0	0.0	10.2	17.9	18.1	0.7	9.3	12.3
Cycle Q Clear(g_c), s	8.6	0.0	0.0	2.4	0.0	0.0	19.5	17.9	18.1	18.8	9.3	12.3
Prop In Lane	0.19		0.79	0.64		0.15	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	450	0	0	416	0	0	262	1080	1125	213	2159	942
V/C Ratio(X)	0.63	0.00	0.00	0.21	0.00	0.00	0.28	0.78	0.78	0.02	0.52	0.63
Avail Cap(c_a), veh/h	577	0	0	523	0	0	262	1080	1125	213	2159	942
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	0.0	15.8	0.0	0.0	11.2	7.4	7.4	14.4	5.7	6.3
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.2	0.0	0.0	2.6	5.5	5.4	0.2	0.9	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	0.0	1.0	0.0	0.0	1.0	10.1	10.7	0.1	4.7	5.9
LnGrp Delay(d),s/veh	19.7	0.0	0.0	16.0	0.0	0.0	13.9	12.9	12.8	14.6	6.6	9.4
LnGrp LOS	B			B			B	B	B	B	A	A
Approach Vol, veh/h		285			86			1793			1725	
Approach Delay, s/veh		19.7			16.0			12.9			7.6	
Approach LOS		B			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		15.8		35.0		15.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		16.0		31.0		16.0
Max Q Clear Time (g_c+I1), s		21.5		10.6		20.8		4.4
Green Ext Time (p_c), s		9.3		1.1		10.0		1.9

Intersection Summary		
HCM 2010 Ctrl Delay		11.1
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	5	20	20	10	730	10	630	10	70	1270	160
Future Volume (veh/h)	90	5	20	20	10	730	10	630	10	70	1270	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.94	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	148	8	33	24	12	571	11	708	10	80	1460	184
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.61	0.61	0.61	0.84	0.84	0.84	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	391	31	61	484	219	584	20	1171	17	100	1179	147
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.01	0.33	0.33	0.06	0.37	0.37
Sat Flow, veh/h	702	84	166	978	593	1582	1774	3569	50	1774	3156	393
Grp Volume(v), veh/h	189	0	0	36	0	571	11	351	367	80	811	833
Grp Sat Flow(s),veh/h/ln	951	0	0	1571	0	1582	1774	1770	1850	1774	1770	1780
Q Serve(g_s), s	6.7	0.0	0.0	0.0	0.0	17.4	0.3	8.1	8.1	2.2	18.2	18.2
Cycle Q Clear(g_c), s	7.3	0.0	0.0	0.6	0.0	17.4	0.3	8.1	8.1	2.2	18.2	18.2
Prop In Lane	0.78		0.17	0.67		1.00	1.00		0.03	1.00		0.22
Lane Grp Cap(c), veh/h	483	0	0	703	0	584	20	581	607	100	661	665
V/C Ratio(X)	0.39	0.00	0.00	0.05	0.00	0.98	0.55	0.60	0.60	0.80	1.23	1.25
Avail Cap(c_a), veh/h	483	0	0	703	0	584	146	581	607	146	661	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.8	0.0	0.0	9.9	0.0	15.2	24.0	13.7	13.7	22.7	15.3	15.3
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	31.5	21.1	4.6	4.4	17.3	115.3	126.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	0.3	0.0	12.5	0.3	4.6	4.8	1.5	29.8	32.0
LnGrp Delay(d),s/veh	12.4	0.0	0.0	9.9	0.0	46.7	45.0	18.3	18.2	40.1	130.5	141.5
LnGrp LOS	B			A		D	D	B	B	D	F	F
Approach Vol, veh/h		189			607			729			1724	
Approach Delay, s/veh		12.4			44.5			18.6			131.7	
Approach LOS		B			D			B			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	20.0		22.0	4.6	22.2		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	16.0		18.0	4.0	16.0		18.0
Max Q Clear Time (g_c+I1), s	4.2	10.1		9.3	2.3	20.2		19.4
Green Ext Time (p_c), s	0.0	5.4		3.2	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	83.1
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	20	930	90	40	460
Future Vol, veh/h	10	20	930	90	40	460
Conflicting Peds, #/hr	0	0	0	2	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	0	25	-	0	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	86	86	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	37	1081	105	42	479

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1644	1081	0	-	1081	0
Stage 1	1081	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	110	265	-	0	645	-
Stage 1	326	-	-	0	-	-
Stage 2	570	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	103	265	-	-	645	-
Mov Cap-2 Maneuver	103	-	-	-	-	-
Stage 1	326	-	-	-	-	-
Stage 2	533	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.7	0	0.9
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	103	265	645	-
HCM Lane V/C Ratio	-	0.18	0.14	0.065	-
HCM Control Delay (s)	-	47.5	20.8	11	-
HCM Lane LOS	-	E	C	B	-
HCM 95th %tile Q(veh)	-	0.6	0.5	0.2	-

Intersection	
Int Delay, s/veh	27.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	140	340	640	100	80	360
Future Vol, veh/h	140	340	640	100	80	360
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	80	80	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	161	391	800	125	87	391

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1428	463	0	0	925	0
Stage 1	863	-	-	-	-	-
Stage 2	565	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	~ 137	547	-	-	737	-
Stage 1	374	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 121	547	-	-	737	-
Mov Cap-2 Maneuver	~ 121	-	-	-	-	-
Stage 1	374	-	-	-	-	-
Stage 2	501	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	95	0	1.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	121	547	737	-
HCM Lane V/C Ratio	-	-	1.33	0.714	0.118	-
HCM Control Delay (s)	-	-	261.7	26.4	10.5	-
HCM Lane LOS	-	-	F	D	B	-
HCM 95th %tile Q(veh)	-	-	10.7	5.8	0.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

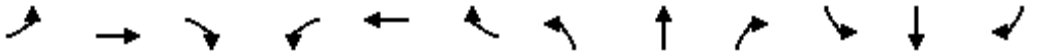
Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	110	350	420	10	90	430
Future Vol, veh/h	110	350	420	10	90	430
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	0	0	-	150	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	83	83	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	136	432	506	12	107	512

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1232	-	0	-	506	0
Stage 1	506	-	-	-	-	-
Stage 2	726	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	196	0	-	0	1059	-
Stage 1	606	0	-	0	-	-
Stage 2	479	0	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	176	-	-	-	1059	-
Mov Cap-2 Maneuver	307	-	-	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	431	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.7	0	1.5
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	307	-	1059	-
HCM Lane V/C Ratio	-	0.442	-	0.101	-
HCM Control Delay (s)	-	25.7	0	8.8	-
HCM Lane LOS	-	D	A	A	-
HCM 95th %tile Q(veh)	-	2.2	-	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	40	10	20	60	80	20	560	20	60	1120	70
Future Volume (veh/h)	10	40	10	20	60	80	20	560	20	60	1120	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	0.97		0.97	1.00		0.95	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	45	6	24	73	55	23	651	21	71	1318	75
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82	0.86	0.86	0.86	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	289	39	96	167	109	286	2278	73	554	2217	126
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	1240	1596	213	146	920	604	386	3493	113	757	3399	193
Grp Volume(v), veh/h	11	0	51	152	0	0	23	330	342	71	685	708
Grp Sat Flow(s),veh/h/ln	1240	0	1809	1669	0	0	386	1770	1836	757	1770	1822
Q Serve(g_s), s	0.0	0.0	1.4	0.0	0.0	0.0	2.2	4.8	4.8	2.7	13.2	13.3
Cycle Q Clear(g_c), s	0.4	0.0	1.4	4.7	0.0	0.0	15.4	4.8	4.8	7.4	13.2	13.3
Prop In Lane	1.00		0.12	0.16		0.36	1.00		0.06	1.00		0.11
Lane Grp Cap(c), veh/h	360	0	328	372	0	0	286	1154	1197	554	1154	1188
V/C Ratio(X)	0.03	0.00	0.16	0.41	0.00	0.00	0.08	0.29	0.29	0.13	0.59	0.60
Avail Cap(c_a), veh/h	569	0	633	646	0	0	286	1154	1197	554	1154	1188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.97	0.97	0.97	0.09	0.09	0.09
Uniform Delay (d), s/veh	20.3	0.0	20.7	22.1	0.0	0.0	10.3	4.5	4.5	6.0	5.9	5.9
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.7	0.0	0.0	0.5	0.6	0.6	0.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.7	2.3	0.0	0.0	0.3	2.5	2.6	0.6	6.3	6.6
LnGrp Delay(d),s/veh	20.3	0.0	20.9	22.8	0.0	0.0	10.9	5.1	5.0	6.1	6.1	6.1
LnGrp LOS	C		C	C			B	A	A	A	A	A
Approach Vol, veh/h		62			152			695			1464	
Approach Delay, s/veh		20.8			22.8			5.2			6.1	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.1		15.9		44.1		15.9
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		29.0		21.0		29.0		21.0
Max Q Clear Time (g_c+I1), s		17.4		3.4		15.3		6.7
Green Ext Time (p_c), s		9.7		1.2		11.3		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	20	40	5	60	30	20	520	10	30	1000	100
Future Volume (veh/h)	60	20	40	5	60	30	20	520	10	30	1000	100
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.89	0.91		0.98	1.00		0.95	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	87	29	46	10	115	46	22	565	11	35	1176	113
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.69	0.69	0.69	0.52	0.52	0.52	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	432	327	371	292	117	304	1785	35	549	1635	157
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.06	0.50	0.50	0.06	0.50	0.50
Sat Flow, veh/h	1205	1863	1409	1204	1259	504	1774	3547	69	1774	3249	312
Grp Volume(v), veh/h	87	29	46	10	0	161	22	282	294	35	639	650
Grp Sat Flow(s),veh/h/ln	1205	1863	1409	1204	0	1763	1774	1770	1846	1774	1770	1791
Q Serve(g_s), s	4.5	0.8	1.8	0.4	0.0	5.2	0.4	6.4	6.4	0.6	19.1	19.2
Cycle Q Clear(g_c), s	9.7	0.8	1.8	1.3	0.0	5.2	0.4	6.4	6.4	0.6	19.1	19.2
Prop In Lane	1.00		1.00	1.00		0.29	1.00		0.04	1.00		0.17
Lane Grp Cap(c), veh/h	293	432	327	371	0	409	304	891	929	549	891	901
V/C Ratio(X)	0.30	0.07	0.14	0.03	0.00	0.39	0.07	0.32	0.32	0.06	0.72	0.72
Avail Cap(c_a), veh/h	332	493	373	410	0	467	304	891	929	549	891	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.95	0.95	0.95	0.78	0.78	0.78
Uniform Delay (d), s/veh	26.2	20.4	20.7	20.9	0.0	22.1	9.5	10.0	10.0	7.0	13.1	13.2
Incr Delay (d2), s/veh	0.6	0.1	0.2	0.0	0.0	0.6	0.4	0.9	0.9	0.0	3.9	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.4	0.7	0.2	0.0	2.6	0.2	3.3	3.5	0.3	10.2	10.4
LnGrp Delay(d),s/veh	26.7	20.4	20.9	20.9	0.0	22.7	9.9	10.9	10.8	7.0	17.0	17.1
LnGrp LOS	C	C	C	C		C	A	B	B	A	B	B
Approach Vol, veh/h		162			171			598			1324	
Approach Delay, s/veh		24.0			22.6			10.8			16.8	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	39.2		20.8	8.0	39.2		20.8
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	24.0		18.0	4.0	32.0		18.0
Max Q Clear Time (g_c+I1), s	2.4	21.2		7.2	2.6	8.4		11.7
Green Ext Time (p_c), s	0.0	2.1		1.4	0.0	10.2		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	16.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	50	20	190	120	100	10	430	70	80	900	70
Future Volume (veh/h)	20	50	20	190	120	100	10	430	70	80	900	70
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.92	0.94		0.92	1.00		0.95	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	25	63	10	211	133	47	12	512	59	100	1125	63
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.79	0.79	0.79	0.90	0.90	0.90	0.84	0.84	0.84	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	358	492	385	417	492	386	252	1427	164	567	1665	93
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.90	0.90	0.05	0.49	0.49
Sat Flow, veh/h	1145	1863	1455	1244	1863	1460	1774	3182	365	1774	3396	190
Grp Volume(v), veh/h	25	63	10	211	133	47	12	284	287	100	586	602
Grp Sat Flow(s),veh/h/ln	1145	1863	1455	1244	1863	1460	1774	1770	1777	1774	1770	1816
Q Serve(g_s), s	1.1	1.5	0.3	9.3	3.4	1.5	0.2	1.5	1.5	1.8	15.1	15.2
Cycle Q Clear(g_c), s	4.5	1.5	0.3	10.9	3.4	1.5	0.2	1.5	1.5	1.8	15.1	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.10
Lane Grp Cap(c), veh/h	358	492	385	417	492	386	252	793	797	567	868	890
V/C Ratio(X)	0.07	0.13	0.03	0.51	0.27	0.12	0.05	0.36	0.36	0.18	0.68	0.68
Avail Cap(c_a), veh/h	380	528	412	440	528	414	349	793	797	590	868	890
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98	0.57	0.57	0.57
Uniform Delay (d), s/veh	19.3	16.8	16.4	20.9	17.5	16.8	10.0	1.8	1.8	7.6	11.7	11.7
Incr Delay (d2), s/veh	0.1	0.1	0.0	1.0	0.3	0.1	0.1	1.2	1.2	0.1	2.4	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.8	0.1	3.3	1.8	0.6	0.1	0.9	0.9	0.8	7.9	8.1
LnGrp Delay(d),s/veh	19.3	16.9	16.4	21.9	17.8	16.9	10.1	3.0	3.0	7.7	14.1	14.0
LnGrp LOS	B	B	B	C	B	B	B	A	A	A	B	B
Approach Vol, veh/h		98			391			583			1288	
Approach Delay, s/veh		17.5			19.9			3.2			13.6	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	34.4		20.9	7.2	31.9		20.9
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	25.0		17.0	4.0	25.0		17.0
Max Q Clear Time (g_c+I1), s	2.2	17.2		12.9	3.8	3.5		6.5
Green Ext Time (p_c), s	0.0	6.1		1.0	0.0	13.4		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	10	170	40	40	470	0	0	550	550
Future Volume (veh/h)	0	0	0	10	170	40	40	470	0	0	550	550
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.91	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				14	239	17	45	534	0	0	632	540
Adj No. of Lanes				0	3	0	1	2	0	0	1	1
Peak Hour Factor				0.71	0.71	0.71	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				44	787	57	437	2358	0	0	1241	1029
Arrive On Green				0.17	0.17	0.17	0.67	0.67	0.00	0.00	1.00	1.00
Sat Flow, veh/h				261	4710	338	476	3632	0	0	1863	1544
Grp Volume(v), veh/h				99	82	89	45	534	0	0	632	540
Grp Sat Flow(s),veh/h/ln				1850	1695	1765	476	1770	0	0	1863	1544
Q Serve(g_s), s				2.8	2.5	2.6	2.1	3.6	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				2.8	2.5	2.6	2.1	3.6	0.0	0.0	0.0	0.0
Prop In Lane				0.14		0.19	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				309	283	295	437	2358	0	0	1241	1029
V/C Ratio(X)				0.32	0.29	0.30	0.10	0.23	0.00	0.00	0.51	0.53
Avail Cap(c_a), veh/h				678	622	647	437	2358	0	0	1241	1029
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.75	0.75
Uniform Delay (d), s/veh				22.0	21.9	21.9	3.7	3.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.6	0.6	0.6	0.5	0.2	0.0	0.0	1.1	1.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.5	1.2	1.3	0.3	1.8	0.0	0.0	0.4	0.4
LnGrp Delay(d),s/veh				22.6	22.4	22.5	4.2	4.2	0.0	0.0	1.1	1.4
LnGrp LOS				C	C	C	A	A			A	A
Approach Vol, veh/h					270			579			1172	
Approach Delay, s/veh					22.5			4.2			1.3	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		45.0		15.0		45.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		28.0		22.0		28.0		
Max Q Clear Time (g_c+I1), s		2.0		4.8		5.6		
Green Ext Time (p_c), s		11.1		1.2		10.4		

Intersection Summary		
HCM 2010 Ctrl Delay		4.9
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	160	110	300	340	10	70	190	120	10	150	10
Future Volume (veh/h)	10	160	110	300	340	10	70	190	120	10	150	10
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.93	0.98		0.97	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	12	186	93	366	415	3	101	275	133	15	231	7
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.82	0.82	0.82	0.69	0.69	0.69	0.65	0.65	0.65
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	400	447	354	658	782	643	423	399	193	283	610	18
Arrive On Green	0.01	0.24	0.24	0.19	0.42	0.42	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1774	1863	1475	1774	1863	1531	1130	1175	568	968	1796	54
Grp Volume(v), veh/h	12	186	93	366	415	3	101	0	408	15	0	238
Grp Sat Flow(s),veh/h/ln	1774	1863	1475	1774	1863	1531	1130	0	1744	968	0	1851
Q Serve(g_s), s	0.2	4.1	2.5	6.6	8.0	0.1	3.6	0.0	9.7	0.7	0.0	4.7
Cycle Q Clear(g_c), s	0.2	4.1	2.5	6.6	8.0	0.1	8.3	0.0	9.7	10.4	0.0	4.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		0.03
Lane Grp Cap(c), veh/h	400	447	354	658	782	643	423	0	592	283	0	628
V/C Ratio(X)	0.03	0.42	0.26	0.56	0.53	0.00	0.24	0.00	0.69	0.05	0.00	0.38
Avail Cap(c_a), veh/h	894	1120	888	832	1120	921	485	0	687	376	0	806
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.6	15.5	14.9	9.0	10.4	8.1	15.2	0.0	13.7	18.2	0.0	12.1
Incr Delay (d2), s/veh	0.0	0.6	0.4	0.7	0.6	0.0	0.3	0.0	2.4	0.1	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.1	1.0	3.3	4.2	0.0	1.2	0.0	5.0	0.2	0.0	2.4
LnGrp Delay(d),s/veh	13.6	16.1	15.3	9.7	11.0	8.1	15.5	0.0	16.1	18.3	0.0	12.4
LnGrp LOS	B	B	B	A	B	A	B		B	B		B
Approach Vol, veh/h		291			784			509			253	
Approach Delay, s/veh		15.7			10.4			16.0			12.8	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	3.6	24.2		20.4	12.3	15.6		20.4
Change Period (Y+Rc), s	3.0	4.0		4.0	3.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	29.0		19.0	14.0	29.0		21.0
Max Q Clear Time (g_c+I1), s	2.2	10.0		11.7	8.6	6.1		12.4
Green Ext Time (p_c), s	0.0	4.2		2.8	0.8	4.5		3.2

Intersection Summary	
HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	200	10	250	430	20	60	310	150	40	240	30
Future Volume (veh/h)	50	200	10	250	430	20	60	310	150	40	240	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.93	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	75	299	12	263	453	21	67	348	138	48	289	30
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.67	0.67	0.67	0.95	0.95	0.95	0.89	0.89	0.89	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	707	575	312	930	771	272	390	155	137	519	54
Arrive On Green	0.06	0.38	0.38	0.18	0.50	0.50	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1774	1863	1516	1774	1863	1543	1055	1242	492	906	1654	172
Grp Volume(v), veh/h	75	299	12	263	453	21	67	0	486	48	0	319
Grp Sat Flow(s),veh/h/ln	1774	1863	1516	1774	1863	1543	1055	0	1734	906	0	1825
Q Serve(g_s), s	3.2	9.1	0.4	11.0	12.3	0.5	4.3	0.0	20.4	3.6	0.0	11.1
Cycle Q Clear(g_c), s	3.2	9.1	0.4	11.0	12.3	0.5	15.4	0.0	20.4	24.0	0.0	11.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.28	1.00		0.09
Lane Grp Cap(c), veh/h	99	707	575	312	930	771	272	0	544	137	0	573
V/C Ratio(X)	0.76	0.42	0.02	0.84	0.49	0.03	0.25	0.00	0.89	0.35	0.00	0.56
Avail Cap(c_a), veh/h	441	707	575	441	930	771	272	0	544	137	0	573
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.6	17.5	14.8	30.5	12.7	9.7	28.2	0.0	25.0	36.6	0.0	21.8
Incr Delay (d2), s/veh	11.2	1.9	0.1	10.0	1.8	0.1	0.5	0.0	16.9	1.5	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.0	0.2	6.2	6.8	0.2	1.3	0.0	12.3	1.1	0.0	5.8
LnGrp Delay(d),s/veh	46.8	19.4	14.9	40.5	14.5	9.8	28.7	0.0	41.9	38.2	0.0	23.0
LnGrp LOS	D	B	B	D	B	A	C		D	D		C
Approach Vol, veh/h		386			737			553			367	
Approach Delay, s/veh		24.6			23.6			40.3			25.0	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.4	32.5		27.5	7.3	41.7		27.5
Change Period (Y+Rc), s	3.0	3.5		3.5	3.0	3.5		3.5
Max Green Setting (Gmax), s	19.0	29.0		24.0	19.0	29.0		24.0
Max Q Clear Time (g_c+I1), s	13.0	11.1		26.0	5.2	14.3		22.4
Green Ext Time (p_c), s	0.5	4.9		0.0	0.2	4.5		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.6
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations			↕				↕				↕				↕	
Traffic Vol, veh/h	0	0	10	5	0	110	40	15	0	5	15	10	0	60	110	20
Future Vol, veh/h	0	0	10	5	0	110	40	15	0	5	15	10	0	60	110	20
Peak Hour Factor	0.92	0.70	0.70	0.70	0.92	0.85	0.85	0.85	0.92	0.75	0.75	0.75	0.92	0.59	0.59	0.59
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	14	7	0	129	47	18	0	7	20	13	0	102	186	34
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	9.7	8	10.6
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	0%	67%	32%
Vol Thru, %	50%	67%	24%	58%
Vol Right, %	33%	33%	9%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	15	165	190
LT Vol	5	0	110	60
Through Vol	15	10	40	110
RT Vol	10	5	15	20
Lane Flow Rate	40	21	194	322
Geometry Grp	1	1	1	1
Degree of Util (X)	0.052	0.029	0.263	0.404
Departure Headway (Hd)	4.679	4.837	4.885	4.521
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	763	737	734	795
Service Time	2.724	2.888	2.923	2.552
HCM Lane V/C Ratio	0.052	0.028	0.264	0.405
HCM Control Delay	8	8	9.7	10.6
HCM Lane LOS	A	A	A	B
HCM 95th-tile Q	0.2	0.1	1.1	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	80	550	40	30	220	0	0	140	170
Future Volume (veh/h)	0	0	0	80	550	40	30	220	0	0	140	170
Number				5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.89	0.96		1.00	1.00		0.90
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				96	663	43	34	250	0	0	163	131
Adj No. of Lanes				0	3	0	1	1	0	0	1	1
Peak Hour Factor				0.83	0.83	0.83	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				279	2057	136	419	683	0	0	683	524
Arrive On Green				0.47	0.47	0.47	0.73	0.73	0.00	0.00	0.12	0.12
Sat Flow, veh/h				598	4408	292	1039	1863	0	0	1863	1430
Grp Volume(v), veh/h				294	247	260	34	250	0	0	163	131
Grp Sat Flow(s),veh/h/ln				1833	1695	1769	1039	1863	0	0	1863	1430
Q Serve(g_s), s				6.1	5.5	5.5	0.9	2.9	0.0	0.0	4.8	5.0
Cycle Q Clear(g_c), s				6.1	5.5	5.5	5.6	2.9	0.0	0.0	4.8	5.0
Prop In Lane				0.33		0.17	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				855	791	826	419	683	0	0	683	524
V/C Ratio(X)				0.34	0.31	0.32	0.08	0.37	0.00	0.00	0.24	0.25
Avail Cap(c_a), veh/h				855	791	826	419	683	0	0	683	524
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				10.2	10.0	10.0	6.9	5.5	0.0	0.0	18.8	18.9
Incr Delay (d2), s/veh				1.1	1.0	1.0	0.4	1.5	0.0	0.0	0.8	1.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.3	2.8	2.9	0.3	1.7	0.0	0.0	2.6	2.1
LnGrp Delay(d),s/veh				11.3	11.0	11.0	7.3	7.0	0.0	0.0	19.6	20.0
LnGrp LOS				B	B	B	A	A			B	C
Approach Vol, veh/h					802			284			294	
Approach Delay, s/veh					11.1			7.0			19.8	
Approach LOS					B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		28.0		22.0				22.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary		
HCM 2010 Ctrl Delay		12.1
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	50	580	30	50	110	0	0	80	70
Future Volume (veh/h)	0	0	0	50	580	30	50	110	0	0	80	70
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.80	0.97		1.00	1.00		0.95
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1863
Adj Flow Rate, veh/h				56	644	31	68	151	0	0	121	85
Adj No. of Lanes				0	3	0	0	1	0	0	1	1
Peak Hour Factor				0.90	0.90	0.90	0.73	0.73	0.73	0.66	0.66	0.66
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				121	1483	73	293	613	0	0	962	778
Arrive On Green				0.10	0.10	0.10	0.52	0.52	0.00	0.00	0.52	0.52
Sat Flow, veh/h				383	4682	230	414	1186	0	0	1863	1505
Grp Volume(v), veh/h				270	225	236	219	0	0	0	121	85
Grp Sat Flow(s),veh/h/ln				1844	1695	1756	1600	0	0	0	1863	1505
Q Serve(g_s), s				8.3	7.5	7.6	0.0	0.0	0.0	0.0	2.0	1.7
Cycle Q Clear(g_c), s				8.3	7.5	7.6	3.9	0.0	0.0	0.0	2.0	1.7
Prop In Lane				0.21		0.13	0.31		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				584	537	556	905	0	0	0	962	778
V/C Ratio(X)				0.46	0.42	0.43	0.24	0.00	0.00	0.00	0.13	0.11
Avail Cap(c_a), veh/h				584	537	556	905	0	0	0	962	778
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				22.1	21.7	21.7	7.9	0.0	0.0	0.0	7.5	7.4
Incr Delay (d2), s/veh				2.6	2.4	2.4	0.6	0.0	0.0	0.0	0.3	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.6	3.9	4.0	2.1	0.0	0.0	0.0	1.1	0.8
LnGrp Delay(d),s/veh				24.7	24.1	24.1	8.6	0.0	0.0	0.0	7.8	7.7
LnGrp LOS				C	C	C	A				A	A
Approach Vol, veh/h					731			219			206	
Approach Delay, s/veh					24.3			8.6			7.7	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		36.0				36.0		24.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		31.0				31.0		19.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		18.4
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	150	520	40	70	180	0	0	150	80
Future Volume (veh/h)	0	0	0	150	520	40	70	180	0	0	150	80
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.92	0.97		1.00	1.00		0.93
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				174	605	41	76	196	0	0	174	73
Adj No. of Lanes				0	3	0	0	1	0	0	1	0
Peak Hour Factor				0.86	0.86	0.86	0.92	0.92	0.92	0.86	0.86	0.86
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				475	1783	123	199	472	0	0	467	196
Arrive On Green				0.45	0.45	0.45	0.38	0.38	0.00	0.00	0.38	0.38
Sat Flow, veh/h				1055	3963	273	319	1230	0	0	1218	511
Grp Volume(v), veh/h				298	253	269	272	0	0	0	0	247
Grp Sat Flow(s),veh/h/ln				1810	1695	1785	1549	0	0	0	0	1728
Q Serve(g_s), s				6.5	5.8	5.8	1.8	0.0	0.0	0.0	0.0	6.2
Cycle Q Clear(g_c), s				6.5	5.8	5.8	8.0	0.0	0.0	0.0	0.0	6.2
Prop In Lane				0.58		0.15	0.28		0.00	0.00		0.30
Lane Grp Cap(c), veh/h				814	763	803	671	0	0	0	0	663
V/C Ratio(X)				0.37	0.33	0.33	0.41	0.00	0.00	0.00	0.00	0.37
Avail Cap(c_a), veh/h				814	763	803	671	0	0	0	0	663
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				10.9	10.7	10.7	13.6	0.0	0.0	0.0	0.0	13.3
Incr Delay (d2), s/veh				1.3	1.2	1.1	1.8	0.0	0.0	0.0	0.0	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.5	2.9	3.1	3.7	0.0	0.0	0.0	0.0	3.2
LnGrp Delay(d),s/veh				12.1	11.8	11.8	15.4	0.0	0.0	0.0	0.0	14.9
LnGrp LOS				B	B	B	B					B
Approach Vol, veh/h					820			272			247	
Approach Delay, s/veh					11.9			15.4			14.9	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.0		32.0		28.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		23.0		27.0		23.0		
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		
Green Ext Time (p_c), s		0.0		0.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		13.2
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	260	30	0	0	0	0	230	10	140	410	0
Future Volume (veh/h)	280	260	30	0	0	0	0	230	10	140	410	0
Number	5	2	12				3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	247	511	31				0	237	5	173	506	0
Adj No. of Lanes	1	2	0				0	1	0	1	1	0
Peak Hour Factor	0.76	0.76	0.76				0.97	0.97	0.97	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	871	1703	103				0	622	13	395	638	0
Arrive On Green	0.49	0.49	0.49				0.00	0.34	0.34	0.34	0.34	0.00
Sat Flow, veh/h	1774	3467	210				0	1817	38	1129	1863	0
Grp Volume(v), veh/h	247	274	268				0	0	242	173	506	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1814				0	0	1855	1129	1863	0
Q Serve(g_s), s	4.9	5.3	5.3				0.0	0.0	5.9	8.2	14.7	0.0
Cycle Q Clear(g_c), s	4.9	5.3	5.3				0.0	0.0	5.9	14.1	14.7	0.0
Prop In Lane	1.00		0.12				0.00		0.02	1.00		0.00
Lane Grp Cap(c), veh/h	871	915	891				0	0	635	395	638	0
V/C Ratio(X)	0.28	0.30	0.30				0.00	0.00	0.38	0.44	0.79	0.00
Avail Cap(c_a), veh/h	871	915	891				0	0	773	479	776	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.0	9.1	9.1				0.0	0.0	14.9	20.3	17.8	0.0
Incr Delay (d2), s/veh	0.8	0.8	0.9				0.0	0.0	0.4	0.8	4.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.9	2.8				0.0	0.0	3.1	2.6	8.3	0.0
LnGrp Delay(d),s/veh	9.8	9.9	10.0				0.0	0.0	15.3	21.0	22.5	0.0
LnGrp LOS	A	A	A						B	C	C	
Approach Vol, veh/h		789						242			679	
Approach Delay, s/veh		9.9						15.3			22.1	
Approach LOS		A						B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		34.5		25.5				25.5
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		25.0		25.0				25.0
Max Q Clear Time (g_c+I1), s		7.3		16.7				7.9
Green Ext Time (p_c), s		4.5		3.8				5.8

Intersection Summary	
HCM 2010 Ctrl Delay	15.5
HCM 2010 LOS	B

Notes

Intersection	
Intersection Delay, s/veh	12.9
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Vol, veh/h	0	0	0	0	0	20	150	20	0	10	230	0	0	0	320	110
Future Vol, veh/h	0	0	0	0	0	20	150	20	0	10	230	0	0	0	320	110
Peak Hour Factor	0.92	1.00	1.00	1.00	0.92	0.80	0.80	0.80	0.92	0.93	0.93	0.93	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	25	188	25	0	11	247	0	0	0	364	125
Number of Lanes	0	0	0	0	0	0	2	0	0	0	1	0	0	0	1	1

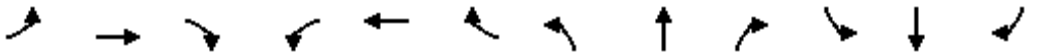
Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	10.9	13.2	13.8
HCM LOS	B	B	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	4%	21%	0%	0%	0%
Vol Thru, %	96%	79%	79%	100%	0%
Vol Right, %	0%	0%	21%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	240	95	95	320	110
LT Vol	10	20	0	0	0
Through Vol	230	75	75	320	0
RT Vol	0	0	20	0	110
Lane Flow Rate	258	119	119	364	125
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.423	0.216	0.208	0.568	0.171
Departure Headway (Hd)	5.907	6.553	6.297	5.626	4.918
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	612	549	571	644	730
Service Time	3.933	4.284	4.028	3.349	2.642
HCM Lane V/C Ratio	0.422	0.217	0.208	0.565	0.171
HCM Control Delay	13.2	11.1	10.7	15.5	8.7
HCM Lane LOS	B	B	B	C	A
HCM 95th-tile Q	2.1	0.8	0.8	3.6	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	30	10	140	20	5	5	400	190	10	320	5
Future Volume (veh/h)	10	30	10	140	20	5	5	400	190	10	320	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.99	1.00		0.95	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	13	38	7	215	31	3	6	471	190	12	390	6
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.78	0.78	0.78	0.65	0.65	0.65	0.85	0.85	0.85	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	535	87	661	86	7	420	518	209	223	761	12
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	244	1338	217	1234	216	18	980	1294	522	767	1902	29
Grp Volume(v), veh/h	58	0	0	249	0	0	6	0	661	12	0	396
Grp Sat Flow(s),veh/h/ln	1799	0	0	1467	0	0	980	0	1816	767	0	1931
Q Serve(g_s), s	0.0	0.0	0.0	4.0	0.0	0.0	0.2	0.0	13.7	0.6	0.0	6.2
Cycle Q Clear(g_c), s	0.8	0.0	0.0	4.7	0.0	0.0	6.4	0.0	13.7	14.3	0.0	6.2
Prop In Lane	0.22		0.12	0.86		0.01	1.00		0.29	1.00		0.02
Lane Grp Cap(c), veh/h	830	0	0	755	0	0	420	0	726	223	0	772
V/C Ratio(X)	0.07	0.00	0.00	0.33	0.00	0.00	0.01	0.00	0.91	0.05	0.00	0.51
Avail Cap(c_a), veh/h	830	0	0	755	0	0	420	0	726	223	0	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.4	0.0	0.0	8.5	0.0	0.0	11.5	0.0	11.3	18.1	0.0	9.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.2	0.0	0.0	0.1	0.0	17.5	0.5	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	2.2	0.0	0.0	0.1	0.0	10.3	0.2	0.0	3.7
LnGrp Delay(d),s/veh	7.6	0.0	0.0	9.7	0.0	0.0	11.5	0.0	28.8	18.5	0.0	11.5
LnGrp LOS	A			A			B		C	B		B
Approach Vol, veh/h		58			249			667			408	
Approach Delay, s/veh		7.6			9.7			28.7			11.7	
Approach LOS		A			A			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		20.0		20.0		20.0		20.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		15.7		2.8		16.3		6.7
Green Ext Time (p_c), s		0.2		1.0		0.0		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	540	330	0	0	0	90	0	450	0	480	140
Future Volume (vph)	0	540	330	0	0	0	90	0	450	0	480	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5				4.2		4.2		4.2	4.5
Lane Util. Factor		0.95	1.00				1.00		1.00		1.00	1.00
Frpb, ped/bikes		1.00	1.00				1.00		0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00				1.00		1.00		1.00	1.00
Frt		1.00	0.85				1.00		0.85		1.00	0.85
Flt Protected		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (prot)		3539	1583				1770		1559		1863	1565
Flt Permitted		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (perm)		3539	1583				1770		1559		1863	1565
Peak-hour factor, PHF	0.83	0.83	0.83	1.00	1.00	1.00	0.81	0.81	0.81	0.87	0.87	0.87
Adj. Flow (vph)	0	651	398	0	0	0	111	0	556	0	552	161
RTOR Reduction (vph)	0	0	115	0	0	0	0	0	30	0	0	44
Lane Group Flow (vph)	0	651	283	0	0	0	111	0	526	0	552	117
Confl. Peds. (#/hr)						4			7			5
Confl. Bikes (#/hr)												12
Turn Type		NA	Perm				Prot		Perm		NA	custom
Protected Phases		2					3				4	2
Permitted Phases			2						8			4
Actuated Green, G (s)		25.4	25.4				8.6		45.1		32.3	57.7
Effective Green, g (s)		25.4	25.4				8.6		45.1		32.3	57.7
Actuated g/C Ratio		0.32	0.32				0.11		0.57		0.41	0.73
Clearance Time (s)		4.5	4.5				4.2		4.2		4.2	4.5
Vehicle Extension (s)		3.0	3.0				3.0		3.0		3.0	3.0
Lane Grp Cap (vph)		1134	507				192		887		759	1140
v/s Ratio Prot		c0.18					0.06				c0.30	0.03
v/s Ratio Perm			0.18						c0.34			0.04
v/c Ratio		0.57	0.56				0.58		0.59		0.73	0.10
Uniform Delay, d1		22.4	22.2				33.6		11.1		19.7	3.2
Progression Factor		1.00	1.00				1.00		1.00		1.00	1.00
Incremental Delay, d2		0.7	1.3				4.2		1.1		3.5	0.0
Delay (s)		23.1	23.6				37.7		12.2		23.2	3.2
Level of Service		C	C				D		B		C	A
Approach Delay (s)		23.3			0.0			16.4			18.7	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	79.2	Sum of lost time (s)	12.9
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	10	5	40	10	5	5	640	20	5	650	10
Future Volume (veh/h)	30	10	5	40	10	5	5	640	20	5	650	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.96	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	14	7	63	16	8	6	800	25	7	890	14
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.70	0.70	0.70	0.63	0.63	0.63	0.80	0.80	0.80	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	322	99	39	403	90	372	273	1097	34	321	1117	18
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	869	396	155	1163	360	1482	614	1795	56	661	1828	29
Grp Volume(v), veh/h	64	0	0	79	0	8	6	0	825	7	0	904
Grp Sat Flow(s),veh/h/ln	1420	0	0	1523	0	1482	614	0	1851	661	0	1857
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	0.2	0.4	0.0	18.1	0.4	0.0	21.4
Cycle Q Clear(g_c), s	2.7	0.0	0.0	2.0	0.0	0.2	21.8	0.0	18.1	18.6	0.0	21.4
Prop In Lane	0.67		0.11	0.80		1.00	1.00		0.03	1.00		0.02
Lane Grp Cap(c), veh/h	460	0	0	494	0	372	273	0	1131	321	0	1135
V/C Ratio(X)	0.14	0.00	0.00	0.16	0.00	0.02	0.02	0.00	0.73	0.02	0.00	0.80
Avail Cap(c_a), veh/h	549	0	0	605	0	485	321	0	1276	373	0	1280
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	0.0	17.0	0.0	16.4	16.8	0.0	7.9	14.4	0.0	8.6
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.9	0.0	0.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	1.0	0.0	0.1	0.1	0.0	9.5	0.1	0.0	11.8
LnGrp Delay(d),s/veh	17.3	0.0	0.0	17.2	0.0	16.4	16.9	0.0	9.8	14.5	0.0	11.8
LnGrp LOS	B			B		B	B		A	B		B
Approach Vol, veh/h		64			87			831			911	
Approach Delay, s/veh		17.3			17.1			9.9			11.8	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		39.5		18.6		39.5		18.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		18.0		40.0		19.0
Max Q Clear Time (g_c+I1), s		23.8		4.7		23.4		4.0
Green Ext Time (p_c), s		11.6		0.6		11.8		0.7

Intersection Summary		
HCM 2010 Ctrl Delay		11.4
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	170	430	570	90	10	220	400	470	20	800	40
Future Volume (veh/h)	70	170	430	570	90	10	220	400	470	20	800	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	75	183	258	731	0	0	247	449	321	23	920	38
Adj No. of Lanes	1	1	1	2	1	0	2	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.88	0.88	0.88	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	362	380	450	785	412	0	306	1363	939	28	1081	45
Arrive On Green	0.20	0.20	0.20	0.22	0.00	0.00	0.09	0.39	0.39	0.02	0.31	0.31
Sat Flow, veh/h	1774	1863	1516	3548	1863	0	3442	3539	1529	1774	3461	143
Grp Volume(v), veh/h	75	183	258	731	0	0	247	449	321	23	470	488
Grp Sat Flow(s),veh/h/ln	1774	1863	1516	1774	1863	0	1721	1770	1529	1774	1770	1834
Q Serve(g_s), s	4.7	11.5	19.2	26.8	0.0	0.0	9.3	11.8	13.9	1.7	33.0	33.0
Cycle Q Clear(g_c), s	4.7	11.5	19.2	26.8	0.0	0.0	9.3	11.8	13.9	1.7	33.0	33.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	362	380	450	785	412	0	306	1363	939	28	553	573
V/C Ratio(X)	0.21	0.48	0.57	0.93	0.00	0.00	0.81	0.33	0.34	0.81	0.85	0.85
Avail Cap(c_a), veh/h	362	380	450	804	422	0	416	1363	939	67	553	573
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	46.5	39.9	50.6	0.0	0.0	59.2	28.7	13.0	64.9	42.6	42.6
Incr Delay (d2), s/veh	1.3	4.3	5.2	17.2	0.0	0.0	8.2	0.6	1.0	39.8	12.1	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.4	8.7	15.0	0.0	0.0	4.8	5.9	9.4	1.2	17.9	18.5
LnGrp Delay(d),s/veh	45.1	50.8	45.1	67.8	0.0	0.0	67.5	29.3	14.0	104.7	54.7	54.3
LnGrp LOS	D	D	D	E			E	C	B	F	D	D
Approach Vol, veh/h		516			731			1017			981	
Approach Delay, s/veh		47.2			67.8			33.7			55.7	
Approach LOS		D			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	57.0		33.0	16.8	47.4		35.3
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0
Max Green Setting (Gmax), s	5.0	51.0		27.0	16.0	40.0		30.0
Max Q Clear Time (g_c+I1), s	3.7	15.9		21.2	11.3	35.0		28.8
Green Ext Time (p_c), s	0.0	15.2		1.3	0.4	3.9		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	50.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	660	60	130	460	10	440	10	490	10	10	10
Future Volume (veh/h)	20	660	60	130	460	10	440	10	490	10	10	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	22	717	52	146	517	10	580	0	572	16	16	6
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.77	0.77	0.77	0.62	0.62	0.62
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	33	1578	114	182	2112	41	801	0	516	305	320	271
Arrive On Green	0.02	0.33	0.33	0.10	0.41	0.41	0.23	0.00	0.23	0.17	0.17	0.17
Sat Flow, veh/h	1774	4821	347	1774	5134	99	3548	0	1563	1774	1863	1578
Grp Volume(v), veh/h	22	503	266	146	341	186	580	0	572	16	16	6
Grp Sat Flow(s),veh/h/ln	1774	1695	1778	1774	1695	1842	1774	0	1563	1774	1863	1578
Q Serve(g_s), s	1.1	10.9	11.0	7.5	6.1	6.1	14.1	0.0	21.0	0.7	0.7	0.3
Cycle Q Clear(g_c), s	1.1	10.9	11.0	7.5	6.1	6.1	14.1	0.0	21.0	0.7	0.7	0.3
Prop In Lane	1.00		0.20	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	33	1110	582	182	1395	758	801	0	516	305	320	271
V/C Ratio(X)	0.67	0.45	0.46	0.80	0.24	0.25	0.72	0.00	1.11	0.05	0.05	0.02
Avail Cap(c_a), veh/h	95	1110	582	362	1395	758	801	0	516	305	320	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	24.7	24.7	40.8	17.9	17.9	33.3	0.0	31.3	32.2	32.2	32.0
Incr Delay (d2), s/veh	20.5	1.3	2.6	7.9	0.4	0.8	5.6	0.0	73.1	0.3	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	5.3	5.8	4.0	2.9	3.3	7.5	0.0	23.7	0.4	0.4	0.1
LnGrp Delay(d),s/veh	65.9	26.0	27.3	48.7	18.3	18.7	39.0	0.0	104.3	32.5	32.4	32.1
LnGrp LOS	E	C	C	D	B	B	D		F	C	C	C
Approach Vol, veh/h		791			673			1152			38	
Approach Delay, s/veh		27.6			25.0			71.4			32.4	
Approach LOS		C			C			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.6	34.4		20.0	5.7	42.3		25.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.6	21.0		16.0	5.0	35.0		21.0
Max Q Clear Time (g_c+I1), s	9.5	13.0		2.7	3.1	8.1		23.0
Green Ext Time (p_c), s	0.3	4.7		0.1	0.0	9.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	930	0	0	570	190	30	5	150	0	0	0
Future Volume (veh/h)	220	930	0	0	570	190	30	5	150	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900			
Adj Flow Rate, veh/h	278	1177	0	0	655	173	34	6	131			
Adj No. of Lanes	2	2	0	0	2	0	1	1	0			
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.88	0.88	0.88			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	1000	2817	0	0	1277	337	209	8	176			
Arrive On Green	0.29	0.80	0.00	0.00	0.46	0.46	0.12	0.12	0.12			
Sat Flow, veh/h	3442	3632	0	0	2855	729	1774	68	1494			
Grp Volume(v), veh/h	278	1177	0	0	419	409	34	0	137			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1721	1774	0	1563			
Q Serve(g_s), s	5.8	9.5	0.0	0.0	15.5	15.6	1.6	0.0	7.9			
Cycle Q Clear(g_c), s	5.8	9.5	0.0	0.0	15.5	15.6	1.6	0.0	7.9			
Prop In Lane	1.00		0.00	0.00		0.42	1.00		0.96			
Lane Grp Cap(c), veh/h	1000	2817	0	0	818	796	209	0	184			
V/C Ratio(X)	0.28	0.42	0.00	0.00	0.51	0.51	0.16	0.00	0.74			
Avail Cap(c_a), veh/h	1000	2817	0	0	818	796	401	0	353			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.95	0.95	1.00	0.00	1.00			
Uniform Delay (d), s/veh	25.5	2.9	0.0	0.0	17.6	17.6	36.9	0.0	39.7			
Incr Delay (d2), s/veh	0.1	0.5	0.0	0.0	2.2	2.2	0.4	0.0	5.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.8	4.6	0.0	0.0	8.1	7.9	0.8	0.0	3.7			
LnGrp Delay(d),s/veh	25.6	3.4	0.0	0.0	19.8	19.9	37.2	0.0	45.5			
LnGrp LOS	C	A			B	B	D		D			
Approach Vol, veh/h		1455			828			171				
Approach Delay, s/veh		7.6			19.8			43.8				
Approach LOS		A			B			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		78.0			31.0	47.0		15.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		64.0			17.0	43.0		21.0
Max Q Clear Time (g_c+I1), s		11.5			7.8	17.6		9.9
Green Ext Time (p_c), s		13.9			5.9	5.5		0.7

Intersection Summary		
HCM 2010 Ctrl Delay		14.3
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	480	5	260	40	890	0	0	740	530
Future Volume (veh/h)	0	0	0	480	5	260	40	890	0	0	740	530
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				585	6	178	48	1060	0	0	822	589
Adj No. of Lanes				0	1	1	1	2	0	0	2	1
Peak Hour Factor				0.82	0.82	0.82	0.84	0.84	0.84	0.90	0.90	0.90
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				635	7	572	253	1928	0	0	1244	543
Arrive On Green				0.36	0.36	0.36	0.14	0.54	0.00	0.00	0.35	0.35
Sat Flow, veh/h				1757	18	1583	1774	3632	0	0	3632	1543
Grp Volume(v), veh/h				591	0	178	48	1060	0	0	822	589
Grp Sat Flow(s),veh/h/ln				1775	0	1583	1774	1770	0	0	1770	1543
Q Serve(g_s), s				30.9	0.0	7.8	2.3	18.9	0.0	0.0	19.0	34.1
Cycle Q Clear(g_c), s				30.9	0.0	7.8	2.3	18.9	0.0	0.0	19.0	34.1
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				642	0	572	253	1928	0	0	1244	543
V/C Ratio(X)				0.92	0.00	0.31	0.19	0.55	0.00	0.00	0.66	1.09
Avail Cap(c_a), veh/h				692	0	617	253	1928	0	0	1244	543
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.84	0.84	0.00	0.00	0.95	0.95
Uniform Delay (d), s/veh				29.6	0.0	22.3	36.6	14.4	0.0	0.0	26.6	31.5
Incr Delay (d2), s/veh				17.1	0.0	0.3	0.3	1.0	0.0	0.0	2.6	62.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				18.1	0.0	3.5	1.2	9.4	0.0	0.0	9.7	24.0
LnGrp Delay(d),s/veh				46.7	0.0	22.6	36.9	15.3	0.0	0.0	29.2	94.4
LnGrp LOS				D		C	D	B			C	F
Approach Vol, veh/h					769			1108			1411	
Approach Delay, s/veh					41.1			16.2			56.4	
Approach LOS					D			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	18.7	39.0				57.7		39.3
Change Period (Y+Rc), s	4.9	* 4.9				4.9		4.2
Max Green Setting (Gmax), s	12.5	* 34				50.1		37.8
Max Q Clear Time (g_c+I1), s	14.3	36.1				20.9		32.9
Green Ext Time (p_c), s	4.6	0.0				9.3		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	39.3
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	470	20	430	20	580	300	460	1570	10
Future Volume (veh/h)	10	10	10	470	20	430	20	580	300	460	1570	10
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	14	14	0	527	0	217	24	690	278	517	1764	11
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	2	2	0
Peak Hour Factor	0.70	0.70	0.70	0.92	0.92	0.92	0.84	0.84	0.84	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	19	19	33	712	0	592	28	1434	948	612	2011	13
Arrive On Green	0.02	0.02	0.00	0.20	0.00	0.20	0.02	0.41	0.41	0.18	0.56	0.56
Sat Flow, veh/h	909	909	1583	3548	0	1550	1774	3539	1555	3442	3605	22
Grp Volume(v), veh/h	28	0	0	527	0	217	24	690	278	517	865	910
Grp Sat Flow(s),veh/h/ln	1817	0	1583	1774	0	1550	1774	1770	1555	1721	1770	1858
Q Serve(g_s), s	1.6	0.0	0.0	15.0	0.0	10.9	1.5	15.5	9.2	15.6	45.5	45.7
Cycle Q Clear(g_c), s	1.6	0.0	0.0	15.0	0.0	10.9	1.5	15.5	9.2	15.6	45.5	45.7
Prop In Lane	0.50		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	38	0	33	712	0	592	28	1434	948	612	987	1036
V/C Ratio(X)	0.73	0.00	0.00	0.74	0.00	0.37	0.84	0.48	0.29	0.84	0.88	0.88
Avail Cap(c_a), veh/h	68	0	59	957	0	700	66	1434	948	800	987	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	0.0	0.0	40.4	0.0	24.2	52.8	23.6	10.2	42.8	20.6	20.6
Incr Delay (d2), s/veh	23.2	0.0	0.0	2.1	0.0	0.4	45.0	1.2	0.8	6.5	10.8	10.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	7.5	0.0	4.7	1.1	7.8	6.2	8.0	25.1	26.3
LnGrp Delay(d),s/veh	75.5	0.0	0.0	42.5	0.0	24.5	97.7	24.8	11.0	49.3	31.4	31.1
LnGrp LOS	E			D		C	F	C	B	D	C	C
Approach Vol, veh/h		28			744			992			2292	
Approach Delay, s/veh		75.5			37.2			22.7			35.3	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.7	66.0		26.6	24.1	49.6		7.3
Change Period (Y+Rc), s	6.0	* 6		5.0	5.0	6.0		5.0
Max Green Setting (Gmax), s	4.0	* 60		29.0	25.0	39.0		4.0
Max Q Clear Time (g_c+I1), s	3.5	47.7		17.0	17.6	17.5		3.6
Green Ext Time (p_c), s	0.0	9.3		2.8	1.5	5.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.9
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	15.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	50	40	1030	1940	10
Future Vol, veh/h	10	50	40	1030	1940	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	180	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	94	94	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	76	43	1096	2282	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2921	1147	2294	0	-	0
Stage 1	2288	-	-	-	-	-
Stage 2	633	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 12	193	217	-	-	-
Stage 1	63	-	-	-	-	-
Stage 2	491	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 10	193	217	-	-	-
Mov Cap-2 Maneuver	~ 10	-	-	-	-	-
Stage 1	63	-	-	-	-	-
Stage 2	394	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 604.2	1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	217	-	48	-	-
HCM Lane V/C Ratio	0.196	-	1.894	-	-
HCM Control Delay (s)	25.6	-	$ 604.2	-	-
HCM Lane LOS	D	-	F	-	-
HCM 95th %tile Q(veh)	0.7	-	9.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	13.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	130	120	940	140	80	1940
Future Vol, veh/h	130	120	940	140	80	1940
Conflicting Peds, #/hr	0	0	0	15	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	89	89	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	163	150	1056	157	83	2021

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2327	622	0	0	1228	0
Stage 1	1150	-	-	-	-	-
Stage 2	1177	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 31	430	-	-	563	-
Stage 1	264	-	-	-	-	-
Stage 2	255	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 26	424	-	-	563	-
Mov Cap-2 Maneuver	~ 120	-	-	-	-	-
Stage 1	260	-	-	-	-	-
Stage 2	217	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	149.9	0	0.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	120	424	563	-
HCM Lane V/C Ratio	-	-	1.354	0.354	0.148	-
HCM Control Delay (s)	-	-	271.6	18.1	12.5	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	10.9	1.6	0.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	26.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	240	30	1460	1660	20
Future Vol, veh/h	10	240	30	1460	1660	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	261	33	1587	1804	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2674	913	1826	0	-	0
Stage 1	1815	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	18	276	331	-	-	-
Stage 1	115	-	-	-	-	-
Stage 2	375	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	16	276	331	-	-	-
Mov Cap-2 Maneuver	16	-	-	-	-	-
Stage 1	115	-	-	-	-	-
Stage 2	338	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 356.6	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	331	-	167	-	-
HCM Lane V/C Ratio	0.099	-	1.627	-	-
HCM Control Delay (s)	17.1	-	$ 356.6	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	18.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	33.0
Intersection LOS	D

Approach	WB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	1	1
Adj Approach Flow, veh/h	186	1622	1829
Demand Flow Rate, veh/h	189	1655	1866
Vehicles Circulating, veh/h	1621	46	167
Vehicles Exiting, veh/h	80	1987	1643
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	1	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	23.1	17.9	47.4
Approach LOS	C	C	E

Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.470	0.530
Critical Headway, s	4.113	5.193	5.193	5.193	5.193
Entry Flow, veh/h	189	778	877	877	989
Cap Entry Lane, veh/h	363	1079	1079	956	956
Entry HV Adj Factor	0.984	0.980	0.980	0.980	0.980
Flow Entry, veh/h	186	762	860	860	970
Cap Entry, veh/h	358	1058	1058	937	937
V/C Ratio	0.520	0.721	0.813	0.917	1.034
Control Delay, s/veh	23.1	15.3	20.3	33.8	59.6
LOS	C	C	C	D	F
95th %tile Queue, veh	3	7	9	14	21

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	110	15	1430	30	40	1570
Future Volume (veh/h)	110	15	1430	30	40	1570
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863
Adj Flow Rate, veh/h	164	22	1589	33	45	1784
Adj No. of Lanes	0	0	2	1	1	2
Peak Hour Factor	0.67	0.67	0.90	0.90	0.88	0.88
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	215	29	2083	910	66	2491
Arrive On Green	0.14	0.14	0.59	0.59	0.04	0.70
Sat Flow, veh/h	1534	206	3632	1545	1774	3632
Grp Volume(v), veh/h	187	0	1589	33	45	1784
Grp Sat Flow(s),veh/h/ln	1750	0	1770	1545	1774	1770
Q Serve(g_s), s	5.3	0.0	17.1	0.5	1.3	15.4
Cycle Q Clear(g_c), s	5.3	0.0	17.1	0.5	1.3	15.4
Prop In Lane	0.88	0.12		1.00	1.00	
Lane Grp Cap(c), veh/h	245	0	2083	910	66	2491
V/C Ratio(X)	0.76	0.00	0.76	0.04	0.69	0.72
Avail Cap(c_a), veh/h	547	0	2083	910	139	2491
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	0.0	7.9	4.4	24.3	4.5
Incr Delay (d2), s/veh	4.9	0.0	2.7	0.1	12.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	8.9	0.2	0.8	7.8
LnGrp Delay(d),s/veh	26.1	0.0	10.6	4.5	36.3	6.3
LnGrp LOS	C		B	A	D	A
Approach Vol, veh/h	187		1622			1829
Approach Delay, s/veh	26.1		10.4			7.1
Approach LOS	C		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.9	34.1				40.0		11.2
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	4.0	28.0				36.0		16.0
Max Q Clear Time (g_c+I1), s	3.3	19.1				17.4		7.3
Green Ext Time (p_c), s	0.0	8.7				17.9		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	9.5
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	460	230	170	230	300	290	1170	50	280	1370	60
Future Volume (veh/h)	140	460	230	170	230	300	290	1170	50	280	1370	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.94	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	167	548	210	189	256	320	337	1360	58	301	1473	62
Adj No. of Lanes	1	2	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	629	247	197	334	280	344	1573	675	306	1534	683
Arrive On Green	0.10	0.18	0.18	0.11	0.19	0.19	0.10	0.44	0.44	0.09	0.43	0.43
Sat Flow, veh/h	1774	3539	1387	1774	1770	1485	3442	3539	1519	3442	3539	1577
Grp Volume(v), veh/h	167	548	210	189	256	320	337	1360	58	301	1473	62
Grp Sat Flow(s),veh/h/ln	1774	1770	1387	1774	1770	1485	1721	1770	1519	1721	1770	1577
Q Serve(g_s), s	8.4	13.6	13.2	9.5	12.3	17.0	8.8	31.2	2.0	7.9	36.4	2.1
Cycle Q Clear(g_c), s	8.4	13.6	13.2	9.5	12.3	17.0	8.8	31.2	2.0	7.9	36.4	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	177	629	247	197	334	280	344	1573	675	306	1534	683
V/C Ratio(X)	0.94	0.87	0.85	0.96	0.77	1.14	0.98	0.86	0.09	0.98	0.96	0.09
Avail Cap(c_a), veh/h	177	629	247	197	334	280	344	1573	675	306	1534	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	36.0	35.9	39.8	34.6	36.5	40.4	22.6	14.4	40.9	24.8	15.0
Incr Delay (d2), s/veh	50.7	12.6	23.7	52.1	10.2	97.3	42.8	6.6	0.3	46.9	15.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	7.7	6.7	7.5	7.0	14.5	6.2	16.6	0.9	5.7	20.9	1.0
LnGrp Delay(d),s/veh	90.9	48.6	59.6	91.9	44.8	133.8	83.2	29.2	14.7	87.8	40.1	15.3
LnGrp LOS	F	D	E	F	D	F	F	C	B	F	D	B
Approach Vol, veh/h		925			765			1755			1836	
Approach Delay, s/veh		58.8			93.7			39.0			47.1	
Approach LOS		E			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	44.0	14.0	20.0	13.0	43.0	13.0	21.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	40.0	10.0	16.0	9.0	39.0	9.0	17.0
Max Q Clear Time (g_c+I1), s	9.9	33.2	11.5	15.6	10.8	38.4	10.4	19.0
Green Ext Time (p_c), s	0.0	6.5	0.0	0.3	0.0	0.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.2
HCM 2010 LOS	D

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	1	1
Adj Approach Flow, veh/h	413	50	978	553
Demand Flow Rate, veh/h	421	50	997	564
Vehicles Circulating, veh/h	530	1143	173	200
Vehicles Exiting, veh/h	234	27	778	993
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	7	14	19	6
Ped Cap Adj	0.999	1.000	0.981	0.994
Approach Delay, s/veh	12.8	8.4	11.1	7.3
Approach LOS	B	A	B	A

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Critical Headway, s	4.113	4.113	5.193	5.193	5.193	5.193
Entry Flow, veh/h	421	50	469	528	265	299
Cap Entry Lane, veh/h	780	508	950	950	925	925
Entry HV Adj Factor	0.981	0.996	0.980	0.982	0.981	0.981
Flow Entry, veh/h	413	50	460	518	260	293
Cap Entry, veh/h	764	506	914	915	903	902
V/C Ratio	0.540	0.098	0.503	0.566	0.288	0.325
Control Delay, s/veh	12.8	8.4	10.4	11.8	7.0	7.5
LOS	B	A	B	B	A	A
95th %tile Queue, veh	3	0	3	4	1	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	5	220	10	5	10	110	530	5	10	370	40
Future Volume (veh/h)	130	5	220	10	5	10	110	530	5	10	370	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.96	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	151	6	256	20	10	20	167	803	8	13	487	53
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	0	2	1
Peak Hour Factor	0.86	0.86	0.86	0.50	0.50	0.50	0.66	0.66	0.66	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	44	329	306	165	219	481	1508	15	118	1428	645
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	446	125	932	463	469	621	859	3588	36	27	3399	1535
Grp Volume(v), veh/h	413	0	0	50	0	0	167	396	415	266	234	53
Grp Sat Flow(s),veh/h/ln	1503	0	0	1553	0	0	859	1770	1854	1815	1610	1535
Q Serve(g_s), s	6.4	0.0	0.0	0.0	0.0	0.0	5.8	5.9	5.9	0.0	3.5	0.7
Cycle Q Clear(g_c), s	8.5	0.0	0.0	0.7	0.0	0.0	9.2	5.9	5.9	3.4	3.5	0.7
Prop In Lane	0.37		0.62	0.40		0.40	1.00		0.02	0.05		1.00
Lane Grp Cap(c), veh/h	670	0	0	691	0	0	481	744	779	870	677	645
V/C Ratio(X)	0.62	0.00	0.00	0.07	0.00	0.00	0.35	0.53	0.53	0.31	0.35	0.08
Avail Cap(c_a), veh/h	819	0	0	829	0	0	510	803	842	928	731	697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.1	0.0	0.0	7.6	0.0	0.0	10.1	7.6	7.6	6.9	6.9	6.1
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.6	0.2	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	0.0	0.3	0.0	0.0	1.4	3.0	3.1	1.7	1.5	0.3
LnGrp Delay(d),s/veh	11.0	0.0	0.0	7.6	0.0	0.0	10.5	8.2	8.2	7.1	7.2	6.2
LnGrp LOS	B			A			B	A	A	A	A	A
Approach Vol, veh/h		413			50			978			553	
Approach Delay, s/veh		11.0			7.6			8.6			7.1	
Approach LOS		B			A			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		18.8		16.4		18.8		16.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		11.2		10.5		5.5		2.7
Green Ext Time (p_c), s		3.4		1.6		6.6		2.8

Intersection Summary	
HCM 2010 Ctrl Delay	8.7
HCM 2010 LOS	A

Intersection	
Intersection Delay, s/veh	17.5
Intersection LOS	C

Approach	WB	NB	SB
Entry Lanes	1	2	1
Conflicting Circle Lanes	2	1	1
Adj Approach Flow, veh/h	552	925	478
Demand Flow Rate, veh/h	563	944	488
Vehicles Circulating, veh/h	816	89	164
Vehicles Exiting, veh/h	216	563	1215
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	38.3	8.8	10.3
Approach LOS	E	A	B

Lane	Left	Left	Right	Left
Designated Moves	LR	LT	TR	LT
Assumed Moves	LR	LT	TR	LT
RT Channelized				
Lane Util	1.000	0.470	0.530	1.000
Critical Headway, s	4.113	5.193	5.193	5.193
Entry Flow, veh/h	563	444	500	488
Cap Entry Lane, veh/h	638	1034	1034	959
Entry HV Adj Factor	0.980	0.979	0.980	0.980
Flow Entry, veh/h	552	435	490	478
Cap Entry, veh/h	626	1012	1014	940
V/C Ratio	0.882	0.430	0.484	0.509
Control Delay, s/veh	38.3	8.4	9.3	10.3
LOS	E	A	A	B
95th %tile Queue, veh	10	2	3	3

Intersection	
Intersection Delay, s/veh	52.4
Intersection LOS	F

Approach	EB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	1	1
Adj Approach Flow, veh/h	91	1139	2294
Demand Flow Rate, veh/h	93	1162	2340
Vehicles Circulating, veh/h	2328	15	44
Vehicles Exiting, veh/h	56	2406	1133
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	30.2	9.5	74.6
Approach LOS	D	A	F

Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.470	0.530
Critical Headway, s	4.113	5.193	5.193	5.193	5.193
Entry Flow, veh/h	93	546	616	1100	1240
Cap Entry Lane, veh/h	221	1113	1113	1081	1081
Entry HV Adj Factor	0.978	0.981	0.980	0.980	0.981
Flow Entry, veh/h	91	535	604	1078	1216
Cap Entry, veh/h	217	1091	1091	1060	1060
V/C Ratio	0.420	0.491	0.553	1.017	1.147
Control Delay, s/veh	30.2	8.9	10.1	51.9	94.7
LOS	D	A	B	F	F
95th %tile Queue, veh	2	3	4	21	33

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	50	40	1030	1940	10
Future Volume (veh/h)	10	50	40	1030	1940	10
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	15	76	43	1096	2282	12
Adj No. of Lanes	0	0	1	2	2	0
Peak Hour Factor	0.66	0.66	0.94	0.94	0.85	0.85
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	19	97	55	2928	2694	14
Arrive On Green	0.07	0.07	0.03	0.83	0.75	0.75
Sat Flow, veh/h	263	1334	1774	3632	3703	19
Grp Volume(v), veh/h	92	0	43	1096	1118	1176
Grp Sat Flow(s),veh/h/ln	1614	0	1774	1770	1770	1859
Q Serve(g_s), s	4.5	0.0	1.9	6.2	34.7	34.9
Cycle Q Clear(g_c), s	4.5	0.0	1.9	6.2	34.7	34.9
Prop In Lane	0.16	0.83	1.00			0.01
Lane Grp Cap(c), veh/h	117	0	55	2928	1321	1387
V/C Ratio(X)	0.79	0.00	0.79	0.37	0.85	0.85
Avail Cap(c_a), veh/h	324	0	89	2928	1321	1387
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.4	0.0	38.4	1.7	7.0	7.0
Incr Delay (d2), s/veh	10.9	0.0	21.5	0.4	6.8	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	1.3	3.0	19.0	19.9
LnGrp Delay(d),s/veh	47.3	0.0	59.9	2.1	13.8	13.6
LnGrp LOS	D		E	A	B	B
Approach Vol, veh/h	92			1139	2294	
Approach Delay, s/veh	47.3			4.3	13.7	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		70.0		9.8	6.5	63.5		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		66.0		16.0	4.0	58.0		
Max Q Clear Time (g_c+I1), s		8.2		6.5	3.9	36.9		
Green Ext Time (p_c), s		50.6		0.2	0.0	20.0		

Intersection Summary	
HCM 2010 Ctrl Delay	11.5
HCM 2010 LOS	B

Notes

Intersection	
Intersection Delay, s/veh	23.7
Intersection LOS	C

Approach	EB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	1	1
Adj Approach Flow, veh/h	272	1620	1826
Demand Flow Rate, veh/h	277	1653	1862
Vehicles Circulating, veh/h	1840	11	34
Vehicles Exiting, veh/h	56	2106	1630
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	64.2	16.0	24.5
Approach LOS	F	C	C

Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.470	0.530
Critical Headway, s	4.113	5.193	5.193	5.193	5.193
Entry Flow, veh/h	277	777	876	875	987
Cap Entry Lane, veh/h	312	1118	1118	1092	1092
Entry HV Adj Factor	0.982	0.980	0.980	0.981	0.980
Flow Entry, veh/h	272	762	859	858	968
Cap Entry, veh/h	306	1095	1096	1071	1071
V/C Ratio	0.889	0.695	0.784	0.801	0.904
Control Delay, s/veh	64.2	13.9	17.9	19.3	29.1
LOS	F	B	C	C	D
95th %tile Queue, veh	8	6	8	9	14

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	240	30	1460	1660	20
Future Volume (veh/h)	10	240	30	1460	1660	20
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	11	261	33	1587	1804	22
Adj No. of Lanes	0	0	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	13	305	49	2396	2105	26
Arrive On Green	0.20	0.20	0.03	0.68	0.59	0.59
Sat Flow, veh/h	64	1521	1774	3632	3674	44
Grp Volume(v), veh/h	273	0	33	1587	890	936
Grp Sat Flow(s),veh/h/ln	1591	0	1774	1770	1770	1855
Q Serve(g_s), s	10.8	0.0	1.2	17.1	27.2	27.4
Cycle Q Clear(g_c), s	10.8	0.0	1.2	17.1	27.2	27.4
Prop In Lane	0.04	0.96	1.00			0.02
Lane Grp Cap(c), veh/h	319	0	49	2396	1040	1091
V/C Ratio(X)	0.86	0.00	0.67	0.66	0.86	0.86
Avail Cap(c_a), veh/h	390	0	109	2497	1040	1091
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	0.0	31.4	6.2	11.1	11.2
Incr Delay (d2), s/veh	14.5	0.0	14.9	0.6	7.1	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	0.0	0.8	8.4	15.2	15.9
LnGrp Delay(d),s/veh	39.6	0.0	46.3	6.8	18.3	18.2
LnGrp LOS	D		D	A	B	B
Approach Vol, veh/h	273			1620	1826	
Approach Delay, s/veh	39.6			7.6	18.2	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		48.1		17.1	5.8	42.3		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		46.0		16.0	4.0	38.0		
Max Q Clear Time (g_c+I1), s		19.1		12.8	3.2	29.4		
Green Ext Time (p_c), s		25.0		0.4	0.0	8.5		

Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	27.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	70	1830	5	10	1200
Future Vol, veh/h	20	70	1830	5	10	1200
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	180	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	93	2033	6	13	1500

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2808	1017	0	0	2033	0
Stage 1	2033	-	-	-	-	-
Stage 2	775	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 14	235	-	-	275	-
Stage 1	87	-	-	-	-	-
Stage 2	415	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 13	235	-	-	275	-
Mov Cap-2 Maneuver	~ 13	-	-	-	-	-
Stage 1	87	-	-	-	-	-
Stage 2	395	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 837.2	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	49	275	-
HCM Lane V/C Ratio	-	-	2.449	0.045	-
HCM Control Delay (s)	-	-	$ 837.2	18.7	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	12.5	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	100	80	160	70	170	50	1620	90	40	1360	30
Future Volume (veh/h)	140	100	80	160	70	170	50	1620	90	40	1360	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.89	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1976	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	138	207	89	148	170	209	54	1742	97	54	1838	40
Adj No. of Lanes	1	2	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.74	0.74	0.74	0.78	0.78	0.78	0.93	0.93	0.93	0.74	0.74	0.74
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	311	428	173	270	283	214	64	1844	815	64	1844	799
Arrive On Green	0.18	0.18	0.18	0.15	0.15	0.15	0.04	0.52	0.52	0.04	0.52	0.52
Sat Flow, veh/h	1774	2443	989	1774	1863	1411	1774	3539	1564	1774	3539	1534
Grp Volume(v), veh/h	138	155	141	148	170	209	54	1742	97	54	1838	40
Grp Sat Flow(s),veh/h/ln	1774	1863	1569	1774	1863	1411	1774	1770	1564	1774	1770	1534
Q Serve(g_s), s	9.6	10.3	11.3	10.7	11.8	20.4	4.2	64.1	4.4	4.2	71.5	1.8
Cycle Q Clear(g_c), s	9.6	10.3	11.3	10.7	11.8	20.4	4.2	64.1	4.4	4.2	71.5	1.8
Prop In Lane	1.00		0.63	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	311	326	275	270	283	214	64	1844	815	64	1844	799
V/C Ratio(X)	0.44	0.47	0.51	0.55	0.60	0.97	0.84	0.94	0.12	0.84	1.00	0.05
Avail Cap(c_a), veh/h	411	431	363	270	283	214	250	1844	815	225	1844	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	51.3	51.7	54.2	54.7	58.3	66.2	31.2	16.9	66.2	33.0	16.3
Incr Delay (d2), s/veh	1.0	1.1	1.5	2.4	3.5	54.0	24.3	10.6	0.1	24.5	20.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	5.4	5.0	5.4	6.3	11.2	2.5	33.9	1.9	2.5	39.9	0.8
LnGrp Delay(d),s/veh	52.0	52.4	53.2	56.6	58.2	112.3	90.5	41.8	17.0	90.7	53.1	16.3
LnGrp LOS	D	D	D	E	E	F	F	D	B	F	D	B
Approach Vol, veh/h		434			527			1893			1932	
Approach Delay, s/veh		52.5			79.2			41.9			53.4	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	76.0		28.2	9.0	76.0		25.0
Change Period (Y+Rc), s	3.5	6.0		4.0	3.5	6.0		4.0
Max Green Setting (Gmax), s	18.0	70.0		32.0	20.0	70.0		21.0
Max Q Clear Time (g_c+I1), s	6.2	66.1		13.3	6.2	73.5		22.4
Green Ext Time (p_c), s	0.1	3.8		2.3	0.1	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	51.6
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	190	270	90	80	40
Future Vol, veh/h	20	190	270	90	80	40
Conflicting Peds, #/hr	0	0	0	42	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	62	62	85	85	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	306	318	106	93	47

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	466	0	-	0	784	415
Stage 1	-	-	-	-	413	-
Stage 2	-	-	-	-	371	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1095	-	-	-	362	637
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	698	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1093	-	-	-	322	610
Mov Cap-2 Maneuver	-	-	-	-	322	-
Stage 1	-	-	-	-	641	-
Stage 2	-	-	-	-	647	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	17.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1093	-	-	-	322	610
HCM Lane V/C Ratio	0.03	-	-	-	0.289	0.076
HCM Control Delay (s)	8.4	0	-	-	20.7	11.4
HCM Lane LOS	A	A	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.2	0.2

Intersection	
Intersection Delay, s/veh	14.5
Intersection LOS	B

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Lane Configurations									
Traffic Vol, veh/h	0	190	90	0	220	280	0	120	180
Future Vol, veh/h	0	190	90	0	220	280	0	120	180
Peak Hour Factor	0.92	0.64	0.64	0.92	0.94	0.94	0.92	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	297	141	0	234	298	0	160	240
Number of Lanes	0	2	0	0	1	1	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	2
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	2
HCM Control Delay	13.3	16.1	13.8
HCM LOS	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	0%	100%	41%	0%	100%
Vol Right, %	0%	100%	0%	59%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	180	127	153	220	280
LT Vol	120	0	0	0	220	0
Through Vol	0	0	127	63	0	280
RT Vol	0	180	0	90	0	0
Lane Flow Rate	160	240	198	240	234	298
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.334	0.42	0.365	0.414	0.454	0.536
Departure Headway (Hd)	7.517	6.296	6.643	6.224	6.982	6.473
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	477	569	538	575	515	554
Service Time	5.285	4.064	4.415	3.995	4.749	4.239
HCM Lane V/C Ratio	0.335	0.422	0.368	0.417	0.454	0.538
HCM Control Delay	14	13.6	13.2	13.4	15.5	16.5
HCM Lane LOS	B	B	B	B	C	C
HCM 95th-tile Q	1.5	2.1	1.7	2	2.3	3.2

Intersection	
Intersection Delay, s/veh	14.8
Intersection LOS	B

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	160	40	0	200	120	0	20	360
Future Vol, veh/h	0	160	40	0	200	120	0	20	360
Peak Hour Factor	0.92	0.79	0.79	0.92	0.87	0.87	0.92	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	203	51	0	230	138	0	24	429
Number of Lanes	0	1	0	0	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	13.3	11.1	18.7
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	WBLn1	SBLn1
Vol Left, %	0%	0%	80%	5%
Vol Thru, %	100%	0%	0%	95%
Vol Right, %	0%	100%	20%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	200	120	200	380
LT Vol	0	0	160	20
Through Vol	200	0	0	360
RT Vol	0	120	40	0
Lane Flow Rate	230	138	253	452
Geometry Grp	7	7	2	5
Degree of Util (X)	0.377	0.199	0.421	0.672
Departure Headway (Hd)	5.898	5.187	5.982	5.351
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	609	691	603	674
Service Time	3.637	2.927	4.024	3.387
HCM Lane V/C Ratio	0.378	0.2	0.42	0.671
HCM Control Delay	12.2	9.2	13.3	18.7
HCM Lane LOS	B	A	B	C
HCM 95th-tile Q	1.8	0.7	2.1	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	240	170	100	350	270	330	1340	90	320	1130	150
Future Volume (veh/h)	120	240	170	100	350	270	330	1340	90	320	1130	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.88	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	145	289	129	106	372	218	375	1523	100	372	1314	96
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.83	0.83	0.83	0.94	0.94	0.94	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	473	377	135	487	277	375	1158	497	322	1103	483
Arrive On Green	0.09	0.25	0.25	0.08	0.24	0.24	0.11	0.33	0.33	0.09	0.31	0.31
Sat Flow, veh/h	1774	1863	1483	1774	2058	1172	3442	3539	1521	3442	3539	1552
Grp Volume(v), veh/h	145	289	129	106	318	272	375	1523	100	372	1314	96
Grp Sat Flow(s),veh/h/ln	1774	1863	1483	1774	1770	1460	1721	1770	1521	1721	1770	1552
Q Serve(g_s), s	5.2	8.8	4.6	3.8	10.7	11.2	7.0	21.0	3.0	6.0	20.0	2.9
Cycle Q Clear(g_c), s	5.2	8.8	4.6	3.8	10.7	11.2	7.0	21.0	3.0	6.0	20.0	2.9
Prop In Lane	1.00		1.00	1.00		0.80	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	473	377	135	419	346	375	1158	497	322	1103	483
V/C Ratio(X)	0.87	0.61	0.34	0.78	0.76	0.79	1.00	1.32	0.20	1.16	1.19	0.20
Avail Cap(c_a), veh/h	166	473	377	166	441	364	375	1158	497	322	1103	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	21.2	19.6	29.1	22.8	23.0	28.6	21.6	15.6	29.1	22.1	16.2
Incr Delay (d2), s/veh	36.8	2.3	0.5	17.6	7.2	10.4	46.3	148.2	0.9	99.7	95.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.8	1.9	2.5	6.1	5.5	5.7	34.0	1.4	7.3	24.3	1.4
LnGrp Delay(d),s/veh	65.5	23.5	20.1	46.7	30.0	33.4	74.9	169.8	16.5	128.8	117.6	17.1
LnGrp LOS	E	C	C	D	C	C	E	F	B	F	F	B
Approach Vol, veh/h		563			696			1998			1782	
Approach Delay, s/veh		33.5			33.9			144.3			114.5	
Approach LOS		C			C			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.0	8.9	20.3	11.0	24.0	10.0	19.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	21.0	6.0	16.0	7.0	20.0	6.0	16.0
Max Q Clear Time (g_c+I1), s	6.0	23.0	5.8	10.8	9.0	22.0	7.2	13.2
Green Ext Time (p_c), s	0.0	0.0	0.0	2.8	0.0	0.0	0.0	1.4

Intersection Summary		
HCM 2010 Ctrl Delay	106.1	
HCM 2010 LOS	F	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	130	400	80	110	20	450	240	40	20	370	110
Future Volume (veh/h)	120	130	400	80	110	20	450	240	40	20	370	110
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.72	1.00		0.93	1.00		0.94	1.00		0.82
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	145	157	463	89	122	20	536	286	44	21	385	108
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.84	0.84	0.84	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	500	525	629	202	176	29	666	1305	198	47	485	786
Arrive On Green	0.28	0.28	0.28	0.11	0.11	0.10	0.19	0.43	0.42	0.03	0.26	0.26
Sat Flow, veh/h	1774	1863	1145	1774	1542	253	3442	3053	462	1774	1863	1305
Grp Volume(v), veh/h	145	157	463	89	0	142	536	164	166	21	385	108
Grp Sat Flow(s),veh/h/ln	1774	1863	1145	1774	0	1795	1721	1770	1746	1774	1863	1305
Q Serve(g_s), s	6.8	7.0	30.0	5.0	0.0	8.1	15.8	6.2	6.4	1.2	20.5	4.4
Cycle Q Clear(g_c), s	6.8	7.0	30.0	5.0	0.0	8.1	15.8	6.2	6.4	1.2	20.5	4.4
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	500	525	629	202	0	205	666	756	746	47	485	786
V/C Ratio(X)	0.29	0.30	0.74	0.44	0.00	0.69	0.80	0.22	0.22	0.44	0.79	0.14
Avail Cap(c_a), veh/h	500	525	629	450	0	455	905	756	746	383	665	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	30.0	24.5	44.0	0.0	45.5	41.0	19.2	19.4	51.0	36.7	12.2
Incr Delay (d2), s/veh	0.3	0.3	4.5	1.5	0.0	4.2	3.8	0.1	0.1	6.3	4.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.7	12.3	2.5	0.0	4.3	7.9	3.1	3.1	0.7	11.2	2.6
LnGrp Delay(d),s/veh	30.2	30.3	29.0	45.5	0.0	49.7	44.9	19.4	19.5	57.4	41.3	12.2
LnGrp LOS	C	C	C	D		D	D	B	B	E	D	B
Approach Vol, veh/h		765			231			866			514	
Approach Delay, s/veh		29.5			48.1			35.2			35.9	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.6	31.7		16.1	6.9	49.5		34.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	7.0	37.0		26.0	22.0	44.0		29.0
Max Q Clear Time (g_c+I1), s	10.8	22.5		10.1	3.2	8.4		32.0
Green Ext Time (p_c), s	1.8	4.2		1.0	0.0	6.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.7
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	5.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	40	160	20	100	110	20
Future Vol, veh/h	40	160	20	100	110	20
Conflicting Peds, #/hr	0	171	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	73	73	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	188	27	137	143	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	406	0	504	314
Stage 1	-	-	-	-	312	-
Stage 2	-	-	-	-	192	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1153	-	528	726
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	841	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1151	-	431	607
Mov Cap-2 Maneuver	-	-	-	-	431	-
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	820	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	17.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	451	-	-	1151	-
HCM Lane V/C Ratio	0.374	-	-	0.024	-
HCM Control Delay (s)	17.7	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.7	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	13.6
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	50	10	70	0	10	10	5	0	100	230	10
Future Vol, veh/h	0	50	10	70	0	10	10	5	0	100	230	10
Peak Hour Factor	0.92	0.79	0.79	0.79	0.92	0.70	0.70	0.70	0.92	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	63	13	89	0	14	14	7	0	118	271	12
Number of Lanes	0	0	1	0	0	0	1	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	1
HCM Control Delay	12.7	10.8	11.1
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	38%	40%	5%	0%	0%
Vol Thru, %	0%	100%	88%	8%	40%	95%	100%	0%
Vol Right, %	0%	0%	12%	54%	20%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	153	87	130	25	190	360	60
LT Vol	100	0	0	50	10	10	0	0
Through Vol	0	153	77	10	10	180	360	0
RT Vol	0	0	10	70	5	0	0	60
Lane Flow Rate	118	180	102	165	36	211	400	67
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.216	0.306	0.171	0.312	0.074	0.342	0.645	0.094
Departure Headway (Hd)	6.621	6.113	6.031	6.821	7.417	5.836	5.809	5.1
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	541	586	593	527	481	616	620	701
Service Time	4.372	3.864	3.782	4.576	5.184	3.579	3.552	2.843
HCM Lane V/C Ratio	0.218	0.307	0.172	0.313	0.075	0.343	0.645	0.096
HCM Control Delay	11.2	11.6	10	12.7	10.8	11.6	18.6	8.4
HCM Lane LOS	B	B	A	B	B	B	C	A
HCM 95th-tile Q	0.8	1.3	0.6	1.3	0.2	1.5	4.7	0.3

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	10	540	60
Future Vol, veh/h	0	10	540	60
Peak Hour Factor	0.92	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	11	600	67
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	15.4
HCM LOS	C

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	60	40	320	600	10
Future Vol, veh/h	10	60	40	320	600	10
Conflicting Peds, #/hr	0	4	0	0	0	14
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	80	80	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	71	50	400	741	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1061	395	767	0	-	0
Stage 1	761	-	-	-	-	-
Stage 2	300	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	219	604	842	-	-	-
Stage 1	422	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	200	594	839	-	-	-
Mov Cap-2 Maneuver	318	-	-	-	-	-
Stage 1	416	-	-	-	-	-
Stage 2	673	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	1.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	839	-	528	-	-
HCM Lane V/C Ratio	0.06	-	0.156	-	-
HCM Control Delay (s)	9.6	-	13.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	5	20	50	60	310	20	80	380	230
Future Vol, veh/h	0	0	0	5	20	50	60	310	20	80	380	230
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	20	0	0	12
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	66	66	66	95	95	95	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	8	30	76	63	326	21	99	469	284

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	915	1446	194	765	0	0	367	0	0
Stage 1	483	483	-	-	-	-	-	-	-
Stage 2	432	963	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	272	131	815	844	-	-	1188	-	-
Stage 1	586	551	-	-	-	-	-	-	-
Stage 2	622	332	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	226	0	799	844	-	-	1188	-	-
Mov Cap-2 Maneuver	226	0	-	-	-	-	-	-	-
Stage 1	532	0	-	-	-	-	-	-	-
Stage 2	570	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	1.5	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	844	-	-	649	1188	-	-
HCM Lane V/C Ratio	0.075	-	-	0.175	0.083	-	-
HCM Control Delay (s)	9.6	-	-	11.7	8.3	-	-
HCM Lane LOS	A	-	-	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.6	0.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	10	40	5	0	10	0	210	10	10	350	0
Future Volume (veh/h)	130	10	40	5	0	10	0	210	10	10	350	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.95	0.98		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	165	13	51	11	0	15	0	231	11	11	398	0
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	1	2	0
Peak Hour Factor	0.79	0.79	0.79	0.46	0.46	0.46	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	263	21	81	18	0	25	0	1039	49	557	1072	0
Arrive On Green	0.21	0.21	0.21	0.03	0.00	0.03	0.00	0.30	0.30	0.30	0.30	0.00
Sat Flow, veh/h	1242	98	384	702	0	957	0	3523	162	1116	3632	0
Grp Volume(v), veh/h	229	0	0	26	0	0	0	118	124	11	398	0
Grp Sat Flow(s),veh/h/ln	1724	0	0	1659	0	0	0	1770	1823	1116	1770	0
Q Serve(g_s), s	3.2	0.0	0.0	0.4	0.0	0.0	0.0	1.3	1.3	0.2	2.3	0.0
Cycle Q Clear(g_c), s	3.2	0.0	0.0	0.4	0.0	0.0	0.0	1.3	1.3	1.5	2.3	0.0
Prop In Lane	0.72		0.22	0.42		0.58	0.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	365	0	0	44	0	0	0	536	552	557	1072	0
V/C Ratio(X)	0.63	0.00	0.00	0.60	0.00	0.00	0.00	0.22	0.22	0.02	0.37	0.00
Avail Cap(c_a), veh/h	1055	0	0	1016	0	0	0	1083	1116	902	2167	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.4	0.0	0.0	12.6	0.0	0.0	0.0	6.8	6.8	7.4	7.2	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	12.3	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	0.3	0.0	0.0	0.0	0.7	0.7	0.1	1.1	0.0
LnGrp Delay(d),s/veh	11.2	0.0	0.0	24.9	0.0	0.0	0.0	7.0	7.0	7.4	7.4	0.0
LnGrp LOS	B			C				A	A	A	A	
Approach Vol, veh/h		229			26			242			409	
Approach Delay, s/veh		11.2			24.9			7.0			7.4	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		11.9		9.5		11.9		4.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		3.3		5.2		4.3		2.4
Green Ext Time (p_c), s		3.3		1.0		3.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	8.7
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	5	20	5	5	10	10	210	5	20	360	20
Future Vol, veh/h	30	5	20	5	5	10	10	210	5	20	360	20
Conflicting Peds, #/hr	0	0	4	0	0	10	0	0	13	0	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	40	40	40	92	92	92	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	6	25	13	13	25	11	228	5	27	486	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	711	827	266	570	839	140	519	0	0	247	0	0
Stage 1	559	559	-	266	266	-	-	-	-	-	-	-
Stage 2	152	268	-	304	573	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	320	305	732	404	300	882	1043	-	-	1316	-	-
Stage 1	481	509	-	716	687	-	-	-	-	-	-	-
Stage 2	835	686	-	681	502	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	287	288	726	366	283	863	1039	-	-	1303	-	-
Mov Cap-2 Maneuver	287	288	-	366	283	-	-	-	-	-	-	-
Stage 1	474	492	-	700	671	-	-	-	-	-	-	-
Stage 2	780	670	-	628	485	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17	13.3	0.4	0.5
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1039	-	-	368	366	513	1303	-	-
HCM Lane V/C Ratio	0.01	-	-	0.185	0.034	0.073	0.021	-	-
HCM Control Delay (s)	8.5	-	-	17	15.2	12.6	7.8	0.1	-
HCM Lane LOS	A	-	-	C	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.1	0.2	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	500	5	5	360	30	5	5	0	150	0	220
Future Volume (veh/h)	180	500	5	5	360	30	5	5	0	150	0	220
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.97	0.99		1.00	0.94		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	207	575	6	5	379	23	7	7	0	197	0	98
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	1	1	0
Peak Hour Factor	0.87	0.87	0.87	0.95	0.95	0.95	0.75	0.75	0.75	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	613	1115	12	498	768	632	243	204	0	464	0	329
Arrive On Green	0.11	0.61	0.62	0.41	0.41	0.41	0.22	0.22	0.00	0.22	0.00	0.23
Sat Flow, veh/h	1774	1839	19	824	1863	1531	571	934	0	1316	0	1509
Grp Volume(v), veh/h	207	0	581	5	379	23	14	0	0	197	0	98
Grp Sat Flow(s),veh/h/ln	1774	0	1859	824	1863	1531	1506	0	0	1316	0	1509
Q Serve(g_s), s	2.6	0.0	8.2	0.2	6.8	0.4	0.0	0.0	0.0	3.1	0.0	2.4
Cycle Q Clear(g_c), s	2.6	0.0	8.2	0.2	6.8	0.4	2.5	0.0	0.0	5.5	0.0	2.4
Prop In Lane	1.00		0.01	1.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	613	0	1127	498	768	632	447	0	0	464	0	329
V/C Ratio(X)	0.34	0.00	0.52	0.01	0.49	0.04	0.03	0.00	0.00	0.42	0.00	0.30
Avail Cap(c_a), veh/h	1164	0	2306	1180	2311	1900	1098	0	0	856	0	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.8	0.0	5.1	7.9	9.9	8.0	14.0	0.0	0.0	15.9	0.0	14.7
Incr Delay (d2), s/veh	0.3	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.0	0.6	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	4.1	0.0	3.6	0.2	0.1	0.0	0.0	2.3	0.0	1.1
LnGrp Delay(d),s/veh	6.1	0.0	5.5	7.9	10.4	8.0	14.1	0.0	0.0	16.6	0.0	15.2
LnGrp LOS	A		A	A	B	A	B			B		B
Approach Vol, veh/h		788			407			14			295	
Approach Delay, s/veh		5.7			10.2			14.1			16.1	
Approach LOS		A			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		31.6		13.9	8.8	22.8		13.9
Change Period (Y+Rc), s		3.5		3.5	4.0	3.5		3.5
Max Green Setting (Gmax), s		57.0		24.0	19.0	57.0		30.0
Max Q Clear Time (g_c+I1), s		10.2		7.5	4.6	8.8		4.5
Green Ext Time (p_c), s		8.5		1.3	0.7	8.5		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	9.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	30	160	10	50	40	1740	70	20	1440	10
Future Volume (veh/h)	10	10	30	160	10	50	40	1740	70	20	1440	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	13	13	7	219	14	63	43	1871	55	23	1636	10
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.77	0.77	0.77	0.73	0.73	0.73	0.93	0.93	0.93	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	55	457	102	0	449	58	1790	52	37	1797	11
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.03	0.51	0.51	0.02	0.50	0.50
Sat Flow, veh/h	0	186	1560	0	0	1532	1774	3509	103	1774	3606	22
Grp Volume(v), veh/h	26	0	7	233	0	63	43	939	987	23	802	844
Grp Sat Flow(s),veh/h/ln	186	0	1560	0	0	1532	1774	1770	1842	1774	1770	1858
Q Serve(g_s), s	0.0	0.0	0.2	0.0	0.0	2.1	1.6	34.8	34.8	0.9	28.4	28.5
Cycle Q Clear(g_c), s	20.0	0.0	0.2	20.0	0.0	2.1	1.6	34.8	34.8	0.9	28.4	28.5
Prop In Lane	0.50		1.00	0.94		1.00	1.00		0.06	1.00		0.01
Lane Grp Cap(c), veh/h	134	0	457	102	0	449	58	903	940	37	882	926
V/C Ratio(X)	0.19	0.00	0.02	2.28	0.00	0.14	0.74	1.04	1.05	0.63	0.91	0.91
Avail Cap(c_a), veh/h	134	0	457	102	0	449	104	903	940	130	882	926
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	17.1	34.1	0.0	17.8	32.7	16.7	16.7	33.1	15.7	15.7
Incr Delay (d2), s/veh	0.7	0.0	0.0	604.2	0.0	0.1	16.8	40.6	43.6	16.2	15.0	14.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.1	19.1	0.0	0.9	1.1	27.0	28.9	0.6	17.3	18.0
LnGrp Delay(d),s/veh	20.4	0.0	17.1	638.3	0.0	17.9	49.6	57.4	60.3	49.3	30.8	30.3
LnGrp LOS	C		B	F		B	D	F	F	D	C	C
Approach Vol, veh/h		33			296			1969			1669	
Approach Delay, s/veh		19.7			506.3			58.7			30.8	
Approach LOS		B			F			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	38.8		24.0	6.2	38.0		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	33.0		16.0	4.0	34.0		20.0
Max Q Clear Time (g_c+I1), s	2.9	36.8		22.0	3.6	30.5		22.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	80.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	5	120	30	10	5	100	1800	150	10	810	730
Future Volume (veh/h)	50	5	120	30	10	5	100	1800	150	10	810	730
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.99	0.99		0.96	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	60	6	54	49	16	1	122	2195	183	11	910	819
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.61	0.61	0.61	0.82	0.82	0.82	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	207	37	103	295	79	4	314	2229	183	157	2389	1032
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	590	243	681	1053	525	24	279	3302	270	148	3539	1529
Grp Volume(v), veh/h	120	0	0	66	0	0	122	1159	1219	11	910	819
Grp Sat Flow(s),veh/h/ln	1514	0	0	1602	0	0	279	1770	1802	148	1770	1529
Q Serve(g_s), s	1.7	0.0	0.0	0.0	0.0	0.0	15.6	28.3	31.0	0.0	5.2	17.2
Cycle Q Clear(g_c), s	3.2	0.0	0.0	1.5	0.0	0.0	20.8	28.3	31.0	31.0	5.2	17.2
Prop In Lane	0.50		0.45	0.74		0.02	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	346	0	0	378	0	0	314	1195	1217	157	2389	1032
V/C Ratio(X)	0.35	0.00	0.00	0.17	0.00	0.00	0.39	0.97	1.00	0.07	0.38	0.79
Avail Cap(c_a), veh/h	634	0	0	661	0	0	314	1195	1217	157	2389	1032
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	0.0	0.0	17.2	0.0	0.0	7.8	7.0	7.5	23.0	3.3	5.2
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.2	0.0	0.0	3.6	19.7	26.3	0.9	0.5	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	0.8	0.0	0.0	1.5	19.7	23.8	0.2	2.6	8.9
LnGrp Delay(d),s/veh	18.5	0.0	0.0	17.4	0.0	0.0	11.4	26.7	33.8	23.8	3.7	11.5
LnGrp LOS	B			B			B	C	F	C	A	B
Approach Vol, veh/h		120			66			2500			1740	
Approach Delay, s/veh		18.5			17.4			29.4			7.5	
Approach LOS		B			B			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		10.9		35.0		10.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		16.0		31.0		16.0
Max Q Clear Time (g_c+I1), s		33.0		5.2		33.0		3.5
Green Ext Time (p_c), s		0.0		0.7		0.0		0.8

Intersection Summary		
HCM 2010 Ctrl Delay		20.3
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	10	10	10	5	720	5	1180	60	70	740	150
Future Volume (veh/h)	150	10	10	10	5	720	5	1180	60	70	740	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.94	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	179	12	12	12	6	861	6	1475	75	77	813	165
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.83	0.83	0.83	0.80	0.80	0.80	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	24	15	506	230	584	11	1124	57	96	1098	223
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.01	0.33	0.33	0.05	0.38	0.38
Sat Flow, veh/h	595	66	42	1035	621	1578	1774	3416	173	1774	2915	592
Grp Volume(v), veh/h	203	0	0	18	0	861	6	761	789	77	494	484
Grp Sat Flow(s),veh/h/ln	702	0	0	1656	0	1578	1774	1770	1819	1774	1770	1737
Q Serve(g_s), s	12.0	0.0	0.0	0.0	0.0	18.0	0.2	16.0	16.0	2.1	11.7	11.7
Cycle Q Clear(g_c), s	12.3	0.0	0.0	0.3	0.0	18.0	0.2	16.0	16.0	2.1	11.7	11.7
Prop In Lane	0.88		0.06	0.67		1.00	1.00		0.10	1.00		0.34
Lane Grp Cap(c), veh/h	399	0	0	736	0	584	11	582	598	96	667	655
V/C Ratio(X)	0.51	0.00	0.00	0.02	0.00	1.47	0.53	1.31	1.32	0.80	0.74	0.74
Avail Cap(c_a), veh/h	399	0	0	736	0	584	146	582	598	146	667	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	0.0	9.7	0.0	15.3	24.1	16.3	16.3	22.7	13.1	13.1
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.0	0.0	222.6	33.1	150.5	154.8	16.3	7.2	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.0	0.2	0.0	43.8	0.2	31.9	33.5	1.4	7.0	6.9
LnGrp Delay(d),s/veh	14.4	0.0	0.0	9.8	0.0	237.9	57.2	166.8	171.1	39.0	20.3	20.5
LnGrp LOS	B			A		F	E	F	F	D	C	C
Approach Vol, veh/h		203			879			1556			1055	
Approach Delay, s/veh		14.4			233.3			168.6			21.8	
Approach LOS		B			F			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	20.0		22.0	4.3	22.3		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	16.0		18.0	4.0	16.0		18.0
Max Q Clear Time (g_c+I1), s	4.1	18.0		14.3	2.2	13.7		20.0
Green Ext Time (p_c), s	0.0	0.0		2.4	0.0	2.2		0.0

Intersection Summary		
HCM 2010 Ctrl Delay	133.6	
HCM 2010 LOS	F	

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	60	610	130	30	800
Future Vol, veh/h	30	60	610	130	30	800
Conflicting Peds, #/hr	0	0	0	10	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	0	25	-	0	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	91	91	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	75	670	143	34	909

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1647	670	0	-	670	0
Stage 1	670	-	-	-	-	-
Stage 2	977	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	109	457	-	0	920	-
Stage 1	509	-	-	0	-	-
Stage 2	365	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	105	457	-	-	920	-
Mov Cap-2 Maneuver	105	-	-	-	-	-
Stage 1	509	-	-	-	-	-
Stage 2	352	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.7	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	105	457	920	-
HCM Lane V/C Ratio	-	0.357	0.164	0.037	-
HCM Control Delay (s)	-	57.2	14.4	9.1	-
HCM Lane LOS	-	F	B	A	-
HCM 95th %tile Q(veh)	-	1.4	0.6	0.1	-

Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	50	720	200	150	670
Future Vol, veh/h	20	50	720	200	150	670
Conflicting Peds, #/hr	0	0	0	6	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	66	791	220	165	736

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1973	511	0	0	1017	0
Stage 1	907	-	-	-	-	-
Stage 2	1066	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	61	509	-	-	680	-
Stage 1	355	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	46	506	-	-	680	-
Mov Cap-2 Maneuver	46	-	-	-	-	-
Stage 1	353	-	-	-	-	-
Stage 2	250	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	54.7	0	2.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	46	506	680	-
HCM Lane V/C Ratio	-	-	0.572	0.13	0.242	-
HCM Control Delay (s)	-	-	158.5	13.2	12	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	2.1	0.4	0.9	-

Intersection	
Int Delay, s/veh	9.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	280	630	130	460	240
Future Vol, veh/h	70	280	630	130	460	240
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	0	0	-	150	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	88	88	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	311	716	148	479	250

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1924	-	0	-	716	0
Stage 1	716	-	-	-	-	-
Stage 2	1208	-	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218	-
Pot Cap-1 Maneuver	~ 73	0	-	0	885	-
Stage 1	484	0	-	0	-	-
Stage 2	283	0	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	~ 33	-	-	-	885	-
Mov Cap-2 Maneuver	103	-	-	-	-	-
Stage 1	484	-	-	-	-	-
Stage 2	130	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	107	0	9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	103	-	885	-
HCM Lane V/C Ratio	-	0.755	-	0.541	-
HCM Control Delay (s)	-	107	0	13.8	-
HCM Lane LOS	-	F	A	B	-
HCM 95th %tile Q(veh)	-	4	-	3.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	60	20	20	60	120	10	1100	40	30	720	20
Future Volume (veh/h)	60	60	20	20	60	120	10	1100	40	30	720	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.95	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	97	97	16	29	88	123	12	1310	40	34	828	23
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.62	0.62	0.62	0.68	0.68	0.68	0.84	0.84	0.84	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	394	407	67	96	177	217	430	2113	64	362	2121	59
Arrive On Green	0.26	0.26	0.25	0.26	0.26	0.25	1.00	1.00	1.00	0.60	0.60	0.59
Sat Flow, veh/h	1147	1549	256	111	673	824	644	3500	107	401	3514	98
Grp Volume(v), veh/h	97	0	113	240	0	0	12	662	688	34	417	434
Grp Sat Flow(s),veh/h/ln	1147	0	1805	1609	0	0	644	1770	1837	401	1770	1842
Q Serve(g_s), s	0.0	0.0	3.0	1.0	0.0	0.0	0.2	0.0	0.0	2.2	7.3	7.3
Cycle Q Clear(g_c), s	5.1	0.0	3.0	7.6	0.0	0.0	7.6	0.0	0.0	2.2	7.3	7.3
Prop In Lane	1.00		0.14	0.12		0.51	1.00		0.06	1.00		0.05
Lane Grp Cap(c), veh/h	394	0	475	490	0	0	430	1068	1109	362	1068	1112
V/C Ratio(X)	0.25	0.00	0.24	0.49	0.00	0.00	0.03	0.62	0.62	0.09	0.39	0.39
Avail Cap(c_a), veh/h	513	0	662	654	0	0	430	1068	1109	362	1068	1112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.87	0.87	0.87	0.67	0.67	0.67
Uniform Delay (d), s/veh	18.2	0.0	17.4	19.3	0.0	0.0	0.8	0.0	0.0	5.1	6.2	6.2
Incr Delay (d2), s/veh	0.3	0.0	0.3	0.8	0.0	0.0	0.1	2.3	2.3	0.3	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	1.5	3.5	0.0	0.0	0.1	0.7	0.7	0.3	3.7	3.8
LnGrp Delay(d),s/veh	18.5	0.0	17.7	20.1	0.0	0.0	0.9	2.3	2.3	5.5	6.9	6.9
LnGrp LOS	B		B	C			A	A	A	A	A	A
Approach Vol, veh/h		210			240			1362			885	
Approach Delay, s/veh		18.1			20.1			2.3			6.8	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		40.2		19.8		40.2		19.8
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		29.0		21.0		29.0		21.0
Max Q Clear Time (g_c+I1), s		9.6		7.1		9.3		9.6
Green Ext Time (p_c), s		15.4		2.4		15.6		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	6.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	40	80	10	20	20	30	1020	40	10	710	40
Future Volume (veh/h)	70	40	80	10	20	20	30	1020	40	10	710	40
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.92	0.94		0.97	0.99		0.95	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	95	54	85	17	34	17	36	1229	48	11	789	44
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.74	0.74	0.74	0.59	0.59	0.59	0.83	0.83	0.83	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	428	333	363	267	134	554	2206	86	336	1709	95
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.21	0.13	1.00	1.00	1.00	1.00	0.97
Sat Flow, veh/h	1319	1863	1450	1174	1161	581	1774	3465	135	429	3396	189
Grp Volume(v), veh/h	95	54	85	17	0	51	36	627	650	11	411	422
Grp Sat Flow(s),veh/h/ln	1319	1863	1450	1174	0	1742	1774	1770	1831	429	1770	1816
Q Serve(g_s), s	3.7	1.4	2.9	0.7	0.0	1.4	0.5	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	5.1	1.4	2.9	2.1	0.0	1.4	0.5	0.0	0.0	0.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		0.33	1.00		0.07	1.00		0.10
Lane Grp Cap(c), veh/h	392	428	333	363	0	401	554	1127	1166	336	891	914
V/C Ratio(X)	0.24	0.13	0.25	0.05	0.00	0.13	0.06	0.56	0.56	0.03	0.46	0.46
Avail Cap(c_a), veh/h	507	590	459	465	0	551	554	1127	1166	336	891	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.61	0.61	0.61	0.92	0.92	0.92
Uniform Delay (d), s/veh	20.3	18.3	18.9	19.1	0.0	18.5	4.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.1	0.4	0.1	0.0	0.1	0.1	1.2	1.2	0.2	1.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.7	1.2	0.2	0.0	0.7	0.2	0.4	0.4	0.0	0.4	0.4
LnGrp Delay(d),s/veh	20.7	18.4	19.3	19.2	0.0	18.6	5.0	1.2	1.2	0.2	1.6	1.6
LnGrp LOS	C	B	B	B		B	A	A	A	A	A	A
Approach Vol, veh/h		234			68			1313			844	
Approach Delay, s/veh		19.7			18.7			1.3			1.6	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	8.0	34.2		17.8		42.2		17.8
Change Period (Y+Rc), s	4.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	4.0	24.0		18.0		32.0		18.0
Max Q Clear Time (g_c+I1), s	2.5	2.1		4.1		2.0		7.1
Green Ext Time (p_c), s	0.0	11.5		1.3		13.3		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	3.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	100	40	110	110	150	10	910	160	190	560	50
Future Volume (veh/h)	50	100	40	110	110	150	10	910	160	190	560	50
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.88	0.92		0.91	0.97		0.94	0.99		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	60	120	18	121	121	76	11	1034	135	204	602	51
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.83	0.83	0.83	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	383	531	399	390	531	409	467	1400	183	392	1652	140
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.02	0.90	0.86	0.13	1.00	0.97
Sat Flow, veh/h	1116	1863	1400	1147	1863	1435	1774	3121	407	1774	3279	277
Grp Volume(v), veh/h	60	120	18	121	121	76	11	586	583	204	324	329
Grp Sat Flow(s),veh/h/ln	1116	1863	1400	1147	1863	1435	1774	1770	1759	1774	1770	1787
Q Serve(g_s), s	2.6	3.0	0.6	5.4	3.0	2.4	0.2	6.1	6.4	4.0	0.0	0.1
Cycle Q Clear(g_c), s	5.6	3.0	0.6	8.4	3.0	2.4	0.2	6.1	6.4	4.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.16
Lane Grp Cap(c), veh/h	383	531	399	390	531	409	467	794	789	392	892	900
V/C Ratio(X)	0.16	0.23	0.05	0.31	0.23	0.19	0.02	0.74	0.74	0.52	0.36	0.37
Avail Cap(c_a), veh/h	399	559	420	408	559	431	565	794	789	392	892	900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88	0.83	0.83	0.83
Uniform Delay (d), s/veh	18.5	16.4	15.5	19.6	16.4	16.2	9.3	2.0	2.2	8.1	0.0	0.1
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.4	0.2	0.2	0.0	5.4	5.5	1.0	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.5	0.2	1.8	1.5	1.0	0.1	3.5	3.5	1.9	0.2	0.3
LnGrp Delay(d),s/veh	18.7	16.6	15.6	20.0	16.6	16.4	9.3	7.4	7.7	9.1	1.0	1.0
LnGrp LOS	B	B	B	C	B	B	A	A	A	A	A	A
Approach Vol, veh/h		198			318			1180			857	
Approach Delay, s/veh		17.2			17.9			7.5			2.9	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	34.2		21.1	8.0	30.9		21.1
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	25.0		17.0	4.0	25.0		17.0
Max Q Clear Time (g_c+I1), s	2.2	2.1		10.4	6.0	8.4		7.6
Green Ext Time (p_c), s	0.0	14.5		1.6	0.0	11.5		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	8.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	30	140	60	60	1060	0	0	420	350
Future Volume (veh/h)	0	0	0	30	140	60	60	1060	0	0	420	350
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.88	0.99		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				34	161	18	65	1152	0	0	442	246
Adj No. of Lanes				0	3	0	1	2	0	0	1	1
Peak Hour Factor				0.87	0.87	0.87	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				153	770	85	598	2267	0	0	1193	982
Arrive On Green				0.21	0.19	0.19	0.64	0.64	0.00	0.00	1.00	1.00
Sat Flow, veh/h				794	3997	442	747	3632	0	0	1863	1533
Grp Volume(v), veh/h				78	65	70	65	1152	0	0	442	246
Grp Sat Flow(s),veh/h/ln				1823	1695	1714	747	1770	0	0	1863	1533
Q Serve(g_s), s				2.2	1.9	2.1	2.1	10.4	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				2.2	1.9	2.1	2.1	10.4	0.0	0.0	0.0	0.0
Prop In Lane				0.44		0.26	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				351	327	330	598	2267	0	0	1193	982
V/C Ratio(X)				0.22	0.20	0.21	0.11	0.51	0.00	0.00	0.37	0.25
Avail Cap(c_a), veh/h				668	622	629	598	2267	0	0	1193	982
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.96	0.96
Uniform Delay (d), s/veh				20.2	20.3	20.4	4.2	5.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				0.3	0.3	0.3	0.4	0.8	0.0	0.0	0.8	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.9	1.0	0.5	5.2	0.0	0.0	0.3	0.2
LnGrp Delay(d),s/veh				20.6	20.6	20.7	4.6	6.6	0.0	0.0	0.8	0.6
LnGrp LOS				C	C	C	A	A			A	A
Approach Vol, veh/h					213			1217			688	
Approach Delay, s/veh					20.6			6.5			0.8	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		43.4		16.6		43.4		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		28.0		22.0		28.0		
Max Q Clear Time (g_c+I1), s		0.0		4.2		0.0		
Green Ext Time (p_c), s		0.0		1.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		6.0
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	280	90	100	250	10	140	150	160	20	130	20
Future Volume (veh/h)	10	280	90	100	250	10	140	150	160	20	130	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		0.94	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	295	87	116	291	6	152	163	135	25	165	19
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.86	0.86	0.86	0.92	0.92	0.92	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	444	593	477	432	709	567	480	304	252	381	529	61
Arrive On Green	0.00	0.32	0.32	0.05	0.38	0.38	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1774	1863	1500	1774	1863	1491	1185	940	779	1073	1634	188
Grp Volume(v), veh/h	11	295	87	116	291	6	152	0	298	25	0	184
Grp Sat Flow(s),veh/h/ln	1774	1863	1500	1774	1863	1491	1185	0	1719	1073	0	1822
Q Serve(g_s), s	0.1	5.0	1.6	1.8	4.4	0.1	4.3	0.0	5.5	0.8	0.0	2.9
Cycle Q Clear(g_c), s	0.1	5.0	1.6	1.8	4.4	0.1	7.2	0.0	5.5	6.2	0.0	2.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		0.10
Lane Grp Cap(c), veh/h	444	593	477	432	709	567	480	0	557	381	0	590
V/C Ratio(X)	0.02	0.50	0.18	0.27	0.41	0.01	0.32	0.00	0.54	0.07	0.00	0.31
Avail Cap(c_a), veh/h	1035	1397	1125	944	1397	1118	678	0	845	617	0	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.4	10.7	9.5	9.1	8.8	7.5	12.6	0.0	10.7	13.3	0.0	9.8
Incr Delay (d2), s/veh	0.0	0.6	0.2	0.3	0.4	0.0	0.4	0.0	0.8	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.6	0.7	0.8	2.3	0.0	1.4	0.0	2.7	0.2	0.0	1.5
LnGrp Delay(d),s/veh	10.4	11.3	9.7	9.5	9.2	7.5	12.9	0.0	11.5	13.3	0.0	10.1
LnGrp LOS	B	B	A	A	A	A	B		B	B		B
Approach Vol, veh/h		393			413			450			209	
Approach Delay, s/veh		10.9			9.2			12.0			10.5	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	3.4	18.7		16.5	5.9	16.3		16.5
Change Period (Y+Rc), s	3.0	4.0		4.0	3.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	29.0		19.0	14.0	29.0		21.0
Max Q Clear Time (g_c+I1), s	2.1	6.4		9.2	3.8	7.0		8.2
Green Ext Time (p_c), s	0.0	4.3		2.8	0.2	4.2		3.3

Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	370	50	280	230	30	40	490	210	10	240	60
Future Volume (veh/h)	120	370	50	280	230	30	40	490	210	10	240	60
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	128	394	38	329	271	35	44	538	188	11	264	54
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.85	0.85	0.85	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	145	664	531	353	883	719	239	381	133	90	436	89
Arrive On Green	0.08	0.36	0.36	0.20	0.47	0.47	0.29	0.29	0.30	0.29	0.29	0.30
Sat Flow, veh/h	1774	1863	1488	1774	1863	1517	1052	1297	453	725	1483	303
Grp Volume(v), veh/h	128	394	38	329	271	35	44	0	726	11	0	318
Grp Sat Flow(s),veh/h/ln	1774	1863	1488	1774	1863	1517	1052	0	1750	725	0	1786
Q Serve(g_s), s	5.7	13.8	1.3	14.6	7.2	1.0	3.0	0.0	23.5	0.0	0.0	12.2
Cycle Q Clear(g_c), s	5.7	13.8	1.3	14.6	7.2	1.0	15.2	0.0	23.5	23.5	0.0	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		0.17
Lane Grp Cap(c), veh/h	145	664	531	353	883	719	239	0	515	90	0	525
V/C Ratio(X)	0.88	0.59	0.07	0.93	0.31	0.05	0.18	0.00	1.41	0.12	0.00	0.61
Avail Cap(c_a), veh/h	400	664	531	400	883	719	239	0	515	90	0	525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.3	21.0	17.0	31.5	12.9	11.3	30.7	0.0	28.1	40.0	0.0	24.2
Incr Delay (d2), s/veh	15.5	3.9	0.3	26.9	0.9	0.1	0.4	0.0	196.2	0.6	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	7.8	0.6	9.8	3.9	0.4	0.9	0.0	39.2	0.3	0.0	6.3
LnGrp Delay(d),s/veh	51.8	24.8	17.2	58.3	13.8	11.4	31.1	0.0	224.3	40.5	0.0	26.2
LnGrp LOS	D	C	B	E	B	B	C		F	D		C
Approach Vol, veh/h		560			635			770			329	
Approach Delay, s/veh		30.5			36.8			213.3			26.6	
Approach LOS		C			D			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	32.5		27.5	10.5	41.9		27.5
Change Period (Y+Rc), s	3.0	3.5		3.5	3.0	3.5		3.5
Max Green Setting (Gmax), s	4.9	29.0		24.0	19.0	29.0		24.0
Max Q Clear Time (g_c+I1), s	16.6	15.8		25.5	7.7	9.2		25.5
Green Ext Time (p_c), s	0.3	3.8		0.0	0.3	4.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	93.0
HCM 2010 LOS	F

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Vol, veh/h	0	10	50	10	0	80	110	30	0	10	90	90	0	30	30	30
Future Vol, veh/h	0	10	50	10	0	80	110	30	0	10	90	90	0	30	30	30
Peak Hour Factor	0.92	0.81	0.81	0.81	0.92	0.86	0.86	0.86	0.92	0.90	0.90	0.90	0.92	0.71	0.71	0.71
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	12	62	12	0	93	128	35	0	11	100	100	0	42	42	42
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.8	10.4	9.5	9
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	5%	14%	36%	33%
Vol Thru, %	47%	71%	50%	33%
Vol Right, %	47%	14%	14%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	190	70	220	90
LT Vol	10	10	80	30
Through Vol	90	50	110	30
RT Vol	90	10	30	30
Lane Flow Rate	211	86	256	127
Geometry Grp	1	1	1	1
Degree of Util (X)	0.273	0.12	0.343	0.173
Departure Headway (Hd)	4.66	5.006	4.83	4.901
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	766	710	739	726
Service Time	2.723	3.086	2.895	2.972
HCM Lane V/C Ratio	0.275	0.121	0.346	0.175
HCM Control Delay	9.5	8.8	10.4	9
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	1.1	0.4	1.5	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	60	500	100	80	410	0	0	130	210
Future Volume (veh/h)	0	0	0	60	500	100	80	410	0	0	130	210
Number				5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.58	0.85		1.00	1.00		0.71
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				62	521	98	98	500	0	0	141	211
Adj No. of Lanes				0	3	0	1	1	0	0	1	1
Peak Hour Factor				0.96	0.96	0.96	0.82	0.82	0.82	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				202	1767	315	396	714	0	0	714	430
Arrive On Green				0.48	0.48	0.47	0.77	0.77	0.00	0.00	0.13	0.13
Sat Flow, veh/h				417	3656	652	876	1863	0	0	1863	1122
Grp Volume(v), veh/h				274	229	179	98	500	0	0	141	211
Grp Sat Flow(s),veh/h/ln				1842	1695	1189	876	1863	0	0	1863	1122
Q Serve(g_s), s				5.4	4.8	5.6	3.2	8.1	0.0	0.0	4.1	10.5
Cycle Q Clear(g_c), s				5.4	4.8	5.6	7.3	8.1	0.0	0.0	4.1	10.5
Prop In Lane				0.23		0.55	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				890	819	574	396	714	0	0	714	430
V/C Ratio(X)				0.31	0.28	0.31	0.25	0.70	0.00	0.00	0.20	0.49
Avail Cap(c_a), veh/h				890	819	574	396	714	0	0	714	430
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				9.4	9.3	9.6	6.1	5.3	0.0	0.0	17.9	20.7
Incr Delay (d2), s/veh				0.9	0.8	1.4	1.5	5.7	0.0	0.0	0.6	4.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.0	2.4	2.0	0.9	4.7	0.0	0.0	2.2	3.7
LnGrp Delay(d),s/veh				10.3	10.1	11.0	7.6	10.9	0.0	0.0	18.6	24.7
LnGrp LOS				B	B	B	A	B			B	C
Approach Vol, veh/h					681			598			352	
Approach Delay, s/veh					10.4			10.4			22.2	
Approach LOS					B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		28.0		22.0				22.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary		
HCM 2010 Ctrl Delay		13.0
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	50	480	60	70	170	0	0	70	100
Future Volume (veh/h)	0	0	0	50	480	60	70	170	0	0	70	100
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.43	0.88		1.00	1.00		0.83
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1863
Adj Flow Rate, veh/h				53	511	58	89	215	0	0	80	98
Adj No. of Lanes				0	3	0	0	1	0	0	1	1
Peak Hour Factor				0.94	0.94	0.94	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				130	1294	137	280	637	0	0	993	701
Arrive On Green				0.11	0.11	0.10	0.53	0.53	0.00	0.00	0.53	0.53
Sat Flow, veh/h				389	3883	410	379	1195	0	0	1863	1315
Grp Volume(v), veh/h				251	209	162	304	0	0	0	80	98
Grp Sat Flow(s),veh/h/ln				1843	1695	1144	1574	0	0	0	1863	1315
Q Serve(g_s), s				7.6	6.9	7.9	0.8	0.0	0.0	0.0	1.3	2.3
Cycle Q Clear(g_c), s				7.6	6.9	7.9	5.6	0.0	0.0	0.0	1.3	2.3
Prop In Lane				0.21		0.36	0.29		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				614	565	381	917	0	0	0	993	701
V/C Ratio(X)				0.41	0.37	0.42	0.33	0.00	0.00	0.00	0.08	0.14
Avail Cap(c_a), veh/h				614	565	381	917	0	0	0	993	701
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				21.2	20.9	21.4	7.8	0.0	0.0	0.0	6.8	7.1
Incr Delay (d2), s/veh				2.0	1.9	3.4	1.0	0.0	0.0	0.0	0.2	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.2	3.5	2.9	3.0	0.0	0.0	0.0	0.7	0.9
LnGrp Delay(d),s/veh				23.2	22.7	24.8	8.8	0.0	0.0	0.0	7.0	7.5
LnGrp LOS				C	C	C	A				A	A
Approach Vol, veh/h					622			304			178	
Approach Delay, s/veh					23.5			8.8			7.3	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		36.0				36.0		24.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		31.0				31.0		19.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		16.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	80	440	60	90	330	0	0	120	70
Future Volume (veh/h)	0	0	0	80	440	60	90	330	0	0	120	70
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.86	0.92		1.00	1.00		0.84
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1900	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				83	458	56	103	379	0	0	156	74
Adj No. of Lanes				0	3	0	0	1	0	0	1	0
Peak Hour Factor				0.96	0.96	0.96	0.87	0.87	0.87	0.77	0.77	0.77
Percent Heavy Veh, %				0	2	0	2	2	0	0	2	2
Cap, veh/h				320	1878	231	176	531	0	0	448	212
Arrive On Green				0.47	0.47	0.45	0.40	0.40	0.00	0.00	0.40	0.38
Sat Flow, veh/h				686	4023	494	258	1329	0	0	1120	531
Grp Volume(v), veh/h				221	185	190	482	0	0	0	0	230
Grp Sat Flow(s),veh/h/ln				1828	1695	1680	1587	0	0	0	0	1651
Q Serve(g_s), s				4.4	3.9	4.1	9.9	0.0	0.0	0.0	0.0	5.9
Cycle Q Clear(g_c), s				4.4	3.9	4.1	15.8	0.0	0.0	0.0	0.0	5.9
Prop In Lane				0.38		0.29	0.21		0.00	0.00		0.32
Lane Grp Cap(c), veh/h				853	791	784	708	0	0	0	0	660
V/C Ratio(X)				0.26	0.23	0.24	0.68	0.00	0.00	0.00	0.00	0.35
Avail Cap(c_a), veh/h				853	791	784	708	0	0	0	0	660
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				9.7	9.6	9.7	15.4	0.0	0.0	0.0	0.0	12.7
Incr Delay (d2), s/veh				0.7	0.7	0.7	5.2	0.0	0.0	0.0	0.0	1.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.4	2.0	2.0	7.9	0.0	0.0	0.0	0.0	2.9
LnGrp Delay(d),s/veh				10.4	10.3	10.5	20.7	0.0	0.0	0.0	0.0	14.1
LnGrp LOS				B	B	B	C					B
Approach Vol, veh/h					597			482			230	
Approach Delay, s/veh					10.4			20.7			14.1	
Approach LOS					B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.0		32.0		28.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		23.0		27.0		23.0		
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		
Green Ext Time (p_c), s		0.0		0.0		0.0		

Intersection Summary		
HCM 2010 Ctrl Delay		14.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	610	330	40	0	0	0	0	400	50	110	360	0
Future Volume (veh/h)	610	330	40	0	0	0	0	400	50	110	360	0
Number	5	2	12				3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	687	284	34				0	488	39	124	404	0
Adj No. of Lanes	2	1	0				0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95				0.82	0.82	0.82	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1558	711	85				0	726	58	291	796	0
Arrive On Green	0.44	0.44	0.44				0.00	0.43	0.41	0.43	0.43	0.00
Sat Flow, veh/h	3548	1618	194				0	1698	136	869	1863	0
Grp Volume(v), veh/h	687	0	318				0	0	527	124	404	0
Grp Sat Flow(s),veh/h/ln	1774	0	1812				0	0	1833	869	1863	0
Q Serve(g_s), s	8.1	0.0	7.2				0.0	0.0	13.9	8.0	9.5	0.0
Cycle Q Clear(g_c), s	8.1	0.0	7.2				0.0	0.0	13.9	21.9	9.5	0.0
Prop In Lane	1.00		0.11				0.00		0.07	1.00		0.00
Lane Grp Cap(c), veh/h	1558	0	796				0	0	784	291	796	0
V/C Ratio(X)	0.44	0.00	0.40				0.00	0.00	0.67	0.43	0.51	0.00
Avail Cap(c_a), veh/h	1558	0	796				0	0	794	296	807	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.7	0.0	11.4				0.0	0.0	13.8	22.6	12.6	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.5				0.0	0.0	2.2	1.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	3.9				0.0	0.0	7.4	2.0	4.9	0.0
LnGrp Delay(d),s/veh	12.6	0.0	12.9				0.0	0.0	16.0	23.6	13.1	0.0
LnGrp LOS	B		B						B	C	B	
Approach Vol, veh/h		1005						527			528	
Approach Delay, s/veh		12.7						16.0			15.5	
Approach LOS		B						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		30.4		29.6				29.6
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green Setting (Gmax), s		25.0		25.0				25.0
Max Q Clear Time (g_c+I1), s		10.1		23.9				15.9
Green Ext Time (p_c), s		5.2		0.7				4.8

Intersection Summary	
HCM 2010 Ctrl Delay	14.3
HCM 2010 LOS	B

Notes

Intersection	
Intersection Delay, s/veh	18
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Vol, veh/h	0	0	0	0	0	10	160	20	0	10	390	0	0	0	260	170
Future Vol, veh/h	0	0	0	0	0	10	160	20	0	10	390	0	0	0	260	170
Peak Hour Factor	0.92	1.00	1.00	1.00	0.92	0.69	0.69	0.69	0.92	0.88	0.88	0.88	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	14	232	29	0	11	443	0	0	0	310	202
Number of Lanes	0	0	0	0	0	0	2	0	0	0	1	0	0	0	1	1

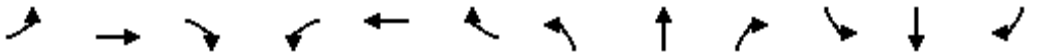
Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	12.2	26.7	13.5
HCM LOS	B	D	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	3%	11%	0%	0%	0%
Vol Thru, %	97%	89%	80%	100%	0%
Vol Right, %	0%	0%	20%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	400	90	100	260	170
LT Vol	10	10	0	0	0
Through Vol	390	80	80	260	0
RT Vol	0	0	20	0	170
Lane Flow Rate	455	130	145	310	202
Geometry Grp	6	7	7	7	7
Degree of Util (X)	0.77	0.255	0.276	0.524	0.303
Departure Headway (Hd)	6.101	7.051	6.852	6.097	5.385
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	591	509	523	591	666
Service Time	4.143	4.806	4.606	3.843	3.131
HCM Lane V/C Ratio	0.77	0.255	0.277	0.525	0.303
HCM Control Delay	26.7	12.2	12.2	15.4	10.5
HCM Lane LOS	D	B	B	C	B
HCM 95th-tile Q	7.1	1	1.1	3	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	80	10	120	20	10	10	440	220	40	350	10
Future Volume (veh/h)	10	80	10	120	20	10	10	440	220	40	350	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.96	0.99		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	11	91	2	135	22	5	12	524	226	47	407	12
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.84	0.84	0.84	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	303	6	323	42	8	704	881	380	458	1297	38
Arrive On Green	0.17	0.17	0.16	0.17	0.17	0.16	0.69	0.69	0.68	0.69	0.69	0.68
Sat Flow, veh/h	102	1753	36	1234	244	47	960	1270	548	709	1870	55
Grp Volume(v), veh/h	104	0	0	162	0	0	12	0	750	47	0	419
Grp Sat Flow(s),veh/h/ln	1892	0	0	1525	0	0	960	0	1818	709	0	1925
Q Serve(g_s), s	0.0	0.0	0.0	2.6	0.0	0.0	0.3	0.0	13.1	2.2	0.0	5.1
Cycle Q Clear(g_c), s	2.8	0.0	0.0	5.5	0.0	0.0	5.4	0.0	13.1	15.3	0.0	5.1
Prop In Lane	0.11		0.02	0.83		0.03	1.00		0.30	1.00		0.03
Lane Grp Cap(c), veh/h	393	0	0	374	0	0	704	0	1261	458	0	1336
V/C Ratio(X)	0.26	0.00	0.00	0.43	0.00	0.00	0.02	0.00	0.59	0.10	0.00	0.31
Avail Cap(c_a), veh/h	783	0	0	669	0	0	704	0	1261	458	0	1336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	0.0	0.0	22.6	0.0	0.0	4.7	0.0	4.9	8.8	0.0	3.6
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.8	0.0	0.0	0.0	0.0	2.1	0.4	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	2.6	0.0	0.0	0.1	0.0	7.0	0.5	0.0	2.9
LnGrp Delay(d),s/veh	22.1	0.0	0.0	23.4	0.0	0.0	4.7	0.0	7.0	9.3	0.0	4.2
LnGrp LOS	C			C			A		A	A		A
Approach Vol, veh/h		104			162			762			466	
Approach Delay, s/veh		22.1			23.4			6.9			4.7	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		45.6		14.4		45.6		14.4
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		28.0		22.0		22.0		22.0
Max Q Clear Time (g_c+I1), s		15.1		4.8		17.3		7.5
Green Ext Time (p_c), s		7.3		1.0		3.3		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	9.1
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	310	100	0	0	0	170	0	940	0	500	260
Future Volume (vph)	0	310	100	0	0	0	170	0	940	0	500	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.5	3.5				4.0		4.0		4.0	3.5
Lane Util. Factor		0.95	1.00				1.00		1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.97				1.00		0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00				1.00		1.00		1.00	1.00
Frt		1.00	0.85				1.00		0.85		1.00	0.85
Flt Protected		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (prot)		3539	1533				1770		1563		1863	1551
Flt Permitted		1.00	1.00				0.95		1.00		1.00	1.00
Satd. Flow (perm)		3539	1533				1770		1563		1863	1551
Peak-hour factor, PHF	0.94	0.94	0.94	1.00	1.00	1.00	0.83	0.83	0.83	0.89	0.89	0.89
Adj. Flow (vph)	0	330	106	0	0	0	205	0	1133	0	562	292
RTOR Reduction (vph)	0	0	71	0	0	0	0	0	30	0	0	111
Lane Group Flow (vph)	0	330	35	0	0	0	205	0	1103	0	562	181
Confl. Peds. (#/hr)			6			6			1			11
Confl. Bikes (#/hr)												15
Turn Type		NA	Perm				Prot		Perm		NA	custom
Protected Phases		2					3				4	2
Permitted Phases			2						8			4
Actuated Green, G (s)		12.8	12.8				13.1		43.7		26.4	39.2
Effective Green, g (s)		13.3	13.3				13.3		43.9		26.6	40.2
Actuated g/C Ratio		0.21	0.21				0.21		0.68		0.41	0.62
Clearance Time (s)		4.0	4.0				4.2		4.2		4.2	4.0
Vehicle Extension (s)		3.0	3.0				3.0		3.0		3.0	3.0
Lane Grp Cap (vph)		727	315				363		1060		765	963
v/s Ratio Prot		c0.09					0.12				0.30	0.04
v/s Ratio Perm			0.02						c0.71			0.08
v/c Ratio		0.45	0.11				0.56		1.04		0.73	0.19
Uniform Delay, d1		22.5	20.9				23.1		10.4		16.1	5.3
Progression Factor		1.00	1.00				1.00		1.00		1.00	1.00
Incremental Delay, d2		0.5	0.2				2.0		38.8		3.7	0.1
Delay (s)		23.0	21.0				25.1		49.2		19.8	5.3
Level of Service		C	C				C		D		B	A
Approach Delay (s)		22.5			0.0			45.5			14.8	
Approach LOS		C			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	64.7	Sum of lost time (s)	11.5
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	5	10	60	5	10	10	910	20	5	600	10
Future Volume (veh/h)	20	5	10	60	5	10	10	910	20	5	600	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	24	6	12	83	7	14	11	1046	23	6	714	12
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.72	0.72	0.72	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	260	74	97	428	32	349	408	1153	25	190	1160	19
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	716	315	412	1344	135	1492	725	1814	40	526	1825	31
Grp Volume(v), veh/h	42	0	0	90	0	14	11	0	1069	6	0	726
Grp Sat Flow(s),veh/h/ln	1443	0	0	1479	0	1492	725	0	1854	526	0	1856
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.0	30.4	0.6	0.0	14.4
Cycle Q Clear(g_c), s	2.5	0.0	0.0	2.5	0.0	0.4	14.9	0.0	30.4	31.0	0.0	14.4
Prop In Lane	0.57		0.29	0.92		1.00	1.00		0.02	1.00		0.02
Lane Grp Cap(c), veh/h	430	0	0	459	0	349	408	0	1178	190	0	1179
V/C Ratio(X)	0.10	0.00	0.00	0.20	0.00	0.04	0.03	0.00	0.91	0.03	0.00	0.62
Avail Cap(c_a), veh/h	520	0	0	567	0	462	421	0	1210	200	0	1211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	0.0	18.9	0.0	18.1	11.2	0.0	9.6	23.0	0.0	6.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	9.9	0.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	1.3	0.0	0.2	0.1	0.0	18.4	0.1	0.0	7.6
LnGrp Delay(d),s/veh	18.5	0.0	0.0	19.1	0.0	18.2	11.2	0.0	19.5	23.1	0.0	7.6
LnGrp LOS	B			B		B	B		B	C		A
Approach Vol, veh/h		42			104			1080			732	
Approach Delay, s/veh		18.5			19.0			19.4			7.7	
Approach LOS		B			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		42.9		18.4		42.9		18.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		18.0		40.0		19.0
Max Q Clear Time (g_c+I1), s		32.4		4.5		33.0		4.5
Green Ext Time (p_c), s		6.4		0.6		5.9		0.6

Intersection Summary		
HCM 2010 Ctrl Delay		15.0
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	240	330	550	110	20	360	930	690	40	690	40
Future Volume (veh/h)	60	240	330	550	110	20	360	930	690	40	690	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		1.00	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	65	258	220	777	0	0	414	1069	527	48	821	38
Adj No. of Lanes	1	1	1	2	1	0	2	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.83	0.83	0.83	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	331	512	746	392	0	529	1302	889	60	853	39
Arrive On Green	0.18	0.18	0.18	0.21	0.00	0.00	0.15	0.37	0.37	0.03	0.25	0.25
Sat Flow, veh/h	1774	1863	1510	3548	1863	0	3442	3539	1511	1774	3441	159
Grp Volume(v), veh/h	65	258	220	777	0	0	414	1069	527	48	422	437
Grp Sat Flow(s),veh/h/ln	1774	1863	1510	1774	1863	0	1721	1770	1511	1774	1770	1830
Q Serve(g_s), s	2.4	10.1	8.7	16.0	0.0	0.0	8.8	20.8	17.2	2.0	17.9	17.9
Cycle Q Clear(g_c), s	2.4	10.1	8.7	16.0	0.0	0.0	8.8	20.8	17.2	2.0	17.9	17.9
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	315	331	512	746	392	0	529	1302	889	60	439	454
V/C Ratio(X)	0.21	0.78	0.43	1.04	0.00	0.00	0.78	0.82	0.59	0.80	0.96	0.96
Avail Cap(c_a), veh/h	373	392	561	746	392	0	723	1302	889	93	439	454
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	29.9	19.9	30.1	0.0	0.0	31.0	21.8	10.4	36.5	28.3	28.3
Incr Delay (d2), s/veh	0.3	8.2	0.6	44.3	0.0	0.0	3.9	5.9	2.9	22.7	33.2	32.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	5.9	3.7	12.4	0.0	0.0	4.5	11.2	11.4	1.4	12.7	13.1
LnGrp Delay(d),s/veh	27.0	38.1	20.5	74.4	0.0	0.0	34.8	27.7	13.3	59.2	61.5	60.9
LnGrp LOS	C	D	C	F			C	C	B	E	E	E
Approach Vol, veh/h		543			777			2010			907	
Approach Delay, s/veh		29.6			74.4			25.4			61.1	
Approach LOS		C			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	32.0		17.5	15.7	22.9		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	28.0		16.0	16.0	16.0		16.0
Max Q Clear Time (g_c+I1), s	4.0	22.8		12.1	10.8	19.9		18.0
Green Ext Time (p_c), s	0.0	4.7		1.0	0.9	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	42.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1030	90	140	770	10	510	10	190	20	10	10
Future Volume (veh/h)	20	1030	90	140	770	10	510	10	190	20	10	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	1096	85	151	828	11	623	0	194	22	25	6
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.93	0.93	0.93	0.83	0.83	0.83	0.66	0.66	0.66
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	32	1516	117	183	2075	28	839	0	538	305	320	271
Arrive On Green	0.02	0.32	0.32	0.10	0.40	0.40	0.24	0.00	0.24	0.17	0.17	0.17
Sat Flow, veh/h	1774	4799	372	1774	5170	69	3548	0	1583	1774	1863	1578
Grp Volume(v), veh/h	21	774	407	151	543	296	623	0	194	22	25	6
Grp Sat Flow(s),veh/h/ln	1774	1695	1780	1774	1695	1848	1774	0	1583	1774	1863	1578
Q Serve(g_s), s	1.1	18.8	18.9	7.8	10.6	10.6	15.1	0.0	8.6	1.0	1.0	0.3
Cycle Q Clear(g_c), s	1.1	18.8	18.9	7.8	10.6	10.6	15.1	0.0	8.6	1.0	1.0	0.3
Prop In Lane	1.00		0.21	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	32	1071	563	183	1361	742	839	0	538	305	320	271
V/C Ratio(X)	0.66	0.72	0.72	0.82	0.40	0.40	0.74	0.00	0.36	0.07	0.08	0.02
Avail Cap(c_a), veh/h	95	1071	563	210	1361	742	839	0	538	305	320	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	28.2	28.2	40.9	19.8	19.8	32.9	0.0	23.1	32.3	32.3	32.0
Incr Delay (d2), s/veh	20.6	4.2	7.9	20.4	0.9	1.6	5.9	0.0	1.9	0.5	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	9.4	10.5	4.9	5.1	5.8	8.0	0.0	4.0	0.5	0.6	0.1
LnGrp Delay(d),s/veh	66.0	32.4	36.1	61.2	20.7	21.5	38.8	0.0	25.0	32.7	32.8	32.1
LnGrp LOS	E	C	D	E	C	C	D		C	C	C	C
Approach Vol, veh/h		1202			990			817			53	
Approach Delay, s/veh		34.3			27.1			35.5			32.7	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.6	33.4		20.0	5.7	41.3		26.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	28.0		16.0	5.0	34.0		22.0
Max Q Clear Time (g_c+I1), s	9.8	20.9		3.0	3.1	12.6		17.1
Green Ext Time (p_c), s	0.1	5.8		0.1	0.0	13.7		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	32.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	440	790	0	0	830	170	100	5	90	0	0	0
Future Volume (veh/h)	440	790	0	0	830	170	100	5	90	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900			
Adj Flow Rate, veh/h	454	814	0	0	954	134	110	5	48			
Adj No. of Lanes	2	2	0	0	2	0	1	1	0			
Peak Hour Factor	0.97	0.97	0.97	0.87	0.87	0.87	0.91	0.91	0.91			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	1036	2930	0	0	1505	211	153	13	123			
Arrive On Green	0.30	0.83	0.00	0.00	0.48	0.48	0.09	0.09	0.09			
Sat Flow, veh/h	3442	3632	0	0	3203	437	1774	149	1430			
Grp Volume(v), veh/h	454	814	0	0	543	545	110	0	53			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1777	1774	0	1579			
Q Serve(g_s), s	9.9	4.8	0.0	0.0	21.2	21.3	5.6	0.0	3.0			
Cycle Q Clear(g_c), s	9.9	4.8	0.0	0.0	21.2	21.3	5.6	0.0	3.0			
Prop In Lane	1.00		0.00	0.00		0.25	1.00		0.91			
Lane Grp Cap(c), veh/h	1036	2930	0	0	856	860	153	0	136			
V/C Ratio(X)	0.44	0.28	0.00	0.00	0.63	0.63	0.72	0.00	0.39			
Avail Cap(c_a), veh/h	1036	2930	0	0	856	860	305	0	272			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.75	0.75	1.00	0.00	1.00			
Uniform Delay (d), s/veh	26.2	1.8	0.0	0.0	17.9	17.9	41.4	0.0	40.2			
Incr Delay (d2), s/veh	0.3	0.2	0.0	0.0	2.7	2.7	6.2	0.0	1.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.7	2.4	0.0	0.0	10.9	10.9	3.0	0.0	1.3			
LnGrp Delay(d),s/veh	26.5	2.0	0.0	0.0	20.5	20.5	47.7	0.0	42.0			
LnGrp LOS	C	A			C	C	D		D			
Approach Vol, veh/h		1268			1088			163				
Approach Delay, s/veh		10.8			20.5			45.8				
Approach LOS		B			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		81.0			32.0	49.0		12.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		69.0			20.0	45.0		16.0
Max Q Clear Time (g_c+I1), s		6.8			11.9	23.3		7.6
Green Ext Time (p_c), s		10.1			4.5	7.4		0.4

Intersection Summary		
HCM 2010 Ctrl Delay		17.3
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	110	0	210	50	1570	0	0	1020	730
Future Volume (veh/h)	0	0	0	110	0	210	50	1570	0	0	1020	730
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				131	0	174	60	1869	0	0	1097	785
Adj No. of Lanes				0	1	1	1	2	0	0	2	1
Peak Hour Factor				0.84	0.84	0.84	0.84	0.84	0.84	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				695	0	620	1064	3598	0	0	1277	554
Arrive On Green				0.39	0.00	0.39	0.60	1.00	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	3632	1535
Grp Volume(v), veh/h				131	0	174	60	1869	0	0	1097	785
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1770	1535
Q Serve(g_s), s				4.7	0.0	7.3	1.4	0.0	0.0	0.0	27.8	35.0
Cycle Q Clear(g_c), s				4.7	0.0	7.3	1.4	0.0	0.0	0.0	27.8	35.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				695	0	620	1064	3598	0	0	1277	554
V/C Ratio(X)				0.19	0.00	0.28	0.06	0.52	0.00	0.00	0.86	1.42
Avail Cap(c_a), veh/h				695	0	620	1064	3598	0	0	1277	554
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.82	0.82	0.00	0.00	0.84	0.84
Uniform Delay (d), s/veh				19.4	0.0	20.2	8.0	0.0	0.0	0.0	28.7	31.0
Incr Delay (d2), s/veh				0.6	0.0	1.1	0.1	0.4	0.0	0.0	6.5	196.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.4	0.0	3.4	0.7	0.2	0.0	0.0	14.7	45.0
LnGrp Delay(d),s/veh				20.0	0.0	21.3	8.1	0.4	0.0	0.0	35.3	227.7
LnGrp LOS				B		C	A	A			D	F
Approach Vol, veh/h					305			1929			1882	
Approach Delay, s/veh					20.7			0.7			115.5	
Approach LOS					C			A			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	15.0	39.0				104.0		42.0
Change Period (Y+Rc), s	4.9	* 4.9				4.9		4.2
Max Green Setting (Gmax), s	12.5	* 34				50.1		37.8
Max Q Clear Time (g_c+I1), s	13.4	37.0				2.0		9.3
Green Ext Time (p_c), s	7.6	0.0				26.3		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	54.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	20	30	420	20	470	50	1660	340	410	1180	10
Future Volume (veh/h)	40	20	30	420	20	470	50	1660	340	410	1180	10
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	59	29	10	537	0	324	59	1953	294	441	1269	11
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	2	2	0
Peak Hour Factor	0.68	0.68	0.68	0.81	0.81	0.81	0.85	0.85	0.85	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	42	21	55	835	0	493	78	1618	1075	302	1769	15
Arrive On Green	0.04	0.04	0.04	0.24	0.00	0.24	0.04	0.46	0.46	0.09	0.49	0.49
Sat Flow, veh/h	1208	594	1570	3548	0	1502	1774	3539	1536	3442	3595	31
Grp Volume(v), veh/h	88	0	10	537	0	324	59	1953	294	441	625	655
Grp Sat Flow(s),veh/h/ln	1802	0	1570	1774	0	1502	1774	1770	1536	1721	1770	1856
Q Serve(g_s), s	4.0	0.0	0.7	15.5	0.0	21.2	3.7	52.0	8.3	10.0	31.5	31.5
Cycle Q Clear(g_c), s	4.0	0.0	0.7	15.5	0.0	21.2	3.7	52.0	8.3	10.0	31.5	31.5
Prop In Lane	0.67		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	63	0	55	835	0	493	78	1618	1075	302	871	914
V/C Ratio(X)	1.39	0.00	0.18	0.64	0.00	0.66	0.76	1.21	0.27	1.46	0.72	0.72
Avail Cap(c_a), veh/h	63	0	55	904	0	522	94	1618	1075	302	871	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.9	0.0	53.3	39.2	0.0	33.2	53.8	30.9	6.7	51.9	22.7	22.7
Incr Delay (d2), s/veh	246.9	0.0	1.6	1.4	0.0	2.8	24.6	99.4	0.6	223.5	5.0	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.3	7.8	0.0	9.1	2.4	47.5	6.4	14.1	16.5	17.2
LnGrp Delay(d),s/veh	301.8	0.0	54.9	40.6	0.0	36.0	78.4	130.3	7.3	275.4	27.7	27.5
LnGrp LOS	F		D	D		D	E	F	A	F	C	C
Approach Vol, veh/h		98			861			2306			1721	
Approach Delay, s/veh		276.6			38.9			113.3			91.1	
Approach LOS		F			D			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	62.0		31.8	15.0	58.0		9.0
Change Period (Y+Rc), s	6.0	* 6		5.0	5.0	6.0		5.0
Max Green Setting (Gmax), s	6.0	* 56		29.0	10.0	52.0		4.0
Max Q Clear Time (g_c+I1), s	5.7	33.5		23.2	12.0	54.0		6.0
Green Ext Time (p_c), s	0.2	9.5		2.1	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	96.0
HCM 2010 LOS	F

Notes

Intersection	
Int Delay, s/veh	53.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	30	70	1900	1620	20
Future Vol, veh/h	20	30	70	1900	1620	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	180	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	88	88	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	45	80	2159	1976	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3227	1000	2000	0	-	0
Stage 1	1988	-	-	-	-	-
Stage 2	1239	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 7	241	283	-	-	-
Stage 1	92	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 5	241	283	-	-	-
Mov Cap-2 Maneuver	~ 5	-	-	-	-	-
Stage 1	92	-	-	-	-	-
Stage 2	169	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 3010.9	0.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	283	-	12	-	-
HCM Lane V/C Ratio	0.281	-	6.313	-	-
HCM Control Delay (s)	22.6	-	$ 3010.9	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	1.1	-	10.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	15.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	100	1970	170	90	1660
Future Vol, veh/h	60	100	1970	170	90	1660
Conflicting Peds, #/hr	0	0	0	14	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	93	93	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	85	141	2118	183	101	1865

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3359	1165	0	0	2315	0
Stage 1	2224	-	-	-	-	-
Stage 2	1135	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 6	187	-	-	213	-
Stage 1	~ 68	-	-	-	-	-
Stage 2	269	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 3	185	-	-	213	-
Mov Cap-2 Maneuver	~ 43	-	-	-	-	-
Stage 1	~ 67	-	-	-	-	-
Stage 2	141	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	288.1	0	1.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	43	185	213	-
HCM Lane V/C Ratio	-	-	1.965	0.761	0.475	-
HCM Control Delay (s)	-	-	$ 654.1	68.5	36.3	-
HCM Lane LOS	-	-	F	F	E	-
HCM 95th %tile Q(veh)	-	-	8.8	5	2.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	110	130	1765	1240	10
Future Vol, veh/h	10	110	130	1765	1240	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	120	141	1918	1348	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2595	679	1359	0	-	0
Stage 1	1353	-	-	-	-	-
Stage 2	1242	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	20	394	502	-	-	-
Stage 1	205	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	14	394	502	-	-	-
Mov Cap-2 Maneuver	14	-	-	-	-	-
Stage 1	205	-	-	-	-	-
Stage 2	170	-	-	-	-	-

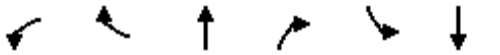
Approach	EB	NB	SB
HCM Control Delay, s	173.7	1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	502	-	121	-	-
HCM Lane V/C Ratio	0.281	-	1.078	-	-
HCM Control Delay (s)	15	-	173.7	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	1.1	-	7.6	-	-

Intersection	
Intersection Delay, s/veh	26.5
Intersection LOS	D

Approach	WB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	1	1
Adj Approach Flow, veh/h	120	2039	1513
Demand Flow Rate, veh/h	123	2080	1543
Vehicles Circulating, veh/h	2074	13	28
Vehicles Exiting, veh/h	19	1558	2169
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	27.8	35.2	14.6
Approach LOS	D	E	B

Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.470	0.530
Critical Headway, s	4.113	5.193	5.193	5.193	5.193
Entry Flow, veh/h	123	978	1102	725	818
Cap Entry Lane, veh/h	265	1115	1115	1099	1099
Entry HV Adj Factor	0.976	0.980	0.981	0.981	0.980
Flow Entry, veh/h	120	958	1081	711	802
Cap Entry, veh/h	258	1093	1094	1078	1077
V/C Ratio	0.465	0.877	0.988	0.660	0.744
Control Delay, s/veh	27.8	25.4	43.9	12.9	16.1
LOS	D	D	E	B	C
95th %tile Queue, veh	2	12	19	5	7



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	70	1830	5	10	1200
Future Volume (veh/h)	20	70	1830	5	10	1200
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863
Adj Flow Rate, veh/h	27	93	2033	6	12	1500
Adj No. of Lanes	0	0	2	1	1	2
Peak Hour Factor	0.75	0.75	0.90	0.90	0.80	0.80
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	35	120	2617	1144	228	2617
Arrive On Green	0.10	0.10	0.74	0.74	0.74	0.74
Sat Flow, veh/h	362	1248	3632	1548	206	3632
Grp Volume(v), veh/h	121	0	2033	6	12	1500
Grp Sat Flow(s),veh/h/ln	1624	0	1770	1548	206	1770
Q Serve(g_s), s	3.5	0.0	17.1	0.0	1.8	9.3
Cycle Q Clear(g_c), s	3.5	0.0	17.1	0.0	19.0	9.3
Prop In Lane	0.22	0.77		1.00	1.00	
Lane Grp Cap(c), veh/h	157	0	2617	1144	228	2617
V/C Ratio(X)	0.77	0.00	0.78	0.01	0.05	0.57
Avail Cap(c_a), veh/h	534	0	2617	1144	228	2617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	3.9	1.7	9.7	2.9
Incr Delay (d2), s/veh	7.9	0.0	2.3	0.0	0.4	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	8.8	0.0	0.1	4.7
LnGrp Delay(d),s/veh	29.3	0.0	6.2	1.7	10.1	3.8
LnGrp LOS	C		A	A	B	A
Approach Vol, veh/h	121		2039			1512
Approach Delay, s/veh	29.3		6.2			3.8
Approach LOS	C		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		40.0				40.0		8.7
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		36.0				36.0		16.0
Max Q Clear Time (g_c+I1), s		19.1				21.0		5.5
Green Ext Time (p_c), s		16.4				14.7		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	6.0
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	240	170	100	350	270	330	1340	90	320	1130	150
Future Volume (veh/h)	120	240	170	100	350	270	330	1340	90	320	1130	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.84	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	145	289	129	106	372	218	375	1523	100	372	1314	96
Adj No. of Lanes	1	2	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.83	0.83	0.83	0.94	0.94	0.94	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	677	279	134	360	204	421	1573	683	382	1534	674
Arrive On Green	0.09	0.19	0.19	0.08	0.18	0.18	0.12	0.44	0.44	0.11	0.43	0.43
Sat Flow, veh/h	1774	3539	1457	1774	2026	1148	3442	3539	1537	3442	3539	1555
Grp Volume(v), veh/h	145	289	129	106	323	267	375	1523	100	372	1314	96
Grp Sat Flow(s),veh/h/ln	1774	1770	1457	1774	1770	1405	1721	1770	1537	1721	1770	1555
Q Serve(g_s), s	7.3	6.5	7.1	5.3	16.0	16.0	9.7	37.8	3.5	9.7	30.1	3.4
Cycle Q Clear(g_c), s	7.3	6.5	7.1	5.3	16.0	16.0	9.7	37.8	3.5	9.7	30.1	3.4
Prop In Lane	1.00		1.00	1.00		0.82	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	158	677	279	134	315	250	421	1573	683	382	1534	674
V/C Ratio(X)	0.92	0.43	0.46	0.79	1.03	1.07	0.89	0.97	0.15	0.97	0.86	0.14
Avail Cap(c_a), veh/h	158	677	279	158	315	250	421	1573	683	382	1534	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	32.1	32.3	40.9	37.0	37.0	38.9	24.4	14.9	39.9	23.0	15.4
Incr Delay (d2), s/veh	48.6	0.4	1.2	20.4	58.0	76.1	20.5	16.3	0.5	38.7	6.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	3.2	2.9	3.4	12.8	11.5	5.8	22.0	1.6	6.7	16.0	1.5
LnGrp Delay(d),s/veh	89.3	32.5	33.5	61.3	95.0	113.1	59.4	40.7	15.3	78.6	29.4	15.8
LnGrp LOS	F	C	C	E	F	F	E	D	B	E	C	B
Approach Vol, veh/h		563			696			1998			1782	
Approach Delay, s/veh		47.4			96.8			42.9			38.9	
Approach LOS		D			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	44.0	10.8	21.2	15.0	43.0	12.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	40.0	8.0	16.0	11.0	39.0	8.0	16.0
Max Q Clear Time (g_c+I1), s	11.7	39.8	7.3	9.1	11.7	32.1	9.3	18.0
Green Ext Time (p_c), s	0.0	0.2	0.0	3.6	0.0	6.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	49.4
HCM 2010 LOS	D

Intersection	
Intersection Delay, s/veh	7.0
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	1	1
Adj Approach Flow, veh/h	165	35	401	678
Demand Flow Rate, veh/h	168	35	408	691
Vehicles Circulating, veh/h	637	460	88	148
Vehicles Exiting, veh/h	202	36	717	347
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	13	23	37	12
Ped Cap Adj	0.998	0.997	0.961	0.988
Approach Delay, s/veh	7.8	4.9	5.7	7.7
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.471	0.529	0.470	0.530
Critical Headway, s	4.113	4.113	5.193	5.193	5.193	5.193
Entry Flow, veh/h	168	35	192	216	325	366
Cap Entry Lane, veh/h	723	819	1035	1035	974	974
Entry HV Adj Factor	0.981	0.992	0.981	0.983	0.980	0.982
Flow Entry, veh/h	165	35	188	212	319	359
Cap Entry, veh/h	708	810	975	977	944	945
V/C Ratio	0.233	0.043	0.193	0.217	0.338	0.380
Control Delay, s/veh	7.8	4.9	5.5	5.8	7.4	8.0
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	0	1	1	2	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	10	70	10	10	5	100	230	10	10	540	60
Future Volume (veh/h)	50	10	70	10	10	5	100	230	10	10	540	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.92	0.97		0.97	1.00		0.95	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	63	13	89	14	14	7	118	271	12	11	600	67
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	0	2	1
Peak Hour Factor	0.79	0.79	0.79	0.70	0.70	0.70	0.85	0.85	0.85	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	64	185	273	212	74	542	1623	72	148	1622	714
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	408	280	806	369	921	323	763	3444	152	18	3442	1514
Grp Volume(v), veh/h	165	0	0	35	0	0	118	139	144	328	283	67
Grp Sat Flow(s),veh/h/ln	1494	0	0	1613	0	0	763	1770	1826	1850	1610	1514
Q Serve(g_s), s	0.8	0.0	0.0	0.0	0.0	0.0	3.1	1.2	1.2	0.0	3.0	0.7
Cycle Q Clear(g_c), s	2.4	0.0	0.0	0.4	0.0	0.0	6.2	1.2	1.2	3.0	3.0	0.7
Prop In Lane	0.38		0.54	0.40		0.20	1.00		0.08	0.03		1.00
Lane Grp Cap(c), veh/h	529	0	0	559	0	0	542	834	861	1011	759	714
V/C Ratio(X)	0.31	0.00	0.00	0.06	0.00	0.00	0.22	0.17	0.17	0.32	0.37	0.09
Avail Cap(c_a), veh/h	1062	0	0	1111	0	0	639	1058	1092	1241	963	905
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.8	0.0	0.0	8.1	0.0	0.0	6.5	4.1	4.1	4.5	4.5	3.9
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.2	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	0.2	0.0	0.0	0.7	0.6	0.6	1.6	1.4	0.3
LnGrp Delay(d),s/veh	9.2	0.0	0.0	8.1	0.0	0.0	6.7	4.2	4.2	4.7	4.8	4.0
LnGrp LOS	A			A			A	A	A	A	A	A
Approach Vol, veh/h		165			35			401			678	
Approach Delay, s/veh		9.2			8.1			4.9			4.7	
Approach LOS		A			A			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		16.6		10.2		16.6		10.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0		16.0		16.0		16.0
Max Q Clear Time (g_c+I1), s		8.2		4.4		5.0		2.4
Green Ext Time (p_c), s		3.9		0.9		5.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	5.4
HCM 2010 LOS	A

Intersection	
Intersection Delay, s/veh	15.7
Intersection LOS	C

Approach	WB	NB	SB
Entry Lanes	1	2	1
Conflicting Circle Lanes	2	1	1
Adj Approach Flow, veh/h	92	1011	901
Demand Flow Rate, veh/h	94	1031	919
Vehicles Circulating, veh/h	807	168	27
Vehicles Exiting, veh/h	392	778	874
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	6	0	0
Ped Cap Adj	0.999	1.000	1.000
Approach Delay, s/veh	7.4	11.0	21.7
Approach LOS	A	B	C

Lane	Left	Left	Right	Left
Designated Moves	LR	LT	TR	LT
Assumed Moves	LR	LT	TR	LT
RT Channelized				
Lane Util	1.000	0.470	0.530	1.000
Critical Headway, s	4.113	5.193	5.193	5.193
Entry Flow, veh/h	94	485	546	919
Cap Entry Lane, veh/h	642	955	955	1100
Entry HV Adj Factor	0.979	0.980	0.982	0.981
Flow Entry, veh/h	92	475	536	901
Cap Entry, veh/h	628	936	938	1079
V/C Ratio	0.146	0.508	0.572	0.836
Control Delay, s/veh	7.4	10.3	11.7	21.7
LOS	A	B	B	C
95th %tile Queue, veh	1	3	4	10

Intersection	
Intersection Delay, s/veh	54.0
Intersection LOS	F

Approach	EB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	1	1
Adj Approach Flow, veh/h	75	2239	2000
Demand Flow Rate, veh/h	77	2284	2040
Vehicles Circulating, veh/h	2016	31	82
Vehicles Exiting, veh/h	106	2062	2233
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	19.9	61.9	46.4
Approach LOS	C	F	E

Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.470	0.530
Critical Headway, s	4.113	5.193	5.193	5.193	5.193
Entry Flow, veh/h	77	1073	1211	959	1081
Cap Entry Lane, veh/h	276	1095	1095	1041	1041
Entry HV Adj Factor	0.974	0.981	0.980	0.980	0.981
Flow Entry, veh/h	75	1052	1187	940	1060
Cap Entry, veh/h	268	1074	1073	1021	1021
V/C Ratio	0.279	0.980	1.105	0.921	1.038
Control Delay, s/veh	19.9	42.3	79.3	32.6	58.7
LOS	C	E	F	D	F
95th %tile Queue, veh	1	19	29	14	23

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	30	70	1900	1620	20
Future Volume (veh/h)	20	30	70	1900	1620	20
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	30	45	80	2159	1976	24
Adj No. of Lanes	0	0	1	2	2	0
Peak Hour Factor	0.66	0.66	0.88	0.88	0.82	0.82
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	38	57	102	2915	2532	31
Arrive On Green	0.06	0.06	0.06	0.82	0.71	0.71
Sat Flow, veh/h	654	981	1774	3632	3673	43
Grp Volume(v), veh/h	76	0	80	2159	974	1026
Grp Sat Flow(s),veh/h/ln	1657	0	1774	1770	1770	1854
Q Serve(g_s), s	3.1	0.0	3.0	18.7	24.4	24.6
Cycle Q Clear(g_c), s	3.1	0.0	3.0	18.7	24.4	24.6
Prop In Lane	0.39	0.59	1.00			0.02
Lane Grp Cap(c), veh/h	97	0	102	2915	1252	1311
V/C Ratio(X)	0.78	0.00	0.78	0.74	0.78	0.78
Avail Cap(c_a), veh/h	390	0	104	2915	1252	1311
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	0.0	31.6	2.7	6.5	6.5
Incr Delay (d2), s/veh	12.8	0.0	30.6	1.7	4.8	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.4	9.4	13.3	14.0
LnGrp Delay(d),s/veh	44.4	0.0	62.2	4.4	11.3	11.2
LnGrp LOS	D		E	A	B	B
Approach Vol, veh/h	76			2239	2000	
Approach Delay, s/veh	44.4			6.5	11.3	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		60.0		8.0	7.9	52.1		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		56.0		16.0	4.0	48.0		
Max Q Clear Time (g_c+I1), s		20.7		5.1	5.0	26.6		
Green Ext Time (p_c), s		34.2		0.1	0.0	20.9		

Intersection Summary	
HCM 2010 Ctrl Delay	9.4
HCM 2010 LOS	A

Notes

Intersection	
Intersection Delay, s/veh	27.9
Intersection LOS	D

Approach	EB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	1	1
Adj Approach Flow, veh/h	131	2059	1359
Demand Flow Rate, veh/h	133	2100	1386
Vehicles Circulating, veh/h	1375	11	144
Vehicles Exiting, veh/h	155	1497	1967
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	13.7	36.5	16.2
Approach LOS	B	E	C

Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.470	0.530
Critical Headway, s	4.113	5.193	5.193	5.193	5.193
Entry Flow, veh/h	133	987	1113	651	735
Cap Entry Lane, veh/h	432	1118	1118	978	978
Entry HV Adj Factor	0.985	0.980	0.980	0.981	0.980
Flow Entry, veh/h	131	968	1091	639	720
Cap Entry, veh/h	425	1096	1096	960	959
V/C Ratio	0.308	0.883	0.996	0.665	0.751
Control Delay, s/veh	13.7	26.1	45.7	14.2	17.9
LOS	B	D	E	B	C
95th %tile Queue, veh	1	13	20	5	7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	110	130	1765	1240	10
Future Volume (veh/h)	10	110	130	1765	1240	10
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	11	120	141	1918	1348	11
Adj No. of Lanes	0	0	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	14	153	180	2576	1955	16
Arrive On Green	0.11	0.11	0.10	0.73	0.54	0.54
Sat Flow, veh/h	133	1454	1774	3632	3691	29
Grp Volume(v), veh/h	132	0	141	1918	663	696
Grp Sat Flow(s),veh/h/ln	1599	0	1774	1770	1770	1858
Q Serve(g_s), s	3.9	0.0	3.7	15.4	13.1	13.1
Cycle Q Clear(g_c), s	3.9	0.0	3.7	15.4	13.1	13.1
Prop In Lane	0.08	0.91	1.00			0.02
Lane Grp Cap(c), veh/h	168	0	180	2576	961	1009
V/C Ratio(X)	0.78	0.00	0.79	0.74	0.69	0.69
Avail Cap(c_a), veh/h	533	0	222	2656	961	1009
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	0.0	21.0	3.9	8.0	8.0
Incr Delay (d2), s/veh	7.7	0.0	13.7	1.1	2.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	2.5	7.6	6.8	7.1
LnGrp Delay(d),s/veh	28.7	0.0	34.8	5.0	10.1	10.0
LnGrp LOS	C		C	A	B	B
Approach Vol, veh/h	132			2059	1359	
Approach Delay, s/veh	28.7			7.1	10.1	
Approach LOS	C			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		38.9		9.1	8.9	30.1		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		36.0		16.0	6.0	26.0		
Max Q Clear Time (g_c+I1), s		17.4		5.9	5.7	15.1		
Green Ext Time (p_c), s		17.5		0.2	0.0	10.5		

Intersection Summary	
HCM 2010 Ctrl Delay	9.0
HCM 2010 LOS	A

Notes

Appendix G.2

Intersection Bicycle LOS Worksheets for 2035 Plus Project Conditions

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	91	6	12	8
Total Flow Rate (veh/h)	355	78	1999	2349
Effct. Green for Bike (s)	13.6	10.1	70.5	81.0
Cross Street Width (ft)	82.0	73.9	69.4	52.1
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	170	126	881	1012
Bicycle Delay (s/bike)	70.2	70.4	25.2	19.6
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.11	1.75	4.27	4.29
Bicycle LOS	C	A	E	E

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	74	9	17	0
Total Flow Rate (veh/h)	989	778	1755	1839
Effct. Green for Bike (s)	16.0	16.0	21.0	20.0
Cross Street Width (ft)	87.8	85.7	63.1	61.6
Through Lanes Number	1	2	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	492	492	646	615
Bicycle Delay (s/bike)	19.2	18.6	15.0	15.6
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.46	2.44	3.97	2.95
Bicycle LOS	C	B	D	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	23	5	52	1
Total Flow Rate (veh/h)	1013	167	1168	277
Effct. Green for Bike (s)	26.3	11.6	39.5	16.7
Cross Street Width (ft)	60.2	71.4	36.3	60.7
Through Lanes Number	1	1	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	373	165	560	237
Bicycle Delay (s/bike)	47.2	59.5	37.5	54.8
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	4.15	2.93	3.08	2.95
Bicycle LOS	D	C	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	26	6
Total Flow Rate (veh/h)	566	39	393	596
Effct. Green for Bike (s)	16.6	5.7	12.1	12.1
Cross Street Width (ft)	58.5	61.2	24.0	12.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	6.0	6.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	553	190	403	403
Bicycle Delay (s/bike)	15.7	24.6	19.4	19.2
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.39	2.56	0.96	0.95
Bicycle LOS	C	B	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	6	0
Total Flow Rate (veh/h)	592	598	26	448
Effct. Green for Bike (s)	41.2	21.6	10.1	10.1
Cross Street Width (ft)	55.3	62.1	49.9	36.3
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	704	369	173	173
Bicycle Delay (s/bike)	24.6	38.9	49.0	48.8
Bicycle Compliance	Fair	Poor	Poor	Poor
Bicycle LOS Score	3.38	2.42	2.37	2.85
Bicycle LOS	C	B	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	0	22	3
Total Flow Rate (veh/h)	54	125	1891	1884
Effct. Green for Bike (s)	10.1	10.7	43.4	40.3
Cross Street Width (ft)	72.8	72.5	38.1	38.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	224	238	964	896
Bicycle Delay (s/bike)	35.6	34.9	12.2	13.7
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.76	2.88	2.42	2.41
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	24	6
Total Flow Rate (veh/h)	642	91	1793	1725
Effct. Green for Bike (s)	16.0	16.0	31.0	31.0
Cross Street Width (ft)	59.9	72.0	23.9	26.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	582	582	1127	1127
Bicycle Delay (s/bike)	13.8	13.8	5.3	5.3
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	3.54	2.81	2.33	2.32
Bicycle LOS	D	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	19	6
Total Flow Rate (veh/h)	189	905	730	1724
Effct. Green for Bike (s)	18.1	18.1	16.1	19.1
Cross Street Width (ft)	59.9	61.1	35.9	23.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	724	724	644	764
Bicycle Delay (s/bike)	10.2	10.2	11.6	9.6
Bicycle Compliance	Fair	Fair	Fair	Good
Bicycle LOS Score	2.79	3.99	1.64	2.28
Bicycle LOS	C	D	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	15	1	20	5
Total Flow Rate (veh/h)	67	195	697	1471
Effct. Green for Bike (s)	9.5	9.5	40.5	40.5
Cross Street Width (ft)	60.1	59.9	32.9	35.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	317	317	1350	1350
Bicycle Delay (s/bike)	21.4	21.3	3.2	3.2
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.59	2.80	1.57	2.25
Bicycle LOS	B	C	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	22	6
Total Flow Rate (veh/h)	174	183	598	1329
Effct. Green for Bike (s)	10.7	10.7	43.2	32.0
Cross Street Width (ft)	61.3	60.1	36.1	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	315	315	1271	941
Bicycle Delay (s/bike)	24.2	24.1	4.6	9.6
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.78	2.78	1.53	2.32
Bicycle LOS	C	C	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	3	6	1
Total Flow Rate (veh/h)	113	455	607	1313
Effct. Green for Bike (s)	15.1	15.1	27.8	33.3
Cross Street Width (ft)	61.2	60.9	48.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	503	503	927	1110
Bicycle Delay (s/bike)	16.8	16.8	8.7	5.9
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.68	3.24	1.72	2.30
Bicycle LOS	B	C	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	4	22	6
Total Flow Rate (veh/h)	0	309	579	1264
Effct. Green for Bike (s)	0.0	8.5	41.5	41.5
Cross Street Width (ft)	48.1	60.0	36.0	38.1
Through Lanes Number	0	3	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	283	1383	1383
Bicycle Delay (s/bike)	0.0	22.1	2.9	2.9
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.65	1.52	3.16
Bicycle LOS		B	A	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	9	4	1	4
Total Flow Rate (veh/h)	326	793	550	261
Effct. Green for Bike (s)	11.0	25.5	17.0	17.0
Cross Street Width (ft)	35.9	38.6	60.1	47.9
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	293	680	453	453
Bicycle Delay (s/bike)	27.4	16.4	22.4	22.5
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.65	3.46	2.31	2.72
Bicycle LOS	B	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	1	26	10
Total Flow Rate (veh/h)	389	737	584	373
Effct. Green for Bike (s)	29.0	38.0	24.0	24.0
Cross Street Width (ft)	38.0	38.8	48.2	48.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	707	927	585	585
Bicycle Delay (s/bike)	17.2	11.8	20.8	20.6
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.78	3.37	1.97	1.62
Bicycle LOS	C	C	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	8	1	12
Total Flow Rate (veh/h)	0	807	284	361
Effct. Green for Bike (s)	0.0	28.0	22.0	22.0
Cross Street Width (ft)	35.9	48.1	36.1	37.4
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	933	733	733
Bicycle Delay (s/bike)	0.0	8.6	12.0	12.1
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.74	2.58	2.73
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	9	8	5
Total Flow Rate (veh/h)	0	733	219	227
Effct. Green for Bike (s)	0.0	19.0	31.0	31.0
Cross Street Width (ft)	24.0	36.0	36.0	38.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	633	1033	1033
Bicycle Delay (s/bike)	0.0	14.1	7.0	7.0
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.51	2.47	2.52
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	6	3	4
Total Flow Rate (veh/h)	0	826	272	267
Effct. Green for Bike (s)	0.0	27.0	23.0	23.0
Cross Street Width (ft)	23.9	24.1	36.0	36.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	900	767	767
Bicycle Delay (s/bike)	0.0	9.1	11.4	11.4
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.38	2.56	2.55
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	15	0	5	0
Total Flow Rate (veh/h)	749	0	247	679
Effct. Green for Bike (s)	28.7	0.0	21.3	21.3
Cross Street Width (ft)	34.7	48.2	38.5	35.9
Through Lanes Number	2	0	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	957	0	710	710
Bicycle Delay (s/bike)	8.2	0.0	12.5	12.5
Bicycle Compliance	Good		Fair	Fair
Bicycle LOS Score	1.42	0.00	1.48	2.16
Bicycle LOS	A		A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	0	4	6
Total Flow Rate (veh/h)	64	254	701	408
Effct. Green for Bike (s)	16.0	16.0	16.0	16.0
Cross Street Width (ft)	38.0	38.0	26.0	26.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	14.0	14.0	14.0	14.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	800	800	800	800
Bicycle Delay (s/bike)	7.2	7.2	7.2	7.2
Bicycle Compliance	Good	Good	Good	Good
Bicycle LOS Score	1.82	2.13	2.69	2.20
Bicycle LOS	A	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	12
Total Flow Rate (veh/h)	1049	0	667	713
Effct. Green for Bike (s)	24.0	0.0	0.0	32.3
Cross Street Width (ft)	37.7	25.0	24.1	51.5
Through Lanes Number	2	0	0	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	444	0	0	598
Bicycle Delay (s/bike)	32.7	0.0	0.0	26.7
Bicycle Compliance	Poor			Fair
Bicycle LOS Score	3.00	0.00	0.00	2.67
Bicycle LOS	C			B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	9	3	9	8
Total Flow Rate (veh/h)	64	87	831	911
Effct. Green for Bike (s)	10.9	16.5	38.7	38.7
Cross Street Width (ft)	39.5	37.8	36.2	30.8
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	16.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	325	493	1155	1155
Bicycle Delay (s/bike)	23.6	19.1	6.0	6.0
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.41	1.21	2.41	3.53
Bicycle LOS	A	A	B	D

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	15	5	6	4
Total Flow Rate (veh/h)	720	761	1224	989
Effct. Green for Bike (s)	27.0	30.0	54.4	39.6
Cross Street Width (ft)	87.2	73.8	37.1	62.5
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	397	441	800	582
Bicycle Delay (s/bike)	44.0	41.4	24.6	34.2
Bicycle Compliance	Poor	Poor	Fair	Poor
Bicycle LOS Score	4.08	3.94	2.07	2.26
Bicycle LOS	D	D	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	13	3	1	0
Total Flow Rate (veh/h)	804	674	1220	48
Effct. Green for Bike (s)	26.2	40.4	21.0	16.0
Cross Street Width (ft)	48.7	48.2	84.8	86.6
Through Lanes Number	3	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	563	869	452	344
Bicycle Delay (s/bike)	24.1	14.9	27.9	31.9
Bicycle Compliance	Fair	Fair	Fair	Poor
Bicycle LOS Score	1.67	1.60	4.87	2.96
Bicycle LOS	A	A	E	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	12	6	0	0
Total Flow Rate (veh/h)	1455	873	210	0
Effct. Green for Bike (s)	74.8	53.8	10.2	0.0
Cross Street Width (ft)	38.7	35.1	92.8	91.2
Through Lanes Number	2	2	1	0
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1609	1157	219	0
Bicycle Delay (s/bike)	1.8	8.3	36.9	0.0
Bicycle Compliance	Good	Good	Poor	
Bicycle LOS Score	2.28	1.74	3.33	0.00
Bicycle LOS	B	A	C	

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	1	5
Total Flow Rate (veh/h)	0	908	1108	1411
Effct. Green for Bike (s)	0.0	37.3	50.6	42.9
Cross Street Width (ft)	60.2	73.8	24.0	14.8
Through Lanes Number	0	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	769	1043	885
Bicycle Delay (s/bike)	0.0	18.4	11.1	15.1
Bicycle Compliance		Fair	Fair	Fair
Bicycle LOS Score	0.00	4.19	1.98	2.09
Bicycle LOS		D	A	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	1	18
Total Flow Rate (veh/h)	42	1000	1071	2292
Effct. Green for Bike (s)	4.1	23.0	40.2	61.9
Cross Street Width (ft)	81.6	80.9	63.0	56.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	69	390	681	1049
Bicycle Delay (s/bike)	55.0	38.2	25.7	13.5
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.88	3.38	2.34	3.25
Bicycle LOS	C	C	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	15	65	6	1
Total Flow Rate (veh/h)	432	513	1893	1933
Effct. Green for Bike (s)	19.8	17.8	73.1	73.1
Cross Street Width (ft)	82.0	73.9	69.4	52.1
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	247	222	914	914
Bicycle Delay (s/bike)	61.9	65.3	23.7	23.6
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.17	2.46	4.18	3.95
Bicycle LOS	C	B	D	D

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	20	69	0	3
Total Flow Rate (veh/h)	639	765	2000	1860
Effct. Green for Bike (s)	16.1	13.9	21.0	20.0
Cross Street Width (ft)	87.8	85.7	63.1	61.5
Through Lanes Number	1	2	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	495	428	646	615
Bicycle Delay (s/bike)	18.6	20.8	14.9	15.6
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.89	2.43	4.18	2.96
Bicycle LOS	C	B	D	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	5	29	12	60
Total Flow Rate (veh/h)	784	233	870	521
Effct. Green for Bike (s)	17.5	14.9	51.2	27.7
Cross Street Width (ft)	60.2	71.1	36.3	60.8
Through Lanes Number	1	1	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	248	211	726	393
Bicycle Delay (s/bike)	54.2	57.2	28.8	46.9
Bicycle Compliance	Poor	Poor	Fair	Poor
Bicycle LOS Score	3.77	3.03	2.83	3.35
Bicycle LOS	D	C	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	10	6
Total Flow Rate (veh/h)	229	33	242	409
Effct. Green for Bike (s)	10.0	5.8	13.3	13.3
Cross Street Width (ft)	58.1	61.2	24.0	12.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	333	193	443	443
Bicycle Delay (s/bike)	20.8	24.5	18.3	18.2
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.83	2.55	0.84	0.79
Bicycle LOS	C	B	A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	1	3	9
Total Flow Rate (veh/h)	788	416	14	486
Effct. Green for Bike (s)	32.6	16.9	13.3	13.3
Cross Street Width (ft)	54.0	62.1	49.8	36.3
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	557	289	227	227
Bicycle Delay (s/bike)	30.5	42.8	46.0	46.2
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	3.69	2.12	2.34	2.92
Bicycle LOS	D	B	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	4	10	3	8
Total Flow Rate (veh/h)	65	301	1989	1670
Effct. Green for Bike (s)	8.4	16.9	38.7	37.6
Cross Street Width (ft)	72.9	72.6	38.1	38.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	187	376	860	836
Bicycle Delay (s/bike)	37.1	29.8	14.6	15.3
Bicycle Compliance	Poor	Fair	Fair	Fair
Bicycle LOS Score	2.78	3.17	2.50	2.24
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	9	12
Total Flow Rate (veh/h)	209	73	2500	1741
Effct. Green for Bike (s)	9.0	9.0	34.2	34.2
Cross Street Width (ft)	60.0	72.0	23.9	26.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	327	327	1244	1244
Bicycle Delay (s/bike)	19.2	19.2	4.0	4.0
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.82	2.78	2.92	2.33
Bicycle LOS	C	C	C	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	8	9
Total Flow Rate (veh/h)	203	885	1556	1055
Effct. Green for Bike (s)	18.1	18.1	16.1	19.1
Cross Street Width (ft)	59.9	61.1	35.9	23.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	724	724	644	764
Bicycle Delay (s/bike)	10.2	10.2	11.5	9.6
Bicycle Compliance	Fair	Fair	Fair	Good
Bicycle LOS Score	2.81	3.95	2.32	1.72
Bicycle LOS	C	D	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	4	13	6	6
Total Flow Rate (veh/h)	226	293	1370	885
Effct. Green for Bike (s)	16.2	16.2	35.8	35.8
Cross Street Width (ft)	60.1	59.9	32.5	36.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	540	540	1193	1193
Bicycle Delay (s/bike)	16.0	16.1	4.9	4.9
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.85	2.96	2.12	1.77
Bicycle LOS	C	C	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	0	6	6
Total Flow Rate (veh/h)	257	85	1313	844
Effct. Green for Bike (s)	10.8	10.8	44.1	25.0
Cross Street Width (ft)	61.3	60.1	36.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	360	360	1470	833
Bicycle Delay (s/bike)	20.2	20.2	2.1	10.2
Bicycle Compliance	Fair	Fair	Good	Fair
Bicycle LOS Score	2.92	2.62	2.12	1.92
Bicycle LOS	C	B	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	6	1	4
Total Flow Rate (veh/h)	228	407	1227	860
Effct. Green for Bike (s)	15.0	15.0	26.1	35.4
Cross Street Width (ft)	61.2	60.8	48.0	47.9
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	500	500	870	1180
Bicycle Delay (s/bike)	16.9	16.9	9.6	5.1
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	2.87	3.16	2.23	1.93
Bicycle LOS	C	C	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	4	4	9
Total Flow Rate (veh/h)	0	264	1217	810
Effct. Green for Bike (s)	0.0	8.3	41.7	41.7
Cross Street Width (ft)	48.0	60.0	36.0	38.2
Through Lanes Number	0	3	2	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	277	1390	1390
Bicycle Delay (s/bike)	0.0	22.3	2.8	2.8
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.62	2.04	2.41
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	13	0	1
Total Flow Rate (veh/h)	401	419	489	215
Effct. Green for Bike (s)	13.3	20.4	13.1	13.1
Cross Street Width (ft)	35.9	38.6	60.1	48.0
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	355	544	349	349
Bicycle Delay (s/bike)	25.4	20.0	25.5	25.6
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	2.77	2.84	2.21	2.65
Bicycle LOS	C	C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	3	6	5	18
Total Flow Rate (veh/h)	575	635	813	341
Effct. Green for Bike (s)	28.5	37.5	23.5	23.5
Cross Street Width (ft)	38.1	38.7	48.1	48.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	695	915	573	573
Bicycle Delay (s/bike)	17.5	12.1	20.9	21.1
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	3.09	3.20	2.35	1.57
Bicycle LOS	C	C	B	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	18	4	13
Total Flow Rate (veh/h)	0	687	598	369
Effct. Green for Bike (s)	0.0	29.0	23.0	23.0
Cross Street Width (ft)	36.0	48.1	36.1	37.4
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	967	767	767
Bicycle Delay (s/bike)	0.0	8.1	11.4	11.5
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.67	3.10	2.74
Bicycle LOS		B	C	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	14	10	10
Total Flow Rate (veh/h)	0	628	304	194
Effct. Green for Bike (s)	0.0	20.0	32.0	32.0
Cross Street Width (ft)	24.0	36.0	36.0	38.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	667	1067	1067
Bicycle Delay (s/bike)	0.0	13.4	6.6	6.6
Bicycle Compliance		Fair	Good	Good
Bicycle LOS Score	0.00	2.46	2.61	2.46
Bicycle LOS		B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	9	10	1
Total Flow Rate (veh/h)	0	603	482	247
Effct. Green for Bike (s)	0.0	28.0	24.0	24.0
Cross Street Width (ft)	23.9	24.0	36.0	36.0
Through Lanes Number	0	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	933	800	800
Bicycle Delay (s/bike)	0.0	8.6	10.9	10.8
Bicycle Compliance		Good	Fair	Fair
Bicycle LOS Score	0.00	2.26	2.91	2.52
Bicycle LOS		B	C	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	0	5	6
Total Flow Rate (veh/h)	1031	0	549	528
Effct. Green for Bike (s)	29.1	0.0	22.9	22.9
Cross Street Width (ft)	34.2	48.2	38.5	36.0
Through Lanes Number	2	0	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	970	0	763	763
Bicycle Delay (s/bike)	8.0	0.0	11.5	11.5
Bicycle Compliance	Good		Fair	Fair
Bicycle LOS Score	1.65	0.00	1.98	1.91
Bicycle LOS	A		A	A

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	4	8	1	8
Total Flow Rate (veh/h)	113	168	798	466
Effct. Green for Bike (s)	13.0	13.2	41.9	41.9
Cross Street Width (ft)	38.0	37.9	26.0	26.1
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	14.0	14.0	14.0	14.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	433	440	1397	1397
Bicycle Delay (s/bike)	18.4	18.3	2.7	2.7
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.90	1.99	2.85	2.30
Bicycle LOS	A	A	C	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	15
Total Flow Rate (veh/h)	436	0	1338	854
Effct. Green for Bike (s)	13.3	0.0	0.0	26.4
Cross Street Width (ft)	37.6	25.1	24.2	52.2
Through Lanes Number	2	0	0	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	299	0	0	593
Bicycle Delay (s/bike)	32.2	0.0	0.0	22.2
Bicycle Compliance	Poor			Fair
Bicycle LOS Score	2.49	0.00	0.00	2.91
Bicycle LOS	B			C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	8	5	14
Total Flow Rate (veh/h)	42	104	1080	732
Effct. Green for Bike (s)	12.8	15.6	44.8	44.8
Cross Street Width (ft)	39.5	37.8	36.2	30.8
Through Lanes Number	1	1	1	1
Through Lane Width (ft)	16.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	382	466	1337	1337
Bicycle Delay (s/bike)	22.0	19.8	3.7	3.7
Bicycle Compliance	Fair	Fair	Good	Good
Bicycle LOS Score	1.38	1.24	2.82	3.24
Bicycle LOS	A	A	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	15	15	3
Total Flow Rate (veh/h)	678	820	2276	917
Effct. Green for Bike (s)	14.2	16.1	29.7	16.1
Cross Street Width (ft)	87.1	73.6	37.1	62.5
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	355	402	742	402
Bicycle Delay (s/bike)	27.2	25.7	15.9	25.6
Bicycle Compliance	Fair	Fair	Fair	Fair
Bicycle LOS Score	4.01	4.04	2.93	2.20
Bicycle LOS	D	D	C	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	12	0	0
Total Flow Rate (veh/h)	1213	990	855	60
Effct. Green for Bike (s)	28.5	39.4	22.0	16.0
Cross Street Width (ft)	48.7	48.2	84.9	86.6
Through Lanes Number	3	3	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	613	847	473	344
Bicycle Delay (s/bike)	22.5	15.5	27.1	31.9
Bicycle Compliance	Fair	Fair	Fair	Poor
Bicycle LOS Score	1.90	1.77	4.27	2.98
Bicycle LOS	A	A	E	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	4	10	1	0
Total Flow Rate (veh/h)	1268	1149	214	0
Effct. Green for Bike (s)	73.9	49.9	11.1	0.0
Cross Street Width (ft)	38.8	35.1	92.6	91.2
Through Lanes Number	2	2	1	0
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	6.0	0.0
Curb Is Present?	Yes	Yes	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	1589	1073	239	0
Bicycle Delay (s/bike)	2.0	10.0	36.1	0.0
Bicycle Compliance	Good	Fair	Poor	
Bicycle LOS Score	2.13	1.97	2.04	0.00
Bicycle LOS	B	A	B	

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	9	9
Total Flow Rate (veh/h)	0	381	1929	1882
Effct. Green for Bike (s)	0.0	38.0	51.0	35.0
Cross Street Width (ft)	60.2	73.7	24.0	14.8
Through Lanes Number	0	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	4.0	4.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	784	1052	722
Bicycle Delay (s/bike)	0.0	17.9	11.0	19.9
Bicycle Compliance		Fair	Fair	Fair
Bicycle LOS Score	0.00	3.32	2.66	2.48
Bicycle LOS		C	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	1	17	4
Total Flow Rate (veh/h)	132	1124	2412	1721
Effct. Green for Bike (s)	4.0	23.9	52.1	58.5
Cross Street Width (ft)	81.6	80.9	62.9	56.1
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	5.0	5.0	5.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	69	412	898	1009
Bicycle Delay (s/bike)	54.1	36.6	17.8	14.3
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	3.03	3.58	3.44	2.77
Bicycle LOS	C	D	C	C

Appendix G.3

Intersection Pedestrian LOS Worksheets for 2035 Plus Project Conditions

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	
Level of Service	

Crosswalk	
Length (ft)	80
Lanes Crossed	4
Veh Vol Crossed	3000
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	25.86
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	2736389888.00
Avg Ped Delay (s)	2736389888.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	157167008
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	3000
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	157167008.00
Avg Ped Delay (s)	157167008.00

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.1	69.4	82.0	73.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	0.0	8.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	5	0
Ped. Right-Left Flow Rate (p/h)	10	0	46	2
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	50	20	140	100
Veh. RTOR Flow in Walk (v/h)	8	2	7	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	1173.5	36450.0	1348.0	6058.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	801.2	0.0	89.4	0.1
Crosswalk Circulation Code	A	-	A	F
Pedestrian Delay (s/p)	69.4	80.0	72.2	80.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.31	2.45	3.16	3.18
Pedestrian Crosswalk LOS	B	B	C	C

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	14.6
Level of Service	C

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	420
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.76
Prob of Blocked Lane	0.51
Delay for adq Gap	19.31
Avg Ped Delay (s)	14.63

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	15.5
Level of Service	C

Crosswalk	
Length (ft)	33
Lanes Crossed	2
Veh Vol Crossed	420
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.43
Prob of Delayed X-ing	0.77
Prob of Blocked Lane	0.52
Delay for adq Gap	20.30
Avg Ped Delay (s)	15.54

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	61.6	63.1	87.8	85.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	7	7
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	29	8	21
Ped. Right-Left Flow Rate (p/h)	4	2	6	5
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	230	300	50	60
Veh. RTOR Flow in Walk (v/h)	54	12	0	3
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	3626.9	1266.8	1561.8	2271.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2310.9	394.9	1422.0	753.8
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	24.1	24.1	24.1	24.1
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.68	2.63	3.09	3.10
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.7	36.3	60.2	71.4
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	21	0	111	0
Ped. Right-Left Flow Rate (p/h)	105	24	7	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	4	14
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	350	10	30	70
Veh. RTOR Flow in Walk (v/h)	35	3	5	12
85th percentile speed (mph)	30	25	35	25
Right Corner Area per Ped (sq.ft)	230.4	2960.3	495.6	509.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	318.3	67.2	0.0
Crosswalk Circulation Code	F	A	A	-
Pedestrian Delay (s/p)	61.8	61.8	61.8	70.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.71	2.11	2.75	2.53
Pedestrian Crosswalk LOS	B	B	C	B

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	1.8
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	80
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.24
Prob of Blocked Lane	0.13
Delay for adq Gap	7.59
Avg Ped Delay (s)	1.80

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	1.8
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	80
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.24
Prob of Blocked Lane	0.13
Delay for adq Gap	7.59
Avg Ped Delay (s)	1.80

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	15758.1
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1400
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.89
Delay for adq Gap	15760.70
Avg Ped Delay (s)	15758.10

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	15758.1
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1400
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.89
Delay for adq Gap	15760.70
Avg Ped Delay (s)	15758.10

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	1537.3
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	970
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.78
Delay for adq Gap	1540.98
Avg Ped Delay (s)	1537.32

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	1537.3
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	970
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.78
Delay for adq Gap	1540.98
Avg Ped Delay (s)	1537.32

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	24.0	58.5	61.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	4	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	4	4	0
Ped. Right-Left Flow Rate (p/h)	13	5	11	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	5
Veh. Perm. R. Flow in Walk (v/h)	50	10	10	0
Veh. RTOR Flow in Walk (v/h)	0	2	0	0
85th percentile speed (mph)	30	25	35	35
Right Corner Area per Ped (sq.ft)	2414.6	8084.9	3020.6	4856.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	574.7	1817.4	1397.5	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	21.7	21.7	21.7	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.96	1.73	2.41	2.64
Pedestrian Crosswalk LOS	A	A	B	B

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	18.8	
Level of Service	C	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	300	430
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.60	0.73
Prob of Blocked Lane	0.37	0.48
Delay for adq Gap	11.68	16.11
Avg Ped Delay (s)	7.01	11.78

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	465.9
Level of Service	F

Crosswalk	
Length (ft)	69
Lanes Crossed	4
Veh Vol Crossed	730
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.71
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.68
Delay for adq Gap	470.59
Avg Ped Delay (s)	465.89

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	275.2	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	640	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	0.98	
Prob of Blocked Lane	0.63	
Delay for adq Gap	280.39	
Avg Ped Delay (s)	275.19	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	15.4	
Level of Service	C	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	360	280
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.67	0.57
Prob of Blocked Lane	0.42	0.35
Delay for adq Gap	13.55	11.12
Avg Ped Delay (s)	9.04	6.39

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.3	49.9	55.3	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	8	1
Ped. Right-Left Flow Rate (p/h)	7	1	5	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	162	0	5	80
Veh. Perm. R. Flow in Walk (v/h)	10	90	0	300
Veh. RTOR Flow in Walk (v/h)	0	12	0	159
85th percentile speed (mph)	30	30	25	35
Right Corner Area per Ped (sq.ft)	3597.4	36386.5	5184.5	9112.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	285.9	6644.4	725.2	55.2
Crosswalk Circulation Code	A	A	A	B
Pedestrian Delay (s/p)	50.8	50.8	50.8	50.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.66	2.40	1.75	2.61
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	38.1	72.8	72.5
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	1	0	1
Ped. Right-Left Flow Rate (p/h)	4	5	0	6
Ped. R. Sidewalk Flow Rate (p/h)	0	5	0	0
Veh. Perm. L. Flow in Walk (v/h)	15	70	0	0
Veh. Perm. R. Flow in Walk (v/h)	10	20	170	20
Veh. RTOR Flow in Walk (v/h)	7	5	37	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18179.4	4034.8	12142.4	6602.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2995.7	1587.2	0.0	2031.3
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	36.5	36.5	45.0	36.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.02	2.16	3.11	3.00
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.9	23.9	59.9	72.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	7	0	2
Ped. Right-Left Flow Rate (p/h)	1	5	0	4
Ped. R. Sidewalk Flow Rate (p/h)	2	1	0	0
Veh. Perm. L. Flow in Walk (v/h)	40	30	60	5
Veh. Perm. R. Flow in Walk (v/h)	430	10	30	550
Veh. RTOR Flow in Walk (v/h)	264	3	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18219.0	3828.0	6061.0	9097.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.3	1357.5	0.0	1906.2
Crosswalk Circulation Code	F	A	-	A
Pedestrian Delay (s/p)	19.2	19.2	19.2	19.2
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.77	1.81	3.05	3.00
Pedestrian Crosswalk LOS	C	A	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	23.9	35.9	59.9	61.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	4	0	1
Ped. Right-Left Flow Rate (p/h)	1	7	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	90	20	0	0
Veh. Perm. R. Flow in Walk (v/h)	20	730	10	160
Veh. RTOR Flow in Walk (v/h)	0	25	1	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	36439.5	6061.0	6619.6	14575.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	7248.5	0.1	0.0	21556.6
Crosswalk Circulation Code	A	F	-	A
Pedestrian Delay (s/p)	16.8	16.8	16.8	16.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.01	2.30	2.71	2.94
Pedestrian Crosswalk LOS	B	B	B	C

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	21.1	
Level of Service	D	

Crosswalk		
Length (ft)	16	16
Lanes Crossed	1	1
Veh Vol Crossed	930	460
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	7.57	7.57
Prob of Delayed X-ing	0.86	0.62
Prob of Blocked Lane	0.86	0.62
Delay for adq Gap	18.55	8.38
Avg Ped Delay (s)	15.93	5.19

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	64.6	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	1	2
Veh Vol Crossed	460	930
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.75	0.94
Prob of Blocked Lane	0.75	0.76
Delay for adq Gap	17.34	54.68
Avg Ped Delay (s)	13.09	51.49

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	26.9	
Level of Service	D	

Crosswalk		
Length (ft)	28	16
Lanes Crossed	2	1
Veh Vol Crossed	640	360
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	7.57
Prob of Delayed X-ing	0.86	0.53
Prob of Blocked Lane	0.62	0.53
Delay for adq Gap	26.94	7.06
Avg Ped Delay (s)	23.13	3.75

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	682.8
Level of Service	F

Crosswalk	
Length (ft)	56
Lanes Crossed	3
Veh Vol Crossed	1000
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	19.00
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.83
Delay for adq Gap	686.27
Avg Ped Delay (s)	682.76

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	147.5
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	850
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.84
Delay for adq Gap	151.37
Avg Ped Delay (s)	147.53

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	147.5
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	850
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.84
Delay for adq Gap	151.37
Avg Ped Delay (s)	147.53

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	35.9	32.9	60.1	59.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	10.0	10.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	6	26	19	8
Ped. Right-Left Flow Rate (p/h)	2	1	1	5
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	10	20	20	60
Veh. Perm. R. Flow in Walk (v/h)	10	80	20	70
Veh. RTOR Flow in Walk (v/h)	4	35	2	6
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	2584.1	1816.7	1536.7	3458.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2817.1	684.5	1131.0	1559.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	20.8	20.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.00	1.91	2.64	2.74
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	36.1	61.3	60.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	7.0	7.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	5	69	13
Ped. Right-Left Flow Rate (p/h)	18	11	8	1
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	7
Veh. Perm. L. Flow in Walk (v/h)	60	5	4	30
Veh. Perm. R. Flow in Walk (v/h)	40	30	10	100
Veh. RTOR Flow in Walk (v/h)	8	6	0	4
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	721.7	2404.2	771.0	1775.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	941.1	1200.7	184.0	800.9
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	23.9	23.9	27.4	27.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.30	2.01	2.59	2.67
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	48.0	61.2	60.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	20	17	6	12
Ped. Right-Left Flow Rate (p/h)	14	4	54	45
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	20	190	1	51
Veh. Perm. R. Flow in Walk (v/h)	20	100	70	70
Veh. RTOR Flow in Walk (v/h)	12	58	20	20
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	770.1	929.2	876.7	782.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	695.6	752.7	323.8	318.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	21.7	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.22	2.60	2.63	2.70
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.1	36.0	48.1	60.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Pretimed	Pretimed
Corresponding Signal Phase	2	6	0	4
Effective Walk Time (s)	13.0	13.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	20	12	8	39
Ped. Right-Left Flow Rate (p/h)	5	2	4	1
Ped. R. Sidewalk Flow Rate (p/h)	4	5	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	10	40	0
Veh. Perm. R. Flow in Walk (v/h)	0	40	0	550
Veh. RTOR Flow in Walk (v/h)	0	28	0	80
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	1767.9	1218.3	2787.5	1097.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1116.6	1827.7	0.0	288.3
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	18.4	18.4	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.36	2.12	2.43	2.60
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	60.1	35.9	38.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	8	4	6	2
Effective Walk Time (s)	8.0	8.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	5	6	5	2
Ped. Right-Left Flow Rate (p/h)	2	11	12	6
Ped. R. Sidewalk Flow Rate (p/h)	2	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	70	10
Veh. Perm. R. Flow in Walk (v/h)	110	10	120	10
Veh. RTOR Flow in Walk (v/h)	30	7	28	5
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	2794.0	2896.6	2124.7	4833.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1579.0	876.5	457.0	1850.2
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	29.9	29.9	29.0	29.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.38	2.53	2.49	2.14
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.1	48.2	38.0	38.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	8	7	4
Ped. Right-Left Flow Rate (p/h)	0	2	8	1
Ped. R. Sidewalk Flow Rate (p/h)	1	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	60	40
Veh. Perm. R. Flow in Walk (v/h)	10	20	150	30
Veh. RTOR Flow in Walk (v/h)	2	0	28	5
85th percentile speed (mph)	30	30	25	25
Right Corner Area per Ped (sq.ft)	4033.8	4843.3	2889.3	9096.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	6496.0	1266.5	310.7	2011.9
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	33.4	33.4	33.4	33.4
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.36	2.43	2.38	2.22
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	37.4	36.1	35.9	48.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	4	8	0	2
Effective Walk Time (s)	11.0	11.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	35	24	17	37
Ped. Right-Left Flow Rate (p/h)	14	25	24	42
Ped. R. Sidewalk Flow Rate (p/h)	1	14	2	18
Veh. Perm. L. Flow in Walk (v/h)	0	80	30	0
Veh. Perm. R. Flow in Walk (v/h)	0	40	0	170
Veh. RTOR Flow in Walk (v/h)	0	4	0	58
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	790.2	502.5	776.1	486.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	478.3	378.8	0.0	246.9
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	20.0	20.0	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.35	2.43	2.12	2.18
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.0	36.0	24.0	36.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	26	17	26	68
Ped. Right-Left Flow Rate (p/h)	36	44	35	40
Ped. R. Sidewalk Flow Rate (p/h)	17	11	10	17
Veh. Perm. L. Flow in Walk (v/h)	0	50	50	0
Veh. Perm. R. Flow in Walk (v/h)	0	30	0	70
Veh. RTOR Flow in Walk (v/h)	0	2	0	14
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	506.8	388.1	538.8	380.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	310.2	259.4	0.0	149.3
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	21.7	21.7	30.0	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.32	2.35	1.94	2.05
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.0	23.9	24.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	4
Effective Walk Time (s)	12.0	12.0	0.0	17.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	14	10	12	37
Ped. Right-Left Flow Rate (p/h)	20	8	14	17
Ped. R. Sidewalk Flow Rate (p/h)	4	2	0	17
Veh. Perm. L. Flow in Walk (v/h)	0	150	70	0
Veh. Perm. R. Flow in Walk (v/h)	0	40	0	80
Veh. RTOR Flow in Walk (v/h)	0	5	0	17
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	1124.5	972.9	1639.4	688.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	746.6	998.9	0.0	510.5
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	19.2	19.2	30.0	15.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.29	2.54	2.06	1.91
Pedestrian Crosswalk LOS	B	B	B	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	35.9	38.5	34.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	0
Effective Walk Time (s)	11.0	11.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	5	1	7	0
Ped. Right-Left Flow Rate (p/h)	15	7	6	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	280	0	0	140
Veh. Perm. R. Flow in Walk (v/h)	30	0	10	0
Veh. RTOR Flow in Walk (v/h)	6	0	5	0
85th percentile speed (mph)	25	30	25	25
Right Corner Area per Ped (sq.ft)	2192.4	9090.6	3463.1	3308.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	554.8	2967.5	1746.2	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	20.0	20.0	20.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.53	2.09	2.02	2.58
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.1	26.0	38.0	38.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	12	8	2
Ped. Right-Left Flow Rate (p/h)	5	6	1	5
Ped. R. Sidewalk Flow Rate (p/h)	2	1	1	0
Veh. Perm. L. Flow in Walk (v/h)	10	140	5	10
Veh. Perm. R. Flow in Walk (v/h)	10	5	190	5
Veh. RTOR Flow in Walk (v/h)	5	3	29	0
85th percentile speed (mph)	25	25	25	30
Right Corner Area per Ped (sq.ft)	4039.2	2799.2	2596.6	5199.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3582.7	1046.7	2409.9	4071.2
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	12.0	12.0	12.0	12.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.74	2.09	2.30	2.20
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	51.5	24.1	37.7	25.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	2	3	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	0	2	0
Effective Walk Time (s)	11.0	0.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	7	0	0
Ped. Right-Left Flow Rate (p/h)	2	0	0	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	330	0	450	140
Veh. RTOR Flow in Walk (v/h)	34	0	41	0
85th percentile speed (mph)	30	30	30	45
Right Corner Area per Ped (sq.ft)	18197.8	6627.3	10346.8	9065.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1059.9	0.1	0.0	0.1
Crosswalk Circulation Code	A	F	-	F
Pedestrian Delay (s/p)	43.6	54.0	43.6	54.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.51	2.32	2.53	2.25
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	30.8	36.2	39.5	37.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	1	0	13
Ped. Right-Left Flow Rate (p/h)	1	7	1	8
Ped. R. Sidewalk Flow Rate (p/h)	0	1	5	0
Veh. Perm. L. Flow in Walk (v/h)	30	40	5	5
Veh. Perm. R. Flow in Walk (v/h)	5	5	20	10
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	18217.7	2409.1	5202.7	3024.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	6163.4	2395.2	14661.2	704.6
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	23.4	23.4	26.0	26.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.79	2.02	2.52	2.51
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	62.5	37.1	87.2	73.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	7	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	4	6	4
Ped. Right-Left Flow Rate (p/h)	4	4	4	5
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	430	10	470	40
Veh. RTOR Flow in Walk (v/h)	190	0	184	7
85th percentile speed (mph)	40	30	35	30
Right Corner Area per Ped (sq.ft)	4810.6	4253.4	3805.6	5175.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	1012.1	94.6	982.6
Crosswalk Circulation Code	F	A	A	A
Pedestrian Delay (s/p)	59.3	59.3	59.3	59.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.88	2.45	3.41	2.63
Pedestrian Crosswalk LOS	C	B	C	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	86.6	84.8	48.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	7	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	9.0	0.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	4	1
Ped. Right-Left Flow Rate (p/h)	2	0	10	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	60	10	490	10
Veh. RTOR Flow in Walk (v/h)	12	1	49	6
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	4538.5	72852.6	5173.3	18225.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	6702.3	0.0	0.0	12894.4
Crosswalk Circulation Code	A	-	F	A
Pedestrian Delay (s/p)	37.9	46.5	37.9	37.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.97	2.99	2.56	2.17
Pedestrian Crosswalk LOS	C	C	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	91.2	92.8	38.7	35.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	6	4	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	Actuated	Actuated	None
Corresponding Signal Phase	0	8	2	6
Effective Walk Time (s)	0.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	8	11	0
Ped. Right-Left Flow Rate (p/h)	0	0	1	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	190	150	0
Veh. RTOR Flow in Walk (v/h)	0	39	34	0
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	6031.5	9112.5	3451.1	0.0
Right Corner Quality of Service	A	A	A	-
Ped. Circulation Area (sq.ft)	0.0	1402.9	578.8	0.0
Crosswalk Circulation Code	-	A	A	-
Pedestrian Delay (s/p)	46.5	37.9	37.9	46.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.93	2.91	1.87	1.97
Pedestrian Crosswalk LOS	C	C	A	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	14.8	24.0	60.2	73.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	No signal	Actuated	Actuated
Corresponding Signal Phase	2	6	0	8
Effective Walk Time (s)	0.0	50.1	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	260	0	530
Veh. RTOR Flow in Walk (v/h)	0	114	0	0
85th percentile speed (mph)	30	30	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	48.5	11.3	48.5	39.9
Pedestrian Compliance Code	Poor	Fair	Poor	Poor
Pedestrian Crosswalk Score	2.06	2.27	2.88	2.94
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	56.7	63.0	81.6	80.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	5	5	6
Number of Right-Turn Islands	0	1	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	5	0	6
Ped. Right-Left Flow Rate (p/h)	2	2	0	8
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	10	430	300	10
Veh. RTOR Flow in Walk (v/h)	10	230	66	0
85th percentile speed (mph)	30	40	45	35
Right Corner Area per Ped (sq.ft)	18193.0	3447.0	10368.5	4014.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2318.5	0.0	0.0	706.4
Crosswalk Circulation Code	A	F	-	A
Pedestrian Delay (s/p)	51.3	51.3	51.3	51.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.00	3.07	3.39	3.12
Pedestrian Crosswalk LOS	B	C	C	C

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	131691000	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	2970	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	1.00	
Prob of Blocked Lane	0.99	
Delay for adq Gap	131691000.00	
Avg Ped Delay (s)	131691000.00	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	750.5	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	1940	1030
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	1.00	0.96
Prob of Blocked Lane	0.95	0.79
Delay for adq Gap	685.44	69.84
Avg Ped Delay (s)	683.61	66.84

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	77518200
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2880
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	77518200.00
Avg Ped Delay (s)	77518200.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	77518200
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2880
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	77518200.00
Avg Ped Delay (s)	77518200.00

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)		
Level of Service		

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	3120	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	1.00	
Prob of Blocked Lane	0.99	
Delay for adq Gap	319166016.00	
Avg Ped Delay (s)	319166016.00	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	532.8	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	1660	1460
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.99	0.99
Prob of Blocked Lane	0.92	0.89
Delay for adq Gap	334.90	202.37
Avg Ped Delay (s)	332.80	200.03

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	
Level of Service	

Crosswalk	
Length (ft)	80
Lanes Crossed	4
Veh Vol Crossed	3030
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	25.86
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	3360750080.00
Avg Ped Delay (s)	3360750080.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	187591008
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	3030
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	187591008.00
Avg Ped Delay (s)	187591008.00

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.1	69.4	82.0	73.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	0.0	8.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	0	31	2
Ped. Right-Left Flow Rate (p/h)	7	0	7	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	50	50	90	40
Veh. RTOR Flow in Walk (v/h)	14	7	0	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	1418.3	36350.0	1853.0	5581.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	730.0	0.0	147.1	0.1
Crosswalk Circulation Code	A	-	A	F
Pedestrian Delay (s/p)	69.4	80.0	72.2	80.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.33	2.50	3.14	3.15
Pedestrian Crosswalk LOS	B	B	C	C

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	17
Level of Service	C

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	460
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.79
Prob of Blocked Lane	0.54
Delay for adq Gap	21.52
Avg Ped Delay (s)	16.96

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	18
Level of Service	C

Crosswalk	
Length (ft)	33
Lanes Crossed	2
Veh Vol Crossed	460
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.43
Prob of Delayed X-ing	0.80
Prob of Blocked Lane	0.55
Delay for adq Gap	22.68
Avg Ped Delay (s)	18.05

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	61.5	63.1	87.8	85.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	7	7
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	12	18	15
Ped. Right-Left Flow Rate (p/h)	5	31	12	27
Ped. R. Sidewalk Flow Rate (p/h)	0	0	2	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	140	300	150	150
Veh. RTOR Flow in Walk (v/h)	63	65	2	67
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	2005.7	841.3	962.4	1501.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2695.6	284.7	599.3	424.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	24.1	24.1	24.1	24.1
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.68	2.68	3.09	3.21
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.8	36.3	60.2	71.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	84	12	55	0
Ped. Right-Left Flow Rate (p/h)	25	14	90	0
Ped. R. Sidewalk Flow Rate (p/h)	1	0	8	13
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	420	20	20	100
Veh. RTOR Flow in Walk (v/h)	16	2	3	7
85th percentile speed (mph)	30	25	35	25
Right Corner Area per Ped (sq.ft)	261.7	2762.3	363.3	544.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	281.1	57.1	0.0
Crosswalk Circulation Code	F	A	B	-
Pedestrian Delay (s/p)	61.8	61.8	61.8	70.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.65	2.09	2.74	2.50
Pedestrian Crosswalk LOS	B	B	B	B

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	3.4
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	140
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.38
Prob of Blocked Lane	0.21
Delay for adq Gap	8.97
Avg Ped Delay (s)	3.38

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	3.4
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	140
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.38
Prob of Blocked Lane	0.21
Delay for adq Gap	8.97
Avg Ped Delay (s)	3.38

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	1180.9
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	920
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.76
Delay for adq Gap	1184.71
Avg Ped Delay (s)	1180.87

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	1180.9
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	920
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.76
Delay for adq Gap	1184.71
Avg Ped Delay (s)	1180.87

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	356.4
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	690
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.66
Delay for adq Gap	361.33
Avg Ped Delay (s)	356.42

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	356.4
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	690
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	0.99
Prob of Blocked Lane	0.66
Delay for adq Gap	361.33
Avg Ped Delay (s)	356.42

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	24.0	58.1	61.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	4	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	4	5	0
Ped. Right-Left Flow Rate (p/h)	1	11	10	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	10
Veh. Perm. R. Flow in Walk (v/h)	40	10	10	0
Veh. RTOR Flow in Walk (v/h)	0	3	0	0
85th percentile speed (mph)	30	25	35	35
Right Corner Area per Ped (sq.ft)	3636.9	4840.1	2417.4	14558.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1885.7	1088.7	1395.9	0.0
Crosswalk Circulation Code	A	A	A	-
Pedestrian Delay (s/p)	21.7	21.7	21.7	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.63	1.73	2.31	2.50
Pedestrian Crosswalk LOS	A	A	B	B

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	13.9	
Level of Service	C	

Crosswalk		
Length (ft)	29	29
Lanes Crossed	2	2
Veh Vol Crossed	210	350
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	11.29
Prob of Delayed X-ing	0.48	0.67
Prob of Blocked Lane	0.28	0.42
Delay for adq Gap	9.71	13.87
Avg Ped Delay (s)	4.68	9.24

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	191
Level of Service	F

Crosswalk	
Length (ft)	69
Lanes Crossed	4
Veh Vol Crossed	560
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.71
Prob of Delayed X-ing	0.97
Prob of Blocked Lane	0.59
Delay for adq Gap	196.70
Avg Ped Delay (s)	190.96

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	191.4	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	570	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	0.97	
Prob of Blocked Lane	0.59	
Delay for adq Gap	197.05	
Avg Ped Delay (s)	191.39	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	14	
Level of Service	C	

Crosswalk		
Length (ft)	29	28
Lanes Crossed	2	2
Veh Vol Crossed	360	210
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	11.00
Prob of Delayed X-ing	0.68	0.47
Prob of Blocked Lane	0.43	0.27
Delay for adq Gap	14.23	9.34
Avg Ped Delay (s)	9.63	4.42

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.3	49.8	54.0	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	5	30	11	6
Ped. Right-Left Flow Rate (p/h)	1	1	4	4
Ped. R. Sidewalk Flow Rate (p/h)	1	1	2	2
Veh. Perm. L. Flow in Walk (v/h)	163	5	5	140
Veh. Perm. R. Flow in Walk (v/h)	5	30	0	270
Veh. RTOR Flow in Walk (v/h)	0	9	0	145
85th percentile speed (mph)	30	30	25	35
Right Corner Area per Ped (sq.ft)	3279.0	1725.1	1473.8	4018.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	360.1	265.2	624.8	0.0
Crosswalk Circulation Code	A	A	A	F
Pedestrian Delay (s/p)	50.8	50.8	50.8	50.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.66	2.46	1.75	2.64
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	38.1	72.9	72.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	0	0	10
Ped. Right-Left Flow Rate (p/h)	1	2	0	4
Ped. R. Sidewalk Flow Rate (p/h)	0	5	5	0
Veh. Perm. L. Flow in Walk (v/h)	10	150	0	0
Veh. Perm. R. Flow in Walk (v/h)	30	50	70	10
Veh. RTOR Flow in Walk (v/h)	25	4	19	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	14570.9	3445.4	10414.3	3817.7
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2284.4	2693.0	0.0	1031.2
Crosswalk Circulation Code	A	A	-	A
Pedestrian Delay (s/p)	36.5	36.5	45.0	36.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.03	2.29	3.09	3.01
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.7	23.9	60.0	72.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	7	8	1	12
Ped. Right-Left Flow Rate (p/h)	4	10	4	7
Ped. R. Sidewalk Flow Rate (p/h)	5	6	0	0
Veh. Perm. L. Flow in Walk (v/h)	50	30	100	10
Veh. Perm. R. Flow in Walk (v/h)	120	5	180	730
Veh. RTOR Flow in Walk (v/h)	75	4	0	1
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	3465.7	1683.0	3157.0	2418.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	984.7	918.7	3182.3	381.2
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	19.2	19.2	19.2	19.2
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.44	1.87	3.12	3.10
Pedestrian Crosswalk LOS	B	A	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	23.9	35.9	59.9	61.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	6	1	0
Ped. Right-Left Flow Rate (p/h)	1	15	0	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	11
Veh. Perm. L. Flow in Walk (v/h)	150	10	0	0
Veh. Perm. R. Flow in Walk (v/h)	10	720	60	160
Veh. RTOR Flow in Walk (v/h)	0	5	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	36429.0	2903.4	3307.9	4551.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	11881.8	0.0	24039.7	5386.9
Crosswalk Circulation Code	A	F	A	A
Pedestrian Delay (s/p)	16.8	16.8	16.8	16.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.08	2.27	2.74	2.97
Pedestrian Crosswalk LOS	B	B	B	C

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	22	
Level of Service	D	

Crosswalk		
Length (ft)	17	17
Lanes Crossed	1	1
Veh Vol Crossed	610	800
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	7.86	7.86
Prob of Delayed X-ing	0.74	0.83
Prob of Blocked Lane	0.74	0.83
Delay for adq Gap	11.67	16.28
Avg Ped Delay (s)	8.59	13.44

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	48.1	
Level of Service	F	

Crosswalk		
Length (ft)	29	17
Lanes Crossed	1	2
Veh Vol Crossed	800	610
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	7.86
Prob of Delayed X-ing	0.92	0.74
Prob of Blocked Lane	0.92	0.49
Delay for adq Gap	42.97	11.67
Avg Ped Delay (s)	39.47	8.59

Approach		
Approach Direction	NB	
Median Present?	Yes	
Approach Delay(s)	41.5	
Level of Service	E	

Crosswalk		
Length (ft)	29	17
Lanes Crossed	2	1
Veh Vol Crossed	720	670
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.29	7.86
Prob of Delayed X-ing	0.90	0.77
Prob of Blocked Lane	0.68	0.77
Delay for adq Gap	35.17	12.96
Avg Ped Delay (s)	31.49	9.96

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	3953.2
Level of Service	F

Crosswalk	
Length (ft)	56
Lanes Crossed	3
Veh Vol Crossed	1390
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	19.00
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.91
Delay for adq Gap	3955.83
Avg Ped Delay (s)	3953.25

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	158.6
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	870
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.98
Prob of Blocked Lane	0.85
Delay for adq Gap	162.33
Avg Ped Delay (s)	158.56

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	158.6
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	870
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	0.98
Prob of Blocked Lane	0.85
Delay for adq Gap	162.33
Avg Ped Delay (s)	158.56

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	32.5	60.1	59.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	10.0	10.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	7	17	4	12
Ped. Right-Left Flow Rate (p/h)	1	20	18	13
Ped. R. Sidewalk Flow Rate (p/h)	5	15	4	1
Veh. Perm. L. Flow in Walk (v/h)	50	20	10	30
Veh. Perm. R. Flow in Walk (v/h)	20	120	40	20
Veh. RTOR Flow in Walk (v/h)	10	36	7	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	2079.2	936.2	1143.0	2129.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2573.0	451.6	1016.7	894.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	20.8	20.8
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.10	1.96	2.67	2.72
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	36.0	61.3	60.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	7.0	7.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	12	14	7	10
Ped. Right-Left Flow Rate (p/h)	19	17	49	10
Ped. R. Sidewalk Flow Rate (p/h)	0	0	2	0
Veh. Perm. L. Flow in Walk (v/h)	70	10	25	0
Veh. Perm. R. Flow in Walk (v/h)	80	20	40	40
Veh. RTOR Flow in Walk (v/h)	17	10	0	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	830.1	1415.3	799.1	1417.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	651.2	713.0	265.7	776.9
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	23.4	23.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.31	2.00	2.68	2.64
Pedestrian Crosswalk LOS	B	A	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	47.9	48.0	61.2	60.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	11.0	11.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	20	21	52	42
Ped. Right-Left Flow Rate (p/h)	33	15	48	33
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	60	140	5	172
Veh. Perm. R. Flow in Walk (v/h)	40	140	180	50
Veh. RTOR Flow in Walk (v/h)	25	81	41	3
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	461.9	643.1	522.6	558.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	409.7	447.5	164.9	206.9
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	20.0	20.0	21.7	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.31	2.61	2.67	2.87
Pedestrian Crosswalk LOS	B	B	B	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.2	36.0	48.0	60.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Pretimed	Pretimed
Corresponding Signal Phase	2	6	0	4
Effective Walk Time (s)	13.0	13.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	12	15	23	19
Ped. Right-Left Flow Rate (p/h)	24	11	35	49
Ped. R. Sidewalk Flow Rate (p/h)	0	0	1	4
Veh. Perm. L. Flow in Walk (v/h)	0	30	60	0
Veh. Perm. R. Flow in Walk (v/h)	0	60	0	400
Veh. RTOR Flow in Walk (v/h)	0	44	0	116
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	760.5	767.8	838.1	661.1
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	775.4	923.1	0.0	227.3
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	18.4	18.4	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.20	2.15	2.55	2.69
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.0	60.1	35.9	38.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	5	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	8	4	6	2
Effective Walk Time (s)	8.0	8.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	5	4	6	6
Ped. Right-Left Flow Rate (p/h)	4	4	13	14
Ped. R. Sidewalk Flow Rate (p/h)	4	0	1	2
Veh. Perm. L. Flow in Walk (v/h)	0	0	130	20
Veh. Perm. R. Flow in Walk (v/h)	90	10	180	20
Veh. RTOR Flow in Walk (v/h)	8	5	36	5
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	2266.6	2590.4	2581.4	2329.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1299.4	1864.8	160.7	701.3
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	29.9	29.9	29.0	29.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.35	2.48	2.45	2.10
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	48.1	48.1	38.1	38.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	7	7	24	11
Ped. Right-Left Flow Rate (p/h)	5	13	4	6
Ped. R. Sidewalk Flow Rate (p/h)	7	0	2	5
Veh. Perm. L. Flow in Walk (v/h)	0	0	70	10
Veh. Perm. R. Flow in Walk (v/h)	50	20	250	60
Veh. RTOR Flow in Walk (v/h)	14	0	39	11
85th percentile speed (mph)	30	30	25	25
Right Corner Area per Ped (sq.ft)	1525.3	1943.2	1448.8	2128.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	976.4	632.1	19.4	589.7
Crosswalk Circulation Code	A	A	D	A
Pedestrian Delay (s/p)	33.4	33.4	33.4	33.4
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.38	2.44	2.49	2.25
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	37.4	36.1	36.0	48.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	4	8	0	2
Effective Walk Time (s)	11.0	11.0	0.0	11.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	123	99	182	206
Ped. Right-Left Flow Rate (p/h)	82	100	212	199
Ped. R. Sidewalk Flow Rate (p/h)	1	35	20	0
Veh. Perm. L. Flow in Walk (v/h)	0	70	80	0
Veh. Perm. R. Flow in Walk (v/h)	0	100	0	220
Veh. RTOR Flow in Walk (v/h)	0	6	0	16
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	106.7	102.1	101.9	106.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	112.2	81.9	0.0	42.9
Crosswalk Circulation Code	A	A	F	B
Pedestrian Delay (s/p)	20.0	20.0	30.0	20.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.33	2.36	2.26	2.20
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	38.0	36.0	24.0	36.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	8
Effective Walk Time (s)	9.0	9.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	143	79	96	302
Ped. Right-Left Flow Rate (p/h)	137	137	177	193
Ped. R. Sidewalk Flow Rate (p/h)	4	20	18	11
Veh. Perm. L. Flow in Walk (v/h)	0	50	70	0
Veh. Perm. R. Flow in Walk (v/h)	0	60	0	100
Veh. RTOR Flow in Walk (v/h)	0	6	0	14
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	117.8	83.5	126.5	81.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	66.9	66.5	0.0	28.7
Crosswalk Circulation Code	A	A	F	C
Pedestrian Delay (s/p)	21.7	21.7	30.0	21.7
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.27	2.31	1.99	2.07
Pedestrian Crosswalk LOS	B	B	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.0	23.9	24.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	0	4
Effective Walk Time (s)	12.0	12.0	0.0	17.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	60	44	90	38
Ped. Right-Left Flow Rate (p/h)	49	38	108	67
Ped. R. Sidewalk Flow Rate (p/h)	6	5	0	4
Veh. Perm. L. Flow in Walk (v/h)	0	80	90	0
Veh. Perm. R. Flow in Walk (v/h)	0	60	0	70
Veh. RTOR Flow in Walk (v/h)	0	6	0	13
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	218.4	371.1	242.1	321.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	230.8	241.3	0.0	264.9
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	19.2	19.2	30.0	15.4
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	2.23	2.33	2.13	1.98
Pedestrian Crosswalk LOS	B	B	B	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	38.5	34.2	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	2	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	8	2	0
Effective Walk Time (s)	11.0	11.0	11.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	25	15	19	0
Ped. Right-Left Flow Rate (p/h)	2	10	18	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	650	0	0	110
Veh. Perm. R. Flow in Walk (v/h)	40	0	50	0
Veh. RTOR Flow in Walk (v/h)	8	0	18	0
85th percentile speed (mph)	25	30	25	25
Right Corner Area per Ped (sq.ft)	1130.9	2906.0	1162.5	2492.2
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	948.1	565.1	0.0
Crosswalk Circulation Code	F	A	A	-
Pedestrian Delay (s/p)	20.0	20.0	20.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	3.13	2.09	2.12	2.62
Pedestrian Crosswalk LOS	C	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	26.1	26.0	38.0	37.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Pretimed	Pretimed	Pretimed	Pretimed
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	11	11	2	2
Ped. Right-Left Flow Rate (p/h)	4	8	1	12
Ped. R. Sidewalk Flow Rate (p/h)	1	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	10	120	10	40
Veh. Perm. R. Flow in Walk (v/h)	10	10	210	10
Veh. RTOR Flow in Walk (v/h)	8	5	30	0
85th percentile speed (mph)	25	25	25	30
Right Corner Area per Ped (sq.ft)	3827.9	2200.6	3298.3	2408.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	961.8	472.5	2972.0	1092.0
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	22.5	22.5	22.5	22.5
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.79	2.11	2.35	2.31
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	52.2	24.2	37.6	25.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	2	3	2
Number of Right-Turn Islands	1	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	4	0	2	0
Effective Walk Time (s)	11.0	0.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	7	1	1	2
Ped. Right-Left Flow Rate (p/h)	4	0	5	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	6
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	100	0	940	260
Veh. RTOR Flow in Walk (v/h)	5	0	18	0
85th percentile speed (mph)	30	30	30	45
Right Corner Area per Ped (sq.ft)	4275.5	10398.4	10374.2	3146.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1288.4	0.4	0.1	0.1
Crosswalk Circulation Code	A	F	F	F
Pedestrian Delay (s/p)	34.2	44.5	36.0	44.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.40	2.44	2.62	2.35
Pedestrian Crosswalk LOS	B	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	30.8	36.2	39.5	37.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	11.0	11.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	4	6	1	6
Ped. Right-Left Flow Rate (p/h)	2	5	0	7
Ped. R. Sidewalk Flow Rate (p/h)	0	2	0	1
Veh. Perm. L. Flow in Walk (v/h)	20	60	10	5
Veh. Perm. R. Flow in Walk (v/h)	10	10	20	10
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	30	30	30	30
Right Corner Area per Ped (sq.ft)	10401.3	2790.7	6060.4	3627.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	3116.7	1653.4	14477.7	1139.7
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	23.4	23.4	26.0	26.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.76	2.05	2.56	2.53
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	62.5	37.1	87.1	73.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	3	7	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	9.0	4.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	7	11	0
Ped. Right-Left Flow Rate (p/h)	6	1	5	4
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	2
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	330	20	710	40
Veh. RTOR Flow in Walk (v/h)	126	3	231	8
85th percentile speed (mph)	40	30	35	30
Right Corner Area per Ped (sq.ft)	3283.2	6071.7	3017.8	6060.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	1285.0	1706.7	206.1	1616.4
Crosswalk Circulation Code	A	A	A	A
Pedestrian Delay (s/p)	31.5	31.5	31.5	36.1
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.81	2.56	3.59	2.72
Pedestrian Crosswalk LOS	C	B	D	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	86.6	84.9	48.7	48.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	7	4	4
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	None	Actuated	Actuated
Corresponding Signal Phase	4	8	2	6
Effective Walk Time (s)	9.0	0.0	9.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	0	1	0
Ped. Right-Left Flow Rate (p/h)	1	0	4	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	4
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	90	10	190	10
Veh. RTOR Flow in Walk (v/h)	10	0	29	6
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	10400.7	0.0	14542.1	12142.1
Right Corner Quality of Service	A	-	A	A
Ped. Circulation Area (sq.ft)	6414.0	0.0	1460.4	0.0
Crosswalk Circulation Code	A	-	A	-
Pedestrian Delay (s/p)	37.9	46.5	37.9	37.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.11	3.04	2.45	2.17
Pedestrian Crosswalk LOS	C	C	B	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	91.2	92.6	38.8	35.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	6	4	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	Actuated	Actuated	None
Corresponding Signal Phase	0	8	2	6
Effective Walk Time (s)	0.0	9.0	9.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	2	0
Ped. Right-Left Flow Rate (p/h)	0	1	1	1
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	170	90	0
Veh. RTOR Flow in Walk (v/h)	0	53	46	0
85th percentile speed (mph)	40	40	30	30
Right Corner Area per Ped (sq.ft)	24268.4	36426.3	18213.1	72841.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	11592.7	3073.1	0.3
Crosswalk Circulation Code	-	A	A	F
Pedestrian Delay (s/p)	46.5	37.9	37.9	46.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.97	2.88	1.89	2.04
Pedestrian Crosswalk LOS	C	C	A	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	14.8	24.0	60.2	73.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	2	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	Actuated	Actuated
Corresponding Signal Phase	2	6	0	8
Effective Walk Time (s)	0.0	0.0	0.0	9.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	1	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	2	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	220	0	740
Veh. RTOR Flow in Walk (v/h)	0	64	0	0
85th percentile speed (mph)	30	30	35	35
Right Corner Area per Ped (sq.ft)	72900.0	36389.4	36450.0	72839.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.5	0.2	0.0	0.0
Crosswalk Circulation Code	F	F	-	-
Pedestrian Delay (s/p)	48.5	48.5	48.5	39.9
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.26	2.00	3.03	3.22
Pedestrian Crosswalk LOS	B	B	C	C

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	56.1	62.9	81.6	80.9
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	5	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	2	6	8	4
Effective Walk Time (s)	8.0	8.0	9.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	2	11	0	14
Ped. Right-Left Flow Rate (p/h)	2	8	1	17
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	30	470	350	10
Veh. RTOR Flow in Walk (v/h)	23	207	90	0
85th percentile speed (mph)	30	40	45	35
Right Corner Area per Ped (sq.ft)	14554.9	1430.3	3607.4	1991.8
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2215.1	0.0	4469.1	323.8
Crosswalk Circulation Code	A	F	A	A
Pedestrian Delay (s/p)	50.3	50.3	49.3	50.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.06	3.13	3.68	3.28
Pedestrian Crosswalk LOS	B	C	D	C

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)		
Level of Service		

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	3520	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	1.00	
Prob of Blocked Lane	1.00	
Delay for adq Gap	3419160064.00	
Avg Ped Delay (s)	3419160064.00	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	916.9	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	1620	1900
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.99	1.00
Prob of Blocked Lane	0.92	0.95
Delay for adq Gap	302.64	618.28
Avg Ped Delay (s)	300.50	616.42

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	
Level of Service	

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	3630
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	6579380224.00
Avg Ped Delay (s)	6579380224.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	
Level of Service	

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	3630
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	6579380224.00
Avg Ped Delay (s)	6579380224.00

Approach		
Approach Direction	NB	
Median Present?	No	
Approach Delay(s)	161870000	
Level of Service	F	

Crosswalk		
Length (ft)	68	
Lanes Crossed	4	
Veh Vol Crossed	3005	
Ped Vol Crossed	0	
Yield Rate(%)	0	
Ped Platooning	No	
Critical Headway (s)	22.43	
Prob of Delayed X-ing	1.00	
Prob of Blocked Lane	0.99	
Delay for adq Gap	161870000.00	
Avg Ped Delay (s)	161870000.00	

Approach		
Approach Direction	SB	
Median Present?	Yes	
Approach Delay(s)	549.9	
Level of Service	F	

Crosswalk		
Length (ft)	28	28
Lanes Crossed	2	2
Veh Vol Crossed	1240	1765
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No
Critical Headway (s)	11.00	11.00
Prob of Delayed X-ing	0.98	1.00
Prob of Blocked Lane	0.85	0.93
Delay for adq Gap	117.09	437.42
Avg Ped Delay (s)	114.44	435.43

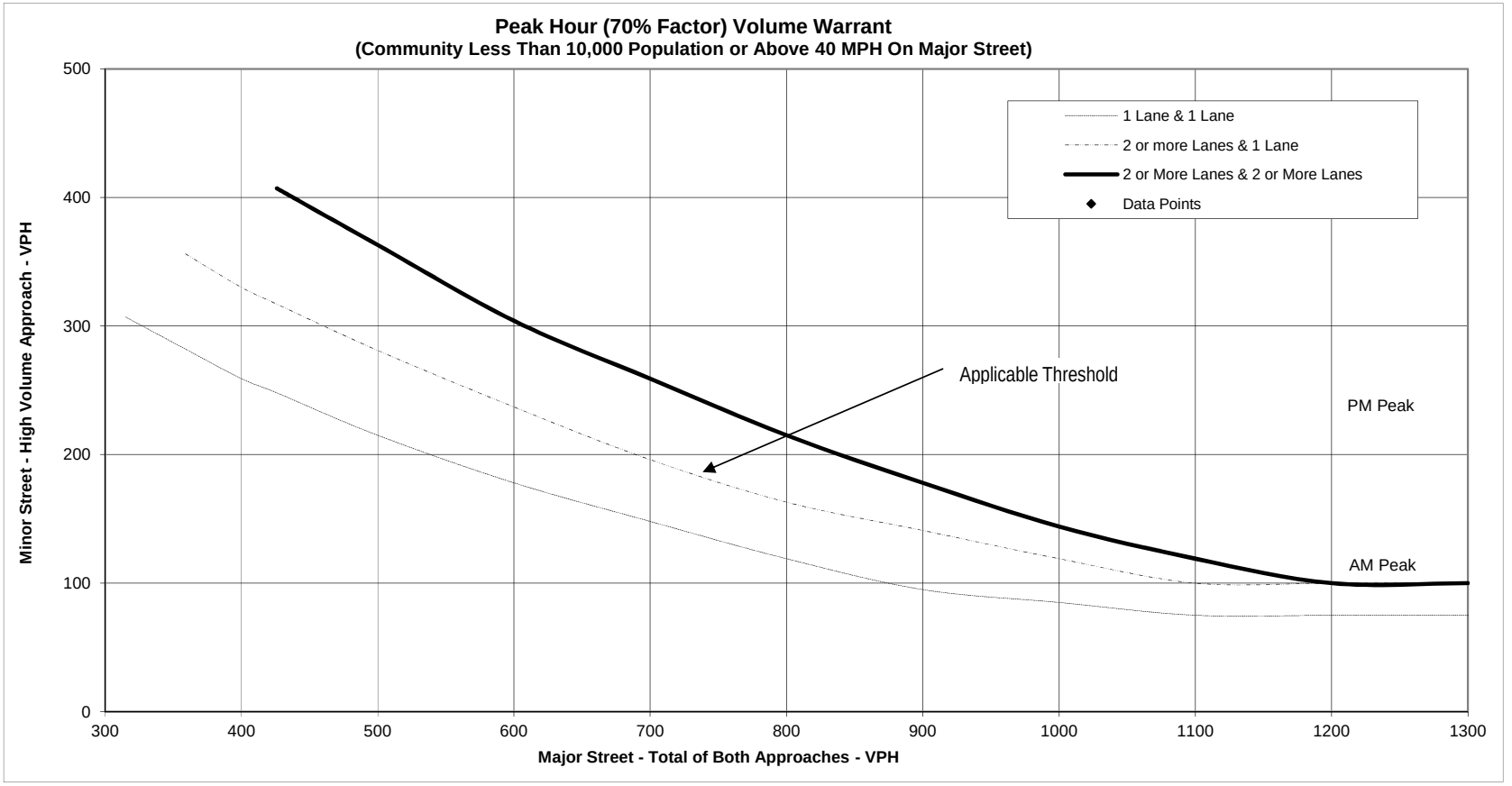
Appendix G.4

Intersection Peak Hour Signal Warrant Worksheets for 2035 Plus Project Conditions

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2035 Plus Project
Intersection: Hwy 1/Stenner Creek Rd
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Hwy 1
Major Street (Orientation): North-South
Minor Street (Name): Stenner Creek Rd.
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	125	125	1460	1610	3,070	Yes
PM Peak	0	240	240	1775	1190	2,965	Yes

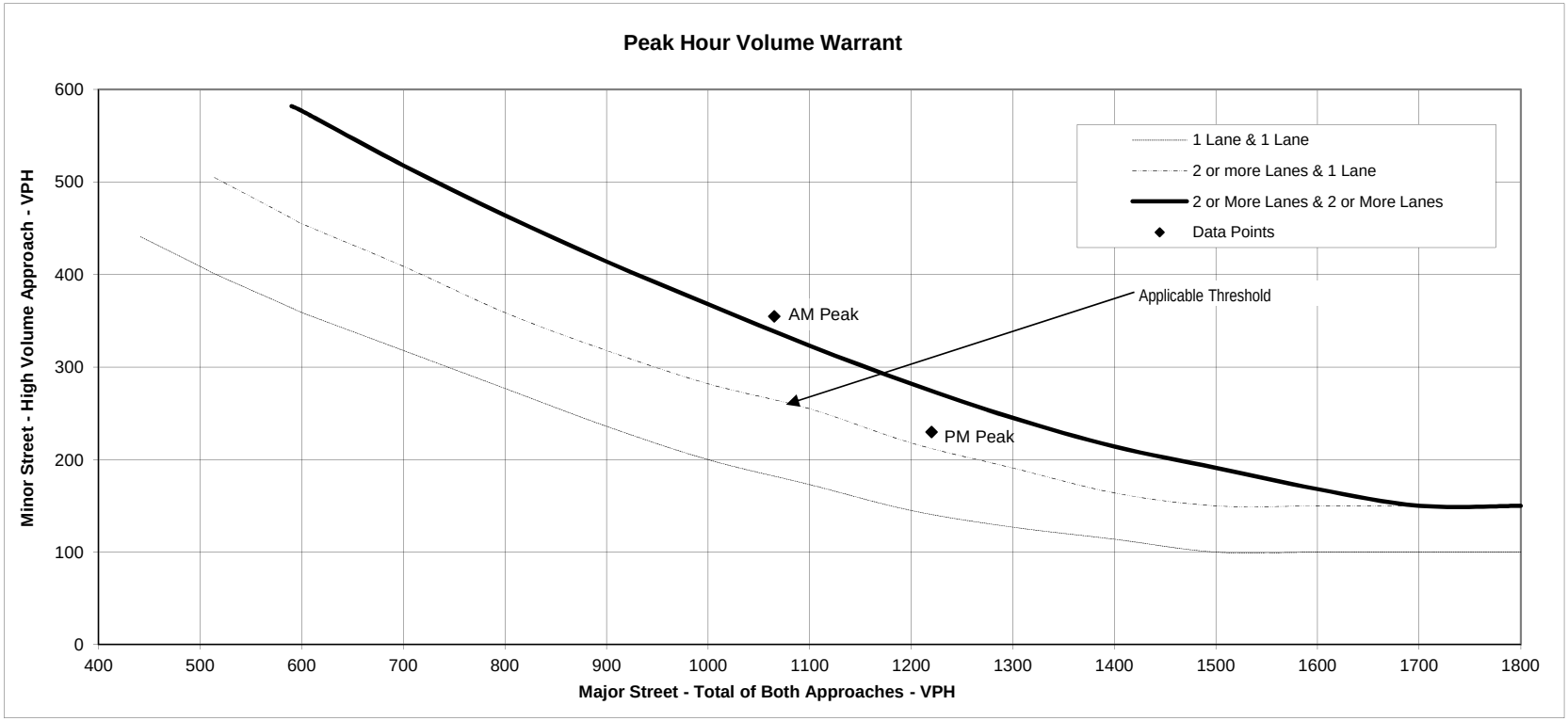


Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

PEAK HOUR VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2035 Plus Project
Intersection: Grand Ave/Slack St
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Grand Ave
Major Street (Orientation): North-South
Minor Street (Name): Slack St
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	355	25	355	645	420	1,065	Yes
PM Peak	230	25	230	560	660	1,220	Yes

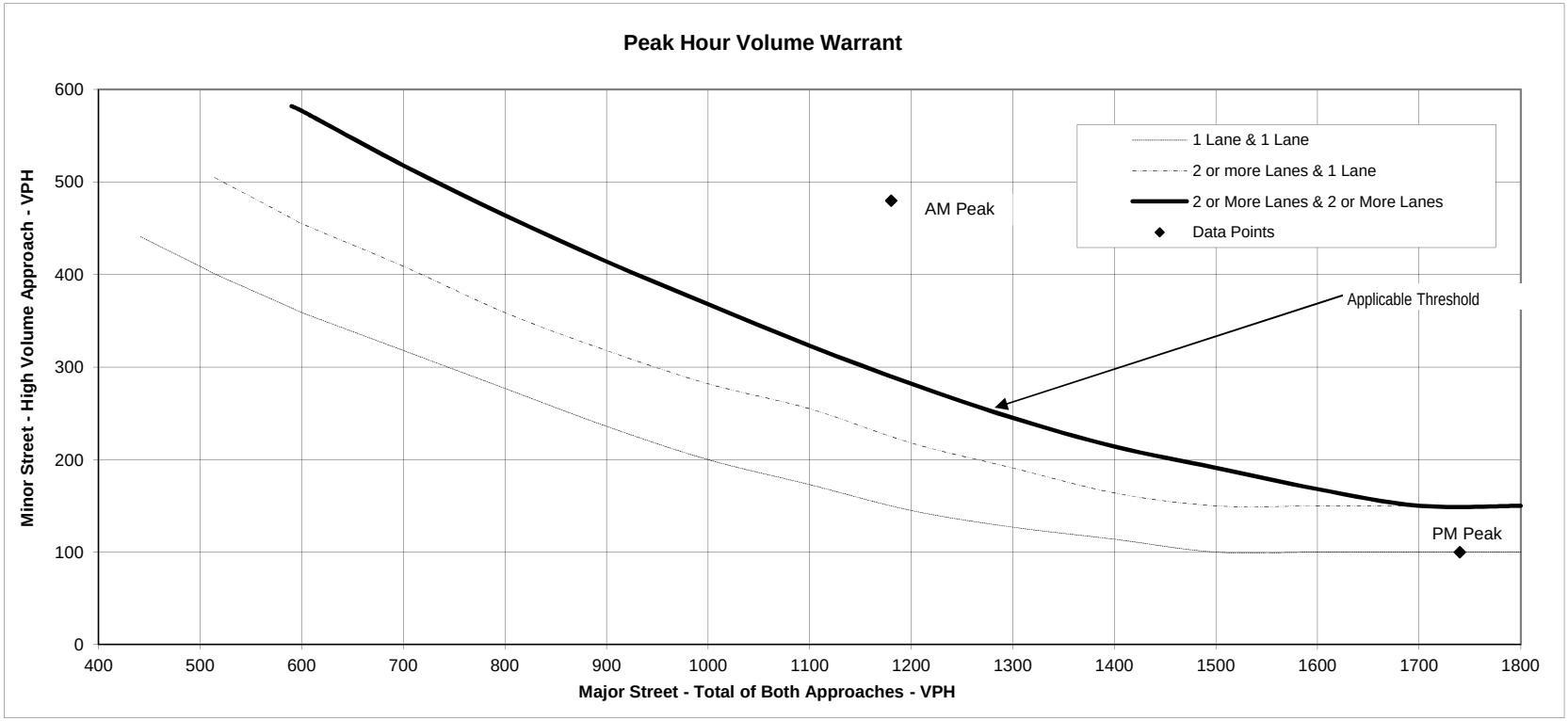


Note: 150 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 100 VPH as the threshold for a minor street approach with one lane

PEAK HOUR VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2035 Plus Project
Intersection: California Blvd/Taft St
Approach Type: 2 or More Lanes & 2 or More Lanes
Major Street (Name): California Blvd
Major Street (Orientation): North-South
Minor Street (Name): Taft St
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	480	480	740	440	1,180	Yes
PM Peak	0	100	100	930	810	1,740	Yes

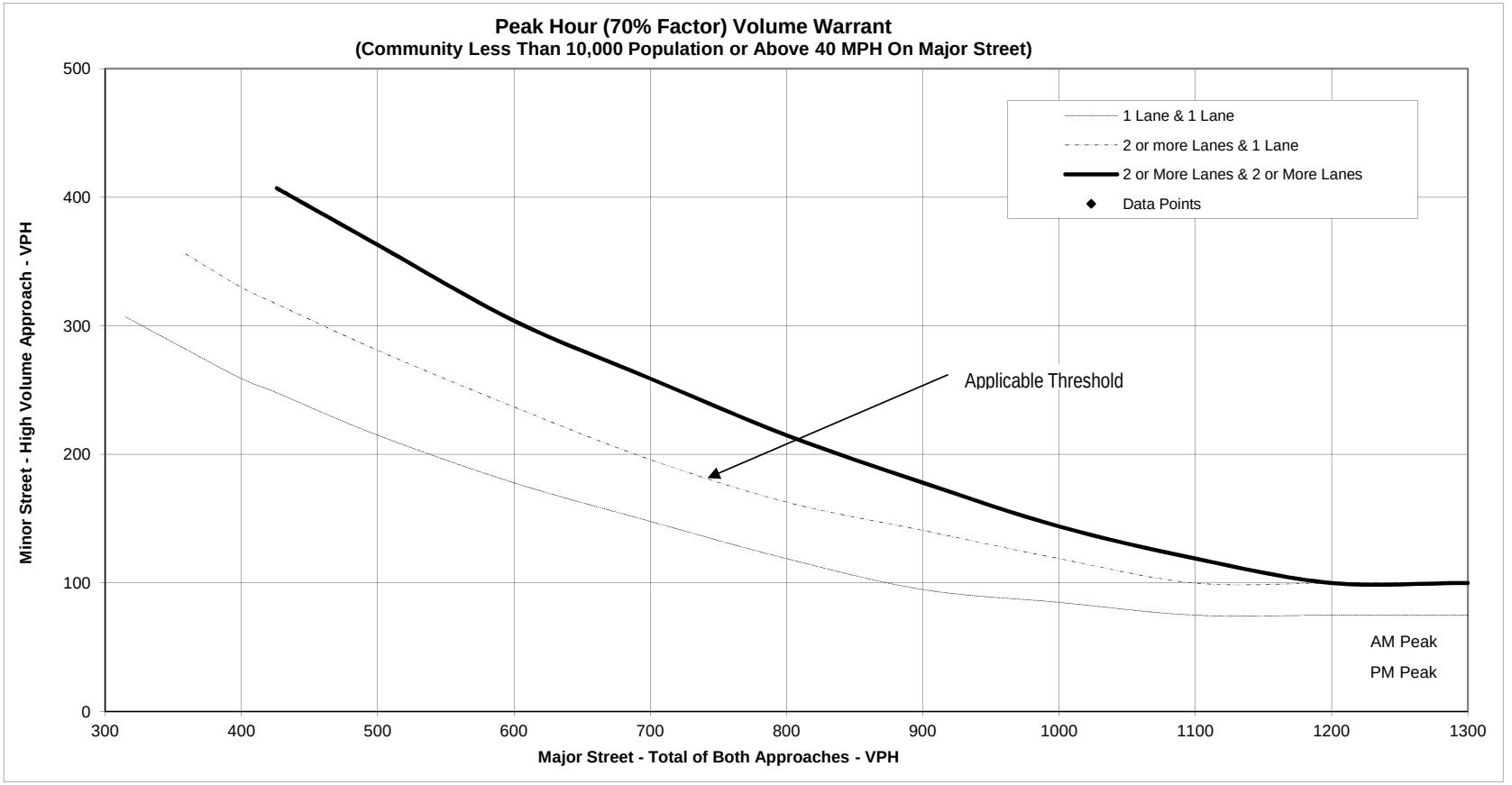


Note: 150 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 100 VPH as the threshold for a minor street approach with one lane

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2035 Plus Project
Intersection: Broad St/Rockview Pl
Approach Type: 2 or More Lanes & 1 Lane
Major Street (Name): Broad St
Major Street (Orientation): North-South
Minor Street (Name): Rockview Pl
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	60	0	60	1070	1950	3,020	No
PM Peak	50	0	50	2000	1660	3,660	No

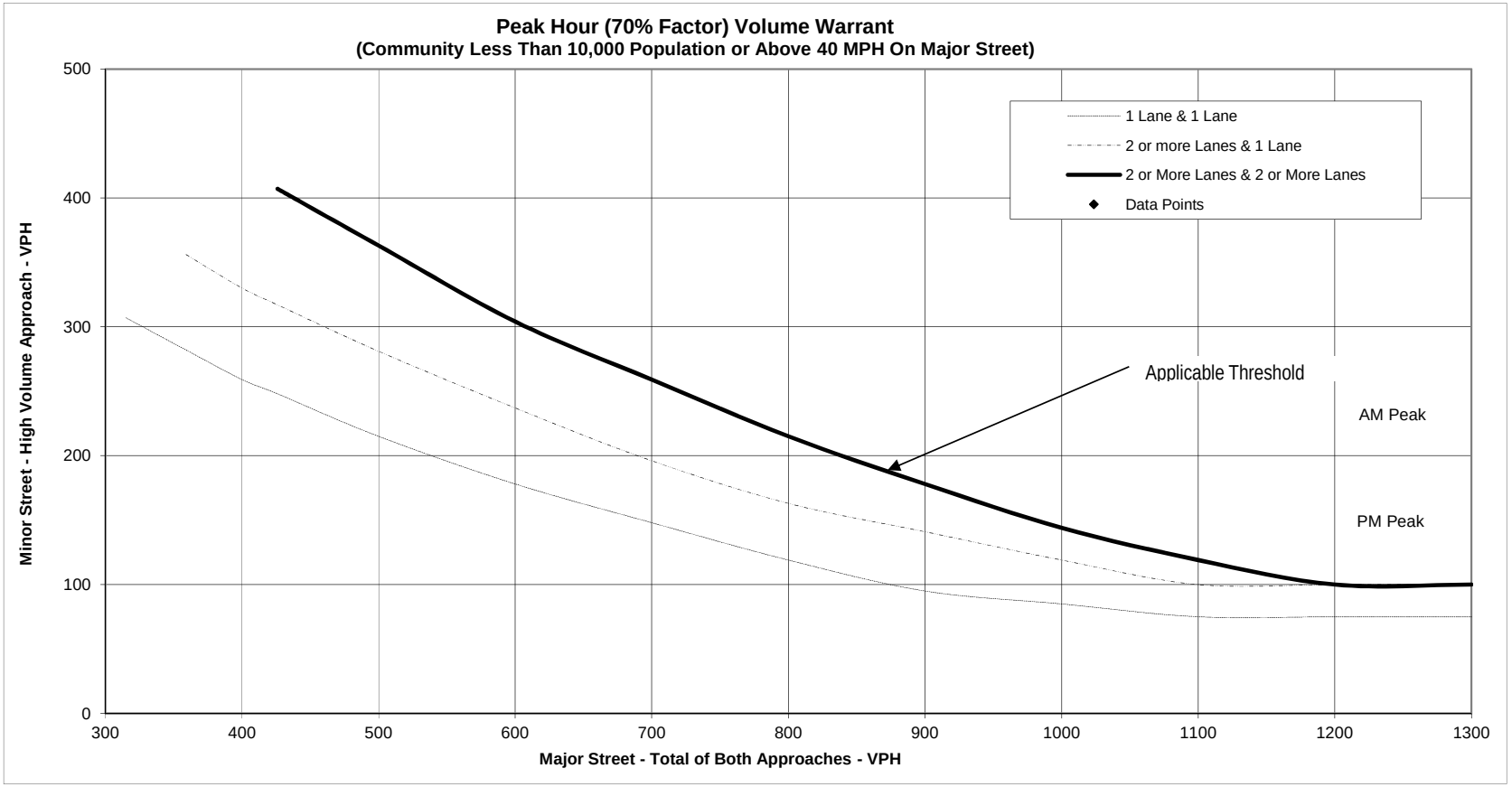


Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2035 Plus Project
Intersection: Broad St/Capitolio Wy
Approach Type: 2 or More Lanes & 2 or More Lanes
Major Street (Name): Broad St
Major Street (Orientation): North-South
Minor Street (Name): Capitolio Wy
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	250	250	1080	2020	3,100	Yes
PM Peak	0	160	160	2190	1760	3,950	Yes

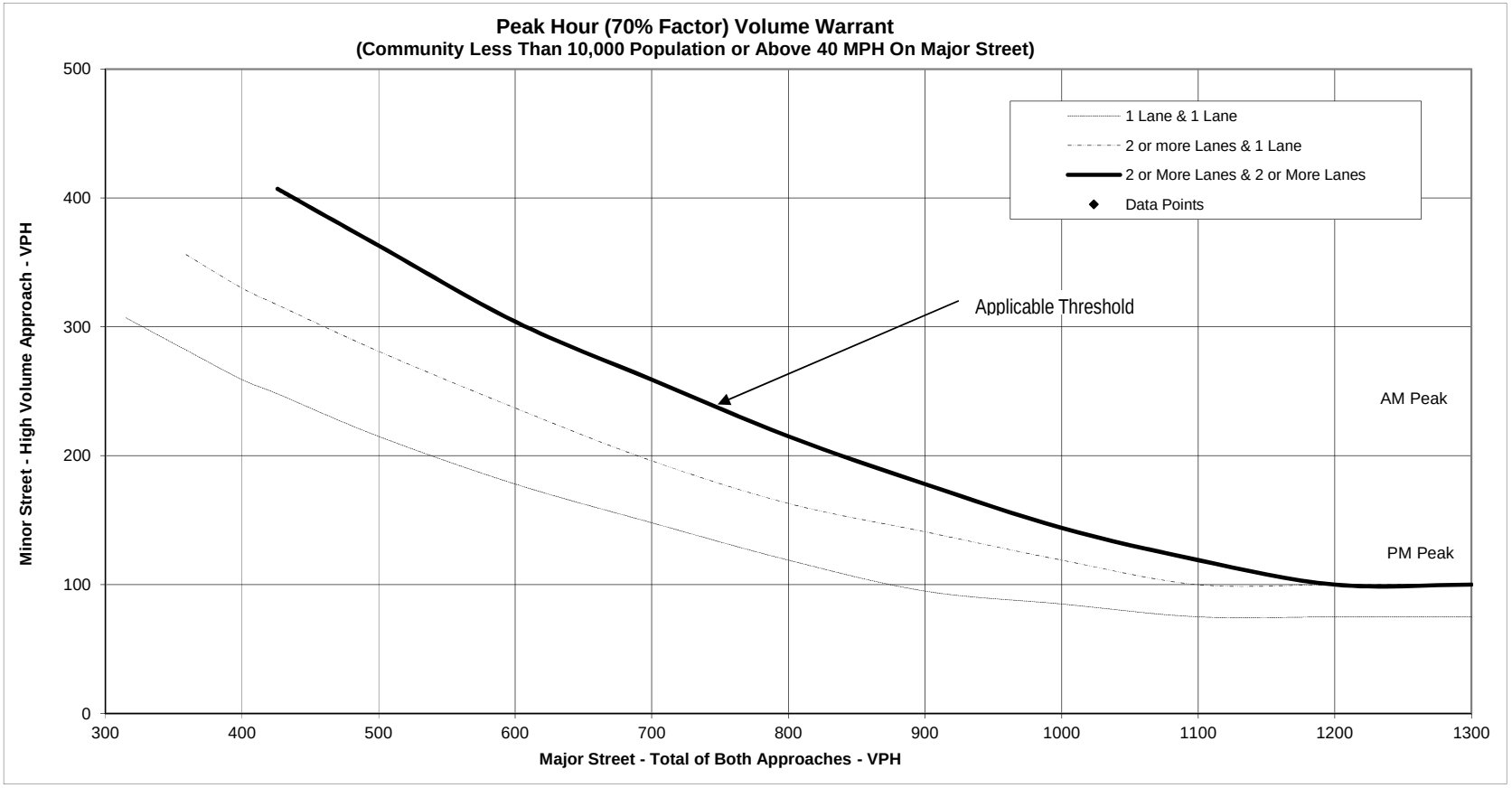


Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

PEAK HOUR (70% FACTOR) VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2035 Plus Project
Intersection: Hwy 1/Project Driveway
Approach Type: 2 or More Lanes & 2 or More Lanes
Major Street (Name): Hwy 1
Major Street (Orientation): North-South
Minor Street (Name): Project Driveway
Minor Street (Orientation): East-West

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time Period	EB	WB	High Vol Approach	NB	SB	NB+SB	Warrant 3?
AM Peak	0	250	250	1530	1680	3,210	Yes
PM Peak	0	120	120	2000	1250	3,250	Yes



Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

Appendix G.5

Freeway LOS Worksheets for 2035 Plus Project Conditions

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 1_2016_AM_Peak_US-101_NB_Marsh_St_to_Osos_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Direction:	US-101 NB
From/To:	Marsh St to Osos St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	3110	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	818	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1711	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1711	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	63.6	mi/h
Number of lanes, N	2	
Density, D	26.9	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 1_2016_PM_Peak_US-101_SB_Marsh_St_to_Osos_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Direction:	US-101 SB
From/To:	Marsh St to Osos St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	4570	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1203	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2514	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	2514	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	47.4	mi/h
Number of lanes, N	2	
Density, D	53.0	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 10_2016_AM_Peak_US-101_NB_Broad_St_to_Marsh_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Direction:	US-101 NB
From/To:	Broad St to Marsh St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	4240	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1116	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2332	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	2332	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	52.7	mi/h
Number of lanes, N	2	
Density, D	44.3	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 10_2016_PM_Peak_US-101_SB_Broad_St_to_Marsh_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Direction:	US-101 SB
From/To:	Broad St to Marsh St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	4000	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1053	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2200	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	2200	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	55.9	mi/h
Number of lanes, N	2	
Density, D	39.3	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.3

File Name: 3_2016_AM_Peak_US-101_NB_Osos_St_to_Toro_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Osos St to Toro St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	510	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1742	198	618	22	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	458	52	163	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1916	211	657	23	pc/h

Volume ratio, VR 0.309

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	868	lc/h
Weaving lane changes, LCW	981	lc/h
Non-weaving vehicle index, INW	168	
Non-weaving lane change, LCNW	98	lc/h
Total lane changes, LCALL	1079	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.408	
Average weaving speed, SW	50.5	mi/h
Average non-weaving speed, SNW	54.3	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	53.0	mi/h
Weaving segment density, D	17.6	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.484	
Weaving segment flow rate, v	2807	pc/h
Weaving segment capacity, cW	5610	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5683	510	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1954	c
		Maximum	Analyzed	
v/c ratio		1.00	0.484	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 3_2016_PM_Peak_US-101_NB_Osos_St_to_Toro_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Osos St to Toro St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	510	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3415	505	495	55	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	899	133	130	14	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3757	537	526	58	pc/h

Volume ratio, VR 0.218

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1063	lc/h
Weaving lane changes, LCW	1176	lc/h
Non-weaving vehicle index, INW	331	
Non-weaving lane change, LCNW	485	lc/h
Total lane changes, LCALL	1661	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.574	
Average weaving speed, SW	46.8	mi/h
Average non-weaving speed, SNW	49.5	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	48.9	mi/h
Weaving segment density, D	33.2	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.808	
Weaving segment flow rate, v	4878	pc/h
Weaving segment capacity, cW	5822	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4720	510	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2028	c
		Maximum	Analyzed	
v/c ratio		1.00	0.808	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 4_2016_AM_Peak_US-101_NB_Toro_St_to_California_Blvd.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Toro St to California Blvd
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	740	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1523	207	427	23	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	401	54	112	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1675	220	454	24	pc/h

Volume ratio, VR 0.284

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	674	lc/h
Weaving lane changes, LCW	837	lc/h
Non-weaving vehicle index, INW	214	
Non-weaving lane change, LCNW	173	lc/h
Total lane changes, LCALL	1010	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.289	
Average weaving speed, SW	53.8	mi/h
Average non-weaving speed, SNW	56.4	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	55.6	mi/h
Weaving segment density, D	14.2	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.401	
Weaving segment flow rate, v	2373	pc/h
Weaving segment capacity, cW	5719	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5413	740	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1993	c
		Maximum	Analyzed	
v/c ratio		1.00	0.401	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 4_2016_PM_Peak_US-101_NB_Toro_St_to_California_Blvd.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	Toro St to California Blvd
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	740	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3623	337	297	33	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	953	89	78	9	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3985	358	316	35	pc/h

Volume ratio, VR 0.144

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	674	lc/h
Weaving lane changes, LCW	837	lc/h
Non-weaving vehicle index, INW	506	
Non-weaving lane change, LCNW	651	lc/h
Total lane changes, LCALL	1488	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.392	
Average weaving speed, SW	50.9	mi/h
Average non-weaving speed, SNW	52.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.4	mi/h
Weaving segment density, D	29.9	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.748	
Weaving segment flow rate, v	4694	pc/h
Weaving segment capacity, cW	6037	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	3968	740	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2103	c
		Maximum	Analyzed	
v/c ratio		1.00	0.748	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 5_2016_AM_Peak_US-101_NB_California_Blvd_to_Grand_Ave.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	California Blvd to Grand Ave
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	530	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1340	90	390	10	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	353	24	103	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1474	96	415	11	pc/h
Volume ratio, VR		0.256			

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	511	lc/h
Weaving lane changes, LCW	611	lc/h
Non-weaving vehicle index, INW	94	
Non-weaving lane change, LCNW	15	lc/h
Total lane changes, LCALL	626	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.258	
Average weaving speed, SW	54.8	mi/h
Average non-weaving speed, SNW	58.1	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	57.2	mi/h
Weaving segment density, D	11.6	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.336	
Weaving segment flow rate, v	1996	pc/h
Weaving segment capacity, cW	5739	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5117	530	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1999	c
		Maximum	Analyzed	
v/c ratio		1.00	0.336	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 5_2016_PM_Peak_US-101_NB_California_Blvd_to_Grand_Ave.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 NB
Weaving Location:	California Blvd to Grand Ave
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	530	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3680	550	270	30	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	968	145	71	8	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4048	585	287	32	pc/h

Volume ratio, VR 0.176

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	872	lc/h
Weaving lane changes, LCW	972	lc/h
Non-weaving vehicle index, INW	259	
Non-weaving lane change, LCNW	550	lc/h
Total lane changes, LCALL	1522	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.519	
Average weaving speed, SW	47.9	mi/h
Average non-weaving speed, SNW	50.8	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	50.3	mi/h
Weaving segment density, D	32.8	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.805	
Weaving segment flow rate, v	4952	pc/h
Weaving segment capacity, cW	5920	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4293	530	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2062	c
		Maximum	Analyzed	
v/c ratio		1.00	0.805	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 6_2016_AM_Peak_US-101_SB_Grand_Ave_to_Taft_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Grand Ave to Taft St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	670	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3152	378	518	42	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	829	99	136	11	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3467	402	551	45	pc/h

Volume ratio, VR 0.213

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	953	lc/h
Weaving lane changes, LCW	1080	lc/h
Non-weaving vehicle index, INW	282	
Non-weaving lane change, LCNW	509	lc/h
Total lane changes, LCALL	1589	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.447	
Average weaving speed, SW	49.6	mi/h
Average non-weaving speed, SNW	51.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	50.7	mi/h
Weaving segment density, D	29.4	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.734	
Weaving segment flow rate, v	4465	pc/h
Weaving segment capacity, cW	5868	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4674	670	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2044	c
		Maximum	Analyzed	
v/c ratio		1.00	0.734	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 6_2016_PM_Peak_US-101_SB_Grand_Ave_to_Taft_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Grand Ave to Taft St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	670	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1671	349	99	11	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	440	92	26	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1838	371	105	12	pc/h

Volume ratio, VR 0.205

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.2	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	476	lc/h
Weaving lane changes, LCW	603	lc/h
Non-weaving vehicle index, INW	149	
Non-weaving lane change, LCNW	166	lc/h
Total lane changes, LCALL	769	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.252	
Average weaving speed, SW	54.9	mi/h
Average non-weaving speed, SNW	57.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	57.2	mi/h
Weaving segment density, D	13.5	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.381	
Weaving segment flow rate, v	2326	pc/h
Weaving segment capacity, cW	5888	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4584	670	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2050	c
		Maximum	Analyzed	
v/c ratio		1.00	0.381	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 7_2016_AM_Peak_US-101_SB_Taft_St_to_Montalban_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Taft St to Montalban St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	390	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3158	252	362	28	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	831	66	95	7	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3474	268	385	30	pc/h

Volume ratio, VR 0.157

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	653	lc/h
Weaving lane changes, LCW	727	lc/h
Non-weaving vehicle index, INW	232	
Non-weaving lane change, LCNW	355	lc/h
Total lane changes, LCALL	1082	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.506	
Average weaving speed, SW	48.2	mi/h
Average non-weaving speed, SNW	53.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.7	mi/h
Weaving segment density, D	26.3	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.674	
Weaving segment flow rate, v	4157	pc/h
Weaving segment capacity, cW	5931	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4102	390	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2066	c
		Maximum	Analyzed	
v/c ratio		1.00	0.674	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 7_2016_PM_Peak_US-101_SB_Taft_St_to_Montalban_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Taft St to Montalban St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	390	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1921	739	99	11	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	506	194	26	3	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2113	786	105	12	pc/h

Volume ratio, VR 0.295

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	891	lc/h
Weaving lane changes, LCW	965	lc/h
Non-weaving vehicle index, INW	141	
Non-weaving lane change, LCNW	71	lc/h
Total lane changes, LCALL	1036	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.489	
Average weaving speed, SW	48.6	mi/h
Average non-weaving speed, SNW	53.8	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.1	mi/h
Weaving segment density, D	19.3	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.519	
Weaving segment flow rate, v	3016	pc/h
Weaving segment capacity, cW	5615	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5535	390	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1957	c
		Maximum	Analyzed	
v/c ratio		1.00	0.519	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 8_2016_AM_Peak_US-101_SB_Lemon_St_to_Olive_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Lemon St to Olive St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	360	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3005	495	405	45	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	791	130	107	12	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3306	526	431	48	pc/h

Volume ratio, VR 0.222

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	957	lc/h
Weaving lane changes, LCW	1017	lc/h
Non-weaving vehicle index, INW	205	
Non-weaving lane change, LCNW	308	lc/h
Total lane changes, LCALL	1325	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.632	
Average weaving speed, SW	45.6	mi/h
Average non-weaving speed, SNW	51.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	49.9	mi/h
Weaving segment density, D	28.8	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.719	
Weaving segment flow rate, v	4311	pc/h
Weaving segment capacity, cW	5779	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4762	360	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2013	c
		Maximum	Analyzed	
v/c ratio		1.00	0.719	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 8_2016_PM_Peak_US-101_SB_Lemon_St_to_Olive_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Lemon St to Olive St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	360	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2498	732	162	18	veh/h
Peak hour factor, PHF	0.95	0.95	0.95	0.95	
Peak 15-min volume, v15	657	193	43	5	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2748	778	172	19	pc/h

Volume ratio, VR 0.256

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	950	lc/h
Weaving lane changes, LCW	1010	lc/h
Non-weaving vehicle index, INW	169	
Non-weaving lane change, LCNW	187	lc/h
Total lane changes, LCALL	1197	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.583	
Average weaving speed, SW	46.6	mi/h
Average non-weaving speed, SNW	52.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	50.6	mi/h
Weaving segment density, D	24.5	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.630	
Weaving segment flow rate, v	3717	pc/h
Weaving segment capacity, cW	5701	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5112	360	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1986	c
		Maximum	Analyzed	
v/c ratio		1.00	0.630	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 9_2016_AM_Peak_US-101_SB_Olive_St_to_Broad_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	AM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Olive St to Broad St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	540	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3240	480	270	30	veh/h
Peak hour factor, PHF	0.95	0.94	0.94	0.95	
Peak 15-min volume, v15	853	128	72	8	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3564	516	290	32	pc/h

Volume ratio, VR 0.183

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	806	lc/h
Weaving lane changes, LCW	961	lc/h
Non-weaving vehicle index, INW	524	
Non-weaving lane change, LCNW	456	lc/h
Total lane changes, LCALL	1417	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.484	
Average weaving speed, SW	48.7	mi/h
Average non-weaving speed, SNW	52.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	51.5	mi/h
Weaving segment density, D	28.5	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.718	
Weaving segment flow rate, v	4402	pc/h
Weaving segment capacity, cW	5905	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4364	540	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2058	c
		Maximum	Analyzed	
v/c ratio		1.00	0.718	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Weaving Release 6.3

File Name: 9_2016_PM_Peak_US-101_SB_Olive_St_to_Broad_St.xhw

Operational Analysis

Analyst:	bp
Agency/Co.:	Parsons Brinckerhoff
Date Performed:	02/10/2017
Analysis Time Period:	PM Peak
Freeway/Dir of Travel:	US-101 SB
Weaving Location:	Olive St to Broad St
Analysis Year:	2016
Description:	I-15 PA/ED

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	540	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	-	%
Length	-	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3023	647	207	23	veh/h
Peak hour factor, PHF	0.95	0.94	0.94	0.95	
Peak 15-min volume, v15	796	172	55	6	
Trucks and buses	9	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3325	695	222	24	pc/h

Volume ratio, VR 0.215

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	917	lc/h
Weaving lane changes, LCW	1072	lc/h
Non-weaving vehicle index, INW	488	
Non-weaving lane change, LCNW	405	lc/h
Total lane changes, LCALL	1477	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.500	
Average weaving speed, SW	48.3	mi/h
Average non-weaving speed, SNW	51.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	50.8	mi/h
Weaving segment density, D	28.0	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.705	
Weaving segment flow rate, v	4266	pc/h
Weaving segment capacity, cW	5836	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4690	540	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	2033	c
		Maximum	Analyzed	
v/c ratio		1.00	0.705	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, 'Freeway Merge and Diverge Segments.'
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 1_2016_AM_Peak_US-101_NB_Marsh_St_to_Osos_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/13/2017
Analysis Time Period:	AM Peak
Freeway/Direction:	US-101 NB
From/To:	Marsh St to Osos St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	3110	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	818	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1140	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1140	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	65.0	mi/h
Number of lanes, N	3	
Density, D	17.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 10_2016_AM_Peak_US-101_NB_Broad_St_to_Marsh_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/13/2017
Analysis Time Period:	AM Peak
Freeway/Direction:	US-101 NB
From/To:	Broad St to Marsh St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	4240	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1116	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1555	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1555	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	64.7	mi/h
Number of lanes, N	3	
Density, D	24.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Basic Freeway Segments Release 6.3

File Name: 10_2016_PM_Peak_US-101_SB_Broad_St_to_Marsh_St.xhf

Operational Analysis

Analyst:	bp
Agency or Company:	Parsons Brinckerhoff
Date Performed:	02/13/2017
Analysis Time Period:	PM Peak
Freeway/Direction:	US-101 SB
From/To:	Broad St to Marsh St
Jurisdiction:	Caltrans
Analysis Year:	2016
Description:	I-15 PA/ED

Flow Inputs and Adjustments

Volume, V	4000	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1053	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1467	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1467	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	64.9	mi/h
Number of lanes, N	3	
Density, D	22.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Appendix F:
Air Quality and Greenhouse Gas Worksheets

Air Quality
Master Plan Operational

CSU San Luis Obispo Master Plan - San Luis Obispo County, Winter

CSU San Luis Obispo Master Plan

San Luis Obispo County, Winter

Daily Area + Energy Emissions (Campus)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	22,500.00	Student	0.00	1,040,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Baseline

Construction Phase -

Woodstoves - .

Table Name	Column Name	Default Value	New Value
tblLandUse	BuildingSpaceSquareFeet	4,135,443.04	1,040,000.00
tblLandUse	LandUseSquareFeet	4,135,443.04	1,040,000.00
tblLandUse	LotAcreage	94.94	0.00
tblProjectCharacteristics	OperationalYear	2018	2035

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	29.0682	0.0205	2.2842	1.7000e-004		8.1000e-003	8.1000e-003		8.1000e-003	8.1000e-003		4.9242	4.9242	0.0127		5.2413
Energy	0.7445	6.7685	5.6856	0.0406		0.5144	0.5144		0.5144	0.5144		8,122.2240	8,122.2240	0.1557	0.1489	8,170.4903
Mobile	26.5969	117.7535	276.7377	1.1723	152.0430	0.6780	152.7210	40.5488	0.6305	41.1793		119,186.2932	119,186.2932	3.8725		119,283.1062
Total	**56.4097**	**124.5425**	**284.7074**	**1.2131**	**152.0430**	**1.2005**	**153.2435**	**40.5488**	**1.1530**	**41.7018**		**127,313.4414**	**127,313.4414**	**4.0409**	**0.1489**	**127,458.8378**

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7445	6.7685	5.6856	0.0406		0.5144	0.5144		0.5144	0.5144		8,122.2240	8,122.2240	0.1557	0.1489	8,170.4903
NaturalGas Unmitigated	0.7445	6.7685	5.6856	0.0406		0.5144	0.5144		0.5144	0.5144		8,122.2240	8,122.2240	0.1557	0.1489	8,170.4903

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
University/College (4Yr)	69038.9	0.7445	6.7685	5.6856	0.0406		0.5144	0.5144		0.5144	0.5144		8,122.2240	8,122.2240	0.1557	0.1489	8,170.4903
Total		**0.7445**	**6.7685**	**5.6856**	**0.0406**		**0.5144**	**0.5144**		**0.5144**	**0.5144**		**8,122.2240**	**8,122.2240**	**0.1557**	**0.1489**	**8,170.4903**
Total		**0.7445**	**6.7685**	**5.6856**	**0.0406**		**0.5144**	**0.5144**		**0.5144**	**0.5144**		**8,122.2240**	**8,122.2240**	**0.1557**	**0.1489**	**8,170.4903**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	29.0682	0.0205	2.2842	1.7000e-004		8.1000e-003	8.1000e-003		8.1000e-003	8.1000e-003		4.9242	4.9242	0.0127		5.2413
Unmitigated	29.0682	0.0205	2.2842	1.7000e-004		8.1000e-003	8.1000e-003		8.1000e-003	8.1000e-003		4.9242	4.9242	0.0127		5.2413

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.6033					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	22.2560					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.2089	0.0205	2.2842	1.7000e-004		8.1000e-003	8.1000e-003		8.1000e-003	8.1000e-003		4.9242	4.9242	0.0127		5.2413
Total	**29.0682**	**0.0205**	**2.2842**	**1.7000e-004**		**8.1000e-003**	**8.1000e-003**		**8.1000e-003**	**8.1000e-003**		**4.9242**	**4.9242**	**0.0127**		**5.2413**

CSU San Luis Obispo Master Plan - San Luis Obispo County, Winter

CSU San Luis Obispo Master Plan

San Luis Obispo County, Winter

Daily Mobile Emissions (Campus)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	1,136.00	Student	5.00	480,920.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Construction Phase -

Vehicle Trips - .

Table Name	Column Name	Default Value	New Value
tblLandUse	BuildingSpaceSquareFeet	208,793.92	480,920.00
tblLandUse	LandUseSquareFeet	208,793.92	480,920.00
tblLandUse	LotAcreage	4.79	5.00
tblProjectCharacteristics	OperationalYear	2018	2035
tblVehicleTrips	ST_TR	1.30	1.71

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.3558	1.0400e-003	0.1153	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2486	0.2486	6.4000e-004		0.2646
Energy	0.3443	3.1299	2.6291	0.0188		0.2379	0.2379		0.2379	0.2379		3,755.9038	3,755.9038	0.0720	0.0689	3,778.2233
Mobile	1.3429	5.9452	13.9722	0.0592	7.6765	0.0342	7.7107	2.0473	0.0318	2.0791		6,017.5835	6,017.5835	0.1955		6,022.4715
Total	**15.0429**	**9.0762**	**16.7166**	**0.0780**	**7.6765**	**0.2725**	**7.9490**	**2.0473**	**0.2701**	**2.3174**		**9,773.7360**	**9,773.7360**	**0.2682**	**0.0689**	**9,800.9594**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3429	5.9452	13.9722	0.0592	7.6765	0.0342	7.7107	2.0473	0.0318	2.0791		6,017.5835	6,017.5835	0.1955		6,022.4715
Unmitigated	1.3429	5.9452	13.9722	0.0592	7.6765	0.0342	7.7107	2.0473	0.0318	2.0791		6,017.5835	6,017.5835	0.1955		6,022.4715

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
University/College (4Yr)	1,942.56	1,942.56	1942.56	3,634,410	3,634,410
Total	1,942.56	1,942.56	1,942.56	3,634,410	3,634,410

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
University/College (4Yr)	13.00	5.00	5.00	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
University/College (4Yr)	0.616164	0.024428	0.200403	0.101710	0.011605	0.004038	0.012692	0.020318	0.002255	0.001026	0.004075	0.000686	0.000600

CSU San Luis Obispo Master Plan

San Luis Obispo County, Winter

Daily Area + Energy Emissions (Technology Park)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	75.00	1000sqft	0.00	75,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Baseline

Construction Phase -

Woodstoves - .

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	1.72	0.00
tblProjectCharacteristics	OperationalYear	2018	2035

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0819	7.00E-05	7.61E-03	0.0000		3.0000e-005	3.00E-05		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175
Energy	0.0470	0.4275	0.3591	2.5600e-003		0.0325	0.0325		0.0325	0.0325		512.9734	512.9734	9.8300e-003	9.4000e-003	516.0218
Mobile	0.6396	2.8898	7.3318	0.0327	4.3160	0.0184	4.3345	1.1511	0.0172	1.1682		3,318.7931	3,318.7931	0.1023		3,321.3515
Total	**2.7685**	**3.3174**	**7.6985**	**0.0352**	**4.3160**	**0.0510**	**4.3670**	**1.1511**	**0.0497**	**1.2007**		**3,831.7829**	**3,831.7829**	**0.1122**	**9.4000e-003**	**3,837.3907**

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0470	0.4275	0.3591	2.5600e-003		0.0325	0.0325		0.0325	0.0325		512.9734	512.9734	9.8300e-003	9.4000e-003	516.0218
NaturalGas Unmitigated	0.0470	0.4275	0.3591	2.5600e-003		0.0325	0.0325		0.0325	0.0325		512.9734	512.9734	9.8300e-003	9.4000e-003	516.0218

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Office Park	4360.27	0.0470	0.4275	0.3591	2.5600e-003		0.0325	0.0325		0.0325	0.0325		512.9734	512.9734	9.8300e-003	9.4000e-003	516.0218
Total		**0.0470**	**0.4275**	**0.3591**	**2.5600e-003**		**0.0325**	**0.0325**		**0.0325**	**0.0325**		**512.9734**	**512.9734**	**9.8300e-003**	**9.4000e-003**	**516.0218**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0819	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175
Unmitigated	2.0819	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4762					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6050					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175
Total	**2.0819**	**7.0000e-005**	**7.6100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0164**	**0.0164**	**4.0000e-005**		**0.0175**

CSU San Luis Obispo Master Plan

San Luis Obispo County, Winter

Daily Mobile Emissions (Technology Park)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	23.29	1000sqft	0.53	23,292.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Baseline

Construction Phase -

Vehicle Trips - .

Woodstoves - .

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2018	2035
tblVehicleTrips	ST_TR	1.64	11.42
tblVehicleTrips	SU_TR	0.76	11.42

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.6466	2.0000e-005	2.3600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1000e-003	5.1000e-003	1.0000e-005		5.4300e-003
Energy	0.0146	0.1328	0.1115	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.3090	159.3090	3.0500e-003	2.9200e-003	160.2557
Mobile	0.1986	0.8975	2.2770	0.0101	1.3404	5.7300e-003	1.3461	0.3575	5.3300e-003	0.3628		1,030.6844	1,030.6844	0.0318		1,031.4789
Total	**0.8598**	**1.0303**	**2.3909**	**0.0109**	**1.3404**	**0.0158**	**1.3562**	**0.3575**	**0.0154**	**0.3729**		**1,189.9985**	**1,189.9985**	**0.0348**	**2.9200e-003**	**1,191.7401**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1986	0.8975	2.2770	0.0101	1.3404	5.7300e-003	1.3461	0.3575	5.3300e-003	0.3628		1,030.6844	1,030.6844	0.0318		1,031.4789
Unmitigated	0.1986	0.8975	2.2770	0.0101	1.3404	5.7300e-003	1.3461	0.3575	5.3300e-003	0.3628		1,030.6844	1,030.6844	0.0318		1,031.4789

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Office Park	265.99	265.99	265.99	634,601	634,601
Total	265.99	265.99	265.99	634,601	634,601

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Office Park	13.00	5.00	5.00	33.00	48.00	19.00	82	15	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Office Park	0.616164	0.024428	0.200403	0.101710	0.011605	0.004038	0.012692	0.020318	0.002255	0.001026	0.004075	0.000686	0.000600

CSU San Luis Obispo Master Plan - San Luis Obispo County, Winter

CSU San Luis Obispo Master Plan

San Luis Obispo County, Winter

Daily Area + Energy + Mobile Emissions (Residential)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Retail	11.30	User Defined Unit	0.00	11,300.00	0
Apartments Mid Rise	1,470.00	Dwelling Unit	88.00	1,470,000.00	3381

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Slack and Grand site is 22 acres, use proportion for acreage estimate for all residential development. 22 acre x 4 = 88 acres. Total population = 1,470 units x 2.3 residents per unit (based on county average) = 3,381

Construction Phase -

Vehicle Trips - Consistent with traffic study.

Woodstoves - No woodstove.

Area Coating - Low VOC paint.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50

tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblLandUse	BuildingSpaceSquareFeet	0.00	11,300.00
tblLandUse	LandUseSquareFeet	0.00	11,300.00
tblLandUse	LotAcreage	38.68	88.00
tblLandUse	Population	4,204.00	3,381.00
tblProjectCharacteristics	OperationalYear	2018	2024
tblVehicleTrips	CC_TTP	0.00	35.80
tblVehicleTrips	CNW_TTP	0.00	43.20
tblVehicleTrips	CW_TL	13.00	5.00
tblVehicleTrips	CW_TTP	0.00	21.00
tblVehicleTrips	DV_TP	0.00	45.00
tblVehicleTrips	PB_TP	0.00	45.00
tblVehicleTrips	PR_TP	0.00	10.00
tblVehicleTrips	ST_TR	6.39	7.50
tblVehicleTrips	ST_TR	0.00	46.00
tblVehicleTrips	SU_TR	5.86	7.50
tblVehicleTrips	SU_TR	0.00	46.00
tblVehicleTrips	WD_TR	6.65	7.50
tblVehicleTrips	WD_TR	0.00	46.00
tblWoodstoves	WoodstoveDayYear	60.00	0.00
tblWoodstoves	WoodstoveWoodMass	2,016.00	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	37.8793	1.3968	121.2270	6.4000e-003		0.6719	0.6719		0.6719	0.6719	0.0000	218.3744	218.3744	0.2095	0.0000	223.6127
Energy	0.4808	4.1083	1.7482	0.0262		0.3322	0.3322		0.3322	0.3322		5,244.6520	5,244.6520	0.1005	0.0962	5,275.8184
Mobile	16.4685	64.5068	186.4706	0.5851	59.7470	0.5321	60.2791	15.9533	0.4973	16.4506		59,109.7627	59,109.7627	2.1794		59,164.2483
Total	**54.8285**	**70.0119**	**309.4458**	**0.6177**	**59.7470**	**1.5362**	**61.2831**	**15.9533**	**1.5014**	**17.4546**	**0.0000**	**64,572.7891**	**64,572.7891**	**2.4895**	**0.0962**	**64,663.6793**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	16.4685	64.5068	186.4706	0.5851	59.7470	0.5321	60.2791	15.9533	0.4973	16.4506		59,109.7627	59,109.7627	2.1794		59,164.2483
Unmitigated	16.4685	64.5068	186.4706	0.5851	59.7470	0.5321	60.2791	15.9533	0.4973	16.4506		59,109.7627	59,109.7627	2.1794		59,164.2483

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	11,025.00	11,025.00	11025.00	28,020,668	28,020,668
User Defined Retail	519.80	519.80	519.80	209,547	209,547
Total	11,544.80	11,544.80	11,544.80	28,230,215	28,230,215

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
User Defined Retail	5.00	5.00	5.00	21.00	35.80	43.20	10	45	45

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Retail	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Apartments Mid Rise	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.4808	4.1083	1.7482	0.0262		0.3322	0.3322		0.3322	0.3322		5,244.6520	5,244.6520	0.1005	0.0962	5,275.8184
NaturalGas Unmitigated	0.4808	4.1083	1.7482	0.0262		0.3322	0.3322		0.3322	0.3322		5,244.6520	5,244.6520	0.1005	0.0962	5,275.8184

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	44579.5	0.4808	4.1083	1.7482	0.0262		0.3322	0.3322		0.3322	0.3322		5,244.6520	5,244.6520	0.1005	0.0962	5,275.8184
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.4808**	**4.1083**	**1.7482**	**0.0262**		**0.3322**	**0.3322**		**0.3322**	**0.3322**		**5,244.6520**	**5,244.6520**	**0.1005**	**0.0962**	**5,275.8184**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	37.8793	1.3968	121.2270	6.4000e-003		0.6719	0.6719		0.6719	0.6719	0.0000	218.3744	218.3744	0.2095	0.0000	223.6127
Unmitigated	37.8793	1.3968	121.2270	6.4000e-003		0.6719	0.6719		0.6719	0.6719	0.0000	218.3744	218.3744	0.2095	0.0000	223.6127

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	31.6998					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.6451	1.3968	121.2270	6.4000e-003		0.6719	0.6719		0.6719	0.6719		218.3744	218.3744	0.2095		223.6127
Total	**37.8793**	**1.3968**	**121.2270**	**6.4000e-003**		**0.6719**	**0.6719**		**0.6719**	**0.6719**	**0.0000**	**218.3744**	**218.3744**	**0.2095**	**0.0000**	**223.6127**

CSU San Luis Obispo Master Plan

San Luis Obispo County, Winter

Daily Operational DPM Emissions (Residential)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	88.00	Dwelling Unit	2.32	1,475,000.00	88

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Baseline

Construction Phase -

Vehicle Trips - .

Woodstoves - .

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	88,000.00	1,475,000.00
tblLandUse	Population	252.00	88.00
tblProjectCharacteristics	OperationalYear	2018	2035
tblVehicleTrips	ST_TR	6.39	6.65

tblVehicleTrips	SU_TR	5.86	6.65

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	44.4244	0.0835	7.2346	3.8000e-004		0.0403	0.0403		0.0403	0.0403	0.0000	13.0726	13.0726	0.0124	0.0000	13.3837
Energy	0.0288	0.2459	0.1047	1.5700e-003		0.0199	0.0199		0.0199	0.0199		313.9656	313.9656	6.0200e-003	5.7600e-003	315.8313
Mobile	0.4468	2.0300	5.2516	0.0237	3.1415	0.0133	3.1548	0.8378	0.0124	0.8502		2,405.1612	2,405.1612	0.0733		2,406.9925
Total	**44.9000**	**2.3594**	**12.5909**	**0.0256**	**3.1415**	**0.0734**	**3.2149**	**0.8378**	**0.0725**	**0.9103**	**0.0000**	**2,732.1993**	**2,732.1993**	**0.0917**	**5.7600e-003**	**2,736.2076**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4468	2.0300	5.2516	0.0237	3.1415	0.0133	3.1548	0.8378	0.0124	0.8502		2,405.1612	2,405.1612	0.0733		2,406.9925
Unmitigated	0.4468	2.0300	5.2516	0.0237	3.1415	0.0133	3.1548	0.8378	0.0124	0.8502		2,405.1612	2,405.1612	0.0733		2,406.9925

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	585.20	585.20	585.20	1,487,319	1,487,319
Total	585.20	585.20	585.20	1,487,319	1,487,319

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.616164	0.024428	0.200403	0.101710	0.011605	0.004038	0.012692	0.020318	0.002255	0.001026	0.004075	0.000686	0.000600

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CSU San Luis Obispo Master Plan

San Luis Obispo County, Annual

Annual Area + Energy Emissions (Campus)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	22,500.00	Student	0.00	1,040,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Baseline

Construction Phase -

Woodstoves - .

Table Name	Column Name	Default Value	New Value
tblLandUse	BuildingSpaceSquareFeet	4,135,443.04	1,040,000.00
tblLandUse	LandUseSquareFeet	4,135,443.04	1,040,000.00
tblLandUse	LotAcreage	94.94	0.00
tblProjectCharacteristics	OperationalYear	2018	2035

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.3013	3.3900e-003	0.3769	3.0000e-005		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	0.7371	0.7371	1.9000e-003	0.0000	0.7846
Energy	0.1359	1.2353	1.0376	7.4100e-003		0.0939	0.0939		0.0939	0.0939	0.0000	3,804.4399	3,804.4399	0.1370	0.0477	3,822.0688
Mobile	3.9212	17.7254	40.6561	0.1771	22.1808	0.1012	22.2821	5.9280	0.0942	6.0222	0.0000	16,345.6928	16,345.6928	0.5158	0.0000	16,358.5883
Waste						0.0000	0.0000		0.0000	0.0000	833.5316	0.0000	833.5316	49.2603	0.0000	2,065.0394
Water						0.0000	0.0000		0.0000	0.0000	15.2836	152.5538	167.8374	1.5767	0.0385	218.7252
Total	**9.3584**	**18.9640**	**42.0706**	**0.1846**	**22.1808**	**0.1965**	**22.3773**	**5.9280**	**0.1894**	**6.1174**	**848.8153**	**20,303.4236**	**21,152.2389**	**51.4917**	**0.0862**	**22,465.2062**

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,459.7146	2,459.7146	0.1112	0.0230	2,469.3525
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,459.7146	2,459.7146	0.1112	0.0230	2,469.3525
NaturalGas Mitigated	0.1359	1.2353	1.0376	7.4100e-003		0.0939	0.0939		0.0939	0.0939	0.0000	1,344.7253	1,344.7253	0.0258	0.0247	1,352.7163
NaturalGas Unmitigated	0.1359	1.2353	1.0376	7.4100e-003		0.0939	0.0939		0.0939	0.0939	0.0000	1,344.7253	1,344.7253	0.0258	0.0247	1,352.7163

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
University/College (4Yr)	2.51992e+007	0.1359	1.2353	1.0376	7.4100e-003		0.0939	0.0939		0.0939	0.0939	0.0000	1,344.7253	1,344.7253	0.0258	0.0247	1,352.7163
Total		**0.1359**	**1.2353**	**1.0376**	**7.4100e-003**		**0.0939**	**0.0939**		**0.0939**	**0.0939**	**0.0000**	**1,344.7253**	**1,344.7253**	**0.0258**	**0.0247**	**1,352.7163**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
University/College (4Yr)	8.4552e+006	2,459.7146	0.1112	0.0230	2,469.3525
Total		**2,459.7146**	**0.1112**	**0.0230**	**2,469.3525**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.3013	3.3900e-003	0.3769	3.0000e-005		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	0.7371	0.7371	1.9000e-003	0.0000	0.7846
Unmitigated	5.3013	3.3900e-003	0.3769	3.0000e-005		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	0.7371	0.7371	1.9000e-003	0.0000	0.7846

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2051					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.0617					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0345	3.3900e-003	0.3769	3.0000e-005		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	0.7371	0.7371	1.9000e-003	0.0000	0.7846
Total	**5.3013**	**3.3900e-003**	**0.3769**	**3.0000e-005**		**1.3400e-003**	**1.3400e-003**		**1.3400e-003**	**1.3400e-003**	**0.0000**	**0.7371**	**0.7371**	**1.9000e-003**	**0.0000**	**0.7846**

7.0 Water Detail

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
University/College (4Yr)	48.1748 / 75.3503	167.8374	1.5767	0.0385	218.7252
Total		**167.8374**	**1.5767**	**0.0385**	**218.7252**

8.0 Waste Detail

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
University/College (4Yr)	4106.25	833.5316	49.2603	0.0000	2,065.0394
Total		**833.5316**	**49.2603**	**0.0000**	**2,065.0394**

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CSU San Luis Obispo Master Plan

San Luis Obispo County, Annual

Annual Mobile Emissions (Campus)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	1,136.00	Student	5.00	480,920.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Construction Phase -

Vehicle Trips - .

Table Name	Column Name	Default Value	New Value
tblLandUse	BuildingSpaceSquareFeet	208,793.92	480,920.00
tblLandUse	LandUseSquareFeet	208,793.92	480,920.00
tblLandUse	LotAcreage	4.79	5.00
tblProjectCharacteristics	OperationalYear	2018	2035
tblVehicleTrips	ST_TR	1.30	1.71
tblVehicleTrips	SU_TR	0.00	1.71

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.4372	1.7000e-004	0.0190	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0372	0.0372	1.0000e-004	0.0000	0.0396
Energy	0.0628	0.5712	0.4798	3.4300e-003		0.0434	0.0434		0.0434	0.0434	0.0000	1,759.2608	1,759.2608	0.0634	0.0220	1,767.4128
Mobile	0.2406	1.0876	2.4945	0.0109	1.3609	6.2100e-003	1.3671	0.3637	5.7800e-003	0.3695	0.0000	1,002.8987	1,002.8987	0.0317	0.0000	1,003.6899
Waste						0.0000	0.0000		0.0000	0.0000	42.0841	0.0000	42.0841	2.4871	0.0000	104.2615
Water						0.0000	0.0000		0.0000	0.0000	0.7717	7.7023	8.4739	0.0796	1.9400e-003	11.0432
Total	**2.7407**	**1.6589**	**2.9933**	**0.0143**	**1.3609**	**0.0497**	**1.4106**	**0.3637**	**0.0493**	**0.4130**	**42.8557**	**2,769.8990**	**2,812.7547**	**2.6618**	**0.0240**	**2,886.4471**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2406	1.0876	2.4945	0.0109	1.3609	6.2100e-003	1.3671	0.3637	5.7800e-003	0.3695	0.0000	1,002.8987	1,002.8987	0.0317	0.0000	1,003.6899
Unmitigated	0.2406	1.0876	2.4945	0.0109	1.3609	6.2100e-003	1.3671	0.3637	5.7800e-003	0.3695	0.0000	1,002.8987	1,002.8987	0.0317	0.0000	1,003.6899

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
University/College (4Yr)	1,942.56	1,942.56	1942.56	3,634,410	3,634,410
Total	1,942.56	1,942.56	1,942.56	3,634,410	3,634,410

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
University/College (4Yr)	13.00	5.00	5.00	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
University/College (4Yr)	0.616164	0.024428	0.200403	0.101710	0.011605	0.004038	0.012692	0.020318	0.002255	0.001026	0.004075	0.000686	0.000600

CSU San Luis Obispo Master Plan

San Luis Obispo County, Annual

Annual Area + Energy Emissions (Technology Park)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	75.00	1000sqft	0.00	75,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Baseline

Construction Phase -

Woodstoves - .

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	1.72	0.00
tblProjectCharacteristics	OperationalYear	2018	2035

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3799	1.0000e-005	1.2600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4600e-003	2.4600e-003	1.0000e-005	0.0000	2.6200e-003
Energy	8.5800e-003	0.0780	0.0655	4.7000e-004		5.9300e-003	5.9300e-003		5.9300e-003	5.9300e-003	0.0000	521.5139	521.5139	0.0214	5.6400e-003	523.7292
Mobile	0.0854	0.3933	0.9781	4.4600e-003	0.5695	2.4900e-003	0.5720	0.1522	2.3200e-003	0.1545	0.0000	411.3291	411.3291	0.0124	0.0000	411.6383
Waste						0.0000	0.0000		0.0000	0.0000	14.1586	0.0000	14.1586	0.8368	0.0000	35.0774
Water						0.0000	0.0000		0.0000	0.0000	4.2290	29.3017	33.5307	0.4357	0.0105	47.5609
Total	**0.4739**	**0.4713**	**1.0449**	**4.9300e-003**	**0.5695**	**8.4200e-003**	**0.5779**	**0.1522**	**8.2500e-003**	**0.1605**	**18.3876**	**962.1472**	**980.5348**	**1.3062**	**0.0162**	**1,018.0084**

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	436.5854	436.5854	0.0197	4.0800e-003	438.2961
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	436.5854	436.5854	0.0197	4.0800e-003	438.2961
NaturalGas Mitigated	8.5800e-003	0.0780	0.0655	4.7000e-004		5.9300e-003	5.9300e-003		5.9300e-003	5.9300e-003	0.0000	84.9285	84.9285	1.6300e-003	1.5600e-003	85.4332
NaturalGas Unmitigated	8.5800e-003	0.0780	0.0655	4.7000e-004		5.9300e-003	5.9300e-003		5.9300e-003	5.9300e-003	0.0000	84.9285	84.9285	1.6300e-003	1.5600e-003	85.4332

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Office Park	1.5915e+006	8.5800e-003	0.0780	0.0655	4.7000e-004		5.9300e-003	5.9300e-003		5.9300e-003	5.9300e-003	0.0000	84.9285	84.9285	1.6300e-003	1.5600e-003	85.4332
Total		**8.5800e-003**	**0.0780**	**0.0655**	**4.7000e-004**		**5.9300e-003**	**5.9300e-003**		**5.9300e-003**	**5.9300e-003**	**0.0000**	**84.9285**	**84.9285**	**1.6300e-003**	**1.5600e-003**	**85.4332**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Office Park	1.50075e+006	436.5854	0.0197	4.0800e-003	438.2961
Total		**436.5854**	**0.0197**	**4.0800e-003**	**438.2961**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3799	1.0000e-005	1.2600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4600e-003	2.4600e-003	1.0000e-005	0.0000	2.6200e-003
Unmitigated	0.3799	1.0000e-005	1.2600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4600e-003	2.4600e-003	1.0000e-005	0.0000	2.6200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0869					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2929					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4600e-003	2.4600e-003	1.0000e-005	0.0000	2.6200e-003
Total	**0.3799**	**1.0000e-005**	**1.2600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.4600e-003**	**2.4600e-003**	**1.0000e-005**	**0.0000**	**2.6200e-003**

7.0 Water Detail

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Office Park	13.33 / 8.17002	33.5307	0.4357	0.0105	47.5609
Total		**33.5307**	**0.4357**	**0.0105**	**47.5609**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Office Park	69.75	14.1586	0.8368	0.0000	35.0774
Total		**14.1586**	**0.8368**	**0.0000**	**35.0774**

CSU San Luis Obispo Master Plan - San Luis Obispo County, Annual

CSU San Luis Obispo Master Plan

San Luis Obispo County, Annual

Annual Mobile Emissions (Technology Park)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	23.29	1000sqft	0.53	23,292.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Baseline

Construction Phase -

Vehicle Trips - .

Woodstoves - .

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2018	2035
tblVehicleTrips	ST_TR	1.64	11.42
tblVehicleTrips	SU_TR	0.76	11.42

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1180	0.0000	3.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.6000e-004	7.6000e-004	0.0000	0.0000	8.1000e-004
Energy	2.6700e-003	0.0242	0.0204	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	161.9614	161.9614	6.6400e-003	1.7500e-003	162.6494
Mobile	0.0356	0.1641	0.4081	1.8600e-003	0.2376	1.0400e-003	0.2387	0.0635	9.7000e-004	0.0645	0.0000	171.6256	171.6256	5.1600e-003	0.0000	171.7546
Waste						0.0000	0.0000		0.0000	0.0000	4.3968	0.0000	4.3968	0.2598	0.0000	10.8929
Water						0.0000	0.0000		0.0000	0.0000	1.3133	9.0992	10.4124	0.1353	3.2700e-003	14.7692
Total	**0.1563**	**0.1883**	**0.4289**	**2.0100e-003**	**0.2376**	**2.8800e-003**	**0.2405**	**0.0635**	**2.8100e-003**	**0.0663**	**5.7100**	**342.6869**	**348.3969**	**0.4069**	**5.0200e-003**	**360.0669**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0356	0.1641	0.4081	1.8600e-003	0.2376	1.0400e-003	0.2387	0.0635	9.7000e-004	0.0645	0.0000	171.6256	171.6256	5.1600e-003	0.0000	171.7546
Unmitigated	0.0356	0.1641	0.4081	1.8600e-003	0.2376	1.0400e-003	0.2387	0.0635	9.7000e-004	0.0645	0.0000	171.6256	171.6256	5.1600e-003	0.0000	171.7546

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Office Park	265.99	265.99	265.99	634,601	634,601
Total	265.99	265.99	265.99	634,601	634,601

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Office Park	13.00	5.00	5.00	33.00	48.00	19.00	82	15	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Office Park	0.616164	0.024428	0.200403	0.101710	0.011605	0.004038	0.012692	0.020318	0.002255	0.001026	0.004075	0.000686	0.000600

CSU San Luis Obispo Master Plan

San Luis Obispo County, Annual

Annual Area + Energy + Mobile (Residential)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Retail	11.30	User Defined Unit	0.00	11,300.00	0
Apartments Mid Rise	1,470.00	Dwelling Unit	88.00	1,470,000.00	3381

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Slack and Grand site is 22 acres, use proportion for acreage estimate for all residential development. 22 acre x 4 = 88 acres. Total population = 1,470 units x 2.3 residents per unit (based on county average) = 3,381

Construction Phase -

Vehicle Trips - Consistent with traffic study.

Woodstoves - No woodstove.

Area Coating - Low VOC paint.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50

tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblLandUse	BuildingSpaceSquareFeet	0.00	11,300.00
tblLandUse	LandUseSquareFeet	0.00	11,300.00
tblLandUse	LotAcreage	38.68	88.00
tblLandUse	Population	4,204.00	3,381.00
tblProjectCharacteristics	OperationalYear	2018	2024
tblVehicleTrips	CC_TTP	0.00	35.80
tblVehicleTrips	CNW_TTP	0.00	43.20
tblVehicleTrips	CW_TL	13.00	5.00
tblVehicleTrips	CW_TTP	0.00	21.00
tblVehicleTrips	DV_TP	0.00	45.00
tblVehicleTrips	PB_TP	0.00	45.00
tblVehicleTrips	PR_TP	0.00	10.00
tblVehicleTrips	ST_TR	6.39	7.50
tblVehicleTrips	ST_TR	0.00	46.00
tblVehicleTrips	SU_TR	5.86	7.50
tblVehicleTrips	SU_TR	0.00	46.00
tblVehicleTrips	WD_TR	6.65	7.50
tblVehicleTrips	WD_TR	0.00	46.00
tblWoodstoves	WoodstoveDayYear	60.00	0.00
tblWoodstoves	WoodstoveWoodMass	2,016.00	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.8492	0.2305	20.0025	1.0600e-003		0.1109	0.1109		0.1109	0.1109	0.0000	32.6875	32.6875	0.0314	0.0000	33.4716
Energy	0.0877	0.7498	0.3191	4.7900e-003		0.0606	0.0606		0.0606	0.0606	0.0000	2,754.6175	2,754.6175	0.1019	0.0336	2,767.1686
Mobile	2.9387	11.7539	33.3519	0.1073	10.5927	0.0965	10.6892	2.8345	0.0902	2.9246	0.0000	9,835.0392	9,835.0392	0.3557	0.0000	9,843.9306
Waste						0.0000	0.0000		0.0000	0.0000	137.2625	0.0000	137.2625	8.1120	0.0000	340.0620
Water						0.0000	0.0000		0.0000	0.0000	30.3854	212.2429	242.6283	3.1305	0.0757	343.4417
Total	**9.8756**	**12.7341**	**53.6734**	**0.1131**	**10.5927**	**0.2680**	**10.8607**	**2.8345**	**0.2617**	**3.0961**	**167.6479**	**12,834.5871**	**13,002.2350**	**11.7314**	**0.1093**	**13,328.0744**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.9387	11.7539	33.3519	0.1073	10.5927	0.0965	10.6892	2.8345	0.0902	2.9246	0.0000	9,835.0392	9,835.0392	0.3557	0.0000	9,843.9306
Unmitigated	2.9387	11.7539	33.3519	0.1073	10.5927	0.0965	10.6892	2.8345	0.0902	2.9246	0.0000	9,835.0392	9,835.0392	0.3557	0.0000	9,843.9306

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	11,025.00	11,025.00	11025.00	28,020,668	28,020,668
User Defined Retail	519.80	519.80	519.80	209,547	209,547
Total	11,544.80	11,544.80	11,544.80	28,230,215	28,230,215

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
User Defined Retail	5.00	5.00	5.00	21.00	35.80	43.20	10	45	45

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Retail	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Apartments Mid Rise	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,886.3066	1,886.3066	0.0853	0.0177	1,893.6977
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,886.3066	1,886.3066	0.0853	0.0177	1,893.6977
NaturalGas Mitigated	0.0877	0.7498	0.3191	4.7900e-003		0.0606	0.0606		0.0606	0.0606	0.0000	868.3110	868.3110	0.0166	0.0159	873.4709
NaturalGas Unmitigated	0.0877	0.7498	0.3191	4.7900e-003		0.0606	0.0606		0.0606	0.0606	0.0000	868.3110	868.3110	0.0166	0.0159	873.4709

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	6.48413e+006	1,886.3066	0.0853	0.0177	1,893.6977
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000
Total		**1,886.3066**	**0.0853**	**0.0177**	**1,893.6977**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.8492	0.2305	20.0025	1.0600e-003		0.1109	0.1109		0.1109	0.1109	0.0000	32.6875	32.6875	0.0314	0.0000	33.4716
Unmitigated	6.8492	0.2305	20.0025	1.0600e-003		0.1109	0.1109		0.1109	0.1109	0.0000	32.6875	32.6875	0.0314	0.0000	33.4716

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4625					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.7852					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6014	0.2305	20.0025	1.0600e-003		0.1109	0.1109		0.1109	0.1109	0.0000	32.6875	32.6875	0.0314	0.0000	33.4716
Total	**6.8492**	**0.2305**	**20.0025**	**1.0600e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**32.6875**	**32.6875**	**0.0314**	**0.0000**	**33.4716**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	242.6283	3.1305	0.0757	343.4417
Unmitigated	242.6283	3.1305	0.0757	343.4417

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	95.7764 / 60.3808	242.6283	3.1305	0.0757	343.4417
User Defined Retail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**242.6283**	**3.1305**	**0.0757**	**343.4417**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	137.2625	8.1120	0.0000	340.0620
Unmitigated	137.2625	8.1120	0.0000	340.0620

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	676.2	137.2625	8.1120	0.0000	340.0620
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000
Total		**137.2625**	**8.1120**	**0.0000**	**340.0620**

Air Quality
Master Plan Construction

CSU San Luis Obispo Master Plan - San Luis Obispo County, Annual

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San Luis Obispo County, Annual

Master Plan Annual Construction

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	22,500.00	Student	94.94	851,500.00	0
Apartments Mid Rise	1,253.00	Dwelling Unit	32.97	1,253,000.00	3466
User Defined Retail	8.50	User Defined Unit	0.00	8,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project definition.

Construction Phase - Assumed construction phasing with multiple buildings constructed simultaneously.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading - Based on acreage calculated under Land Use input in the previous step.

Trips and VMT -

Architectural Coating - Low VOC paint.

Woodstoves - No woodstove.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblConstructionPhase	NumDays	200.00	22.00
tblConstructionPhase	NumDays	120.00	22.00
tblConstructionPhase	NumDays	310.00	260.00
tblConstructionPhase	NumDays	3,100.00	521.00
tblConstructionPhase	NumDays	220.00	260.00
tblConstructionPhase	NumDays	220.00	262.00
tblConstructionPhase	PhaseEndDate	1/2/2022	2/1/2022
tblConstructionPhase	PhaseEndDate	1/2/2022	4/2/2022
tblConstructionPhase	PhaseEndDate	1/2/2022	4/2/2023
tblConstructionPhase	PhaseEndDate	1/2/2022	12/1/2024
tblConstructionPhase	PhaseEndDate	1/2/2022	12/1/2024
tblConstructionPhase	PhaseEndDate	1/2/2022	12/31/2024
tblConstructionPhase	PhaseStartDate	1/3/2022	3/3/2022
tblConstructionPhase	PhaseStartDate	1/3/2022	4/2/2022
tblConstructionPhase	PhaseStartDate	1/3/2022	12/2/2022
tblConstructionPhase	PhaseStartDate	1/3/2022	12/2/2023
tblConstructionPhase	PhaseStartDate	1/3/2022	1/1/2024
tblGrading	AcresOfGrading	650.00	128.00
tblLandUse	LandUseSquareFeet	4,135,443.04	851,500.00

tblLandUse	LandUseSquareFeet	0.00	8,500.00
tblLandUse	Population	3,584.00	3,466.00
tblProjectCharacteristics	OperationalYear	2018	2024
tblWoodstoves	WoodstoveDayYear	60.00	0.00
tblWoodstoves	WoodstoveWoodMass	2,016.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.6208	5.5160	4.8718	0.0124	2.2128	0.2039	2.4167	0.8424	0.1880	1.0304	0.0000	1,110.5401	1,110.5401	0.2187	0.0000	1,116.0083
2023	2.3274	12.5089	18.4616	0.0658	14.9864	0.1828	15.1693	4.0250	0.1706	4.1955	0.0000	6,064.3711	6,064.3711	0.3347	0.0000	6,072.7388
2024	8.2062	11.4871	18.6040	0.0654	14.2493	0.1775	14.4267	3.6193	0.1659	3.7851	0.0000	6,018.9909	6,018.9909	0.3324	0.0000	6,027.2999
Maximum	**8.2062**	**12.5089**	**18.6040**	**0.0658**	**14.9864**	**0.2039**	**15.1693**	**4.0250**	**0.1880**	**4.1955**	**0.0000**	**6,064.3711**	**6,064.3711**	**0.3347**	**0.0000**	**6,072.7388**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-3-2022	4-2-2022	0.7231	0.7231
2	4-3-2022	7-2-2022	1.3845	1.3845
3	7-3-2022	10-2-2022	1.3997	1.3997
4	10-3-2022	1-2-2023	2.7780	2.7780
5	1-3-2023	4-2-2023	4.5908	4.5908
6	4-3-2023	7-2-2023	3.3146	3.3146
7	7-3-2023	10-2-2023	3.3532	3.3532
8	10-3-2023	1-2-2024	3.6086	3.6086
9	1-3-2024	4-2-2024	5.2269	5.2269
10	4-3-2024	7-2-2024	5.1272	5.1272
11	7-3-2024	9-30-2024	5.0708	5.0708
		Highest	5.2269	5.2269

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/3/2022	2/1/2022	5	22	
2	Site Preparation	Site Preparation	3/3/2022	4/2/2022	5	22	
3	Grading	Grading	4/2/2022	4/2/2023	5	260	
4	Building Construction	Building Construction	12/2/2022	12/1/2024	5	521	
5	Paving	Paving	12/2/2023	12/1/2024	5	260	
6	Architectural Coating	Architectural Coating	1/1/2024	12/31/2024	5	262	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 128

Acres of Paving: 0

Residential Indoor: 2,537,325; Residential Outdoor: 845,775; Non-Residential Indoor: 1,290,000; Non-Residential Outdoor: 430,000;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Air Compressors	0		78	0.48
Building Construction	Excavators	0		158	0.38
Building Construction	Concrete/Industrial Saws	0		81	0.73
Building Construction	Excavators	0		158	0.38
Architectural Coating	Cranes	0		231	0.29
Architectural Coating	Forklifts	0		89	0.20
Architectural Coating	Generator Sets	0		84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Building Construction	Rubber Tired Dozers	0		247	0.40
Building Construction	Rubber Tired Dozers	0		247	0.40
Architectural Coating	Tractors/Loaders/Backhoes	0		97	0.37

Building Construction	Graders	0		187	0.41
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Architectural Coating	Tractors/Loaders/Backhoes	0		97	0.37
Architectural Coating	Rubber Tired Dozers	0		247	0.40
Building Construction	Scrapers	0		367	0.48
Architectural Coating	Welders	0		46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	1,263.00	275.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	253.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,263.00	275.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,263.00	275.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	253.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0290	0.2829	0.2265	4.3000e-004		0.0137	0.0137		0.0127	0.0127	0.0000	37.3893	37.3893	0.0105	0.0000	37.6518
Total	**0.0290**	**0.2829**	**0.2265**	**4.3000e-004**		**0.0137**	**0.0137**		**0.0127**	**0.0127**	**0.0000**	**37.3893**	**37.3893**	**0.0105**	**0.0000**	**37.6518**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	5.3000e-004	4.7100e-003	1.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2378	1.2378	3.0000e-005	0.0000	1.2386
Total	**6.3000e-004**	**5.3000e-004**	**4.7100e-003**	**1.0000e-005**	**1.5900e-003**	**1.0000e-005**	**1.6000e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.2378**	**1.2378**	**3.0000e-005**	**0.0000**	**1.2386**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0349	0.3639	0.2167	4.2000e-004		0.0177	0.0177		0.0163	0.0163	0.0000	36.7833	36.7833	0.0119	0.0000	37.0807
Total	**0.0349**	**0.3639**	**0.2167**	**4.2000e-004**	**0.1987**	**0.0177**	**0.2165**	**0.1092**	**0.0163**	**0.1256**	**0.0000**	**36.7833**	**36.7833**	**0.0119**	**0.0000**	**37.0807**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	6.3000e-004	5.6500e-003	2.0000e-005	1.9100e-003	1.0000e-005	1.9200e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.4853	1.4853	4.0000e-005	0.0000	1.4863
Total	**7.6000e-004**	**6.3000e-004**	**5.6500e-003**	**2.0000e-005**	**1.9100e-003**	**1.0000e-005**	**1.9200e-003**	**5.1000e-004**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**1.4853**	**1.4853**	**4.0000e-005**	**0.0000**	**1.4863**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8507	0.0000	0.8507	0.4377	0.0000	0.4377	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3534	3.7872	2.8316	6.0500e-003		0.1594	0.1594		0.1467	0.1467	0.0000	531.7123	531.7123	0.1720	0.0000	536.0115
Total	**0.3534**	**3.7872**	**2.8316**	**6.0500e-003**	**0.8507**	**0.1594**	**1.0101**	**0.4377**	**0.1467**	**0.5843**	**0.0000**	**531.7123**	**531.7123**	**0.1720**	**0.0000**	**536.0115**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4600e-003	6.2300e-003	0.0557	1.6000e-004	0.0188	1.2000e-004	0.0189	4.9900e-003	1.1000e-004	5.1000e-003	0.0000	14.6280	14.6280	4.1000e-004	0.0000	14.6382
Total	**7.4600e-003**	**6.2300e-003**	**0.0557**	**1.6000e-004**	**0.0188**	**1.2000e-004**	**0.0189**	**4.9900e-003**	**1.1000e-004**	**5.1000e-003**	**0.0000**	**14.6280**	**14.6280**	**4.1000e-004**	**0.0000**	**14.6382**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8507	0.0000	0.8507	0.4377	0.0000	0.4377	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1080	1.1218	0.9117	2.0200e-003		0.0463	0.0463		0.0426	0.0426	0.0000	177.2394	177.2394	0.0573	0.0000	178.6725
Total	**0.1080**	**1.1218**	**0.9117**	**2.0200e-003**	**0.8507**	**0.0463**	**0.8970**	**0.4377**	**0.0426**	**0.4803**	**0.0000**	**177.2394**	**177.2394**	**0.0573**	**0.0000**	**178.6725**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3400e-003	1.8700e-003	0.0170	5.0000e-005	6.2600e-003	4.0000e-005	6.3000e-003	1.6600e-003	3.0000e-005	1.7000e-003	0.0000	4.6931	4.6931	1.2000e-004	0.0000	4.6962
Total	**2.3400e-003**	**1.8700e-003**	**0.0170**	**5.0000e-005**	**6.2600e-003**	**4.0000e-005**	**6.3000e-003**	**1.6600e-003**	**3.0000e-005**	**1.7000e-003**	**0.0000**	**4.6931**	**4.6931**	**1.2000e-004**	**0.0000**	**4.6962**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0179	0.1640	0.1718	2.8000e-004		8.4900e-003	8.4900e-003		7.9900e-003	7.9900e-003	0.0000	24.3312	24.3312	5.8300e-003	0.0000	24.4769
Total	**0.0179**	**0.1640**	**0.1718**	**2.8000e-004**		**8.4900e-003**	**8.4900e-003**		**7.9900e-003**	**7.9900e-003**	**0.0000**	**24.3312**	**24.3312**	**5.8300e-003**	**0.0000**	**24.4769**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0244	0.7835	0.2230	1.7000e-003	0.0949	2.0700e-003	0.0970	0.0250	1.9800e-003	0.0270	0.0000	164.5291	164.5291	9.6500e-003	0.0000	164.7703
Worker	0.1522	0.1271	1.1362	3.3000e-003	1.0462	2.3700e-003	1.0486	0.2646	2.1800e-003	0.2668	0.0000	298.4440	298.4440	8.4000e-003	0.0000	298.6539
Total	**0.1767**	**0.9106**	**1.3592**	**5.0000e-003**	**1.1411**	**4.4400e-003**	**1.1455**	**0.2896**	**4.1600e-003**	**0.2937**	**0.0000**	**462.9730**	**462.9730**	**0.0181**	**0.0000**	**463.4242**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383
Total	**0.2045**	**1.8700**	**2.1117**	**3.5000e-003**		**0.0910**	**0.0910**		**0.0856**	**0.0856**	**0.0000**	**301.3462**	**301.3462**	**0.0717**	**0.0000**	**303.1383**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2309	7.9985	2.4260	0.0207	1.1751	0.0119	1.1869	0.3096	0.0114	0.3210	0.0000	2,003.5443	2,003.5443	0.1063	0.0000	2,006.2005
Worker	1.7709	1.4144	12.8456	0.0393	12.9529	0.0286	12.9815	3.2756	0.0263	3.3019	0.0000	3,556.4383	3,556.4383	0.0928	0.0000	3,558.7588
Total	**2.0018**	**9.4129**	**15.2715**	**0.0600**	**14.1280**	**0.0404**	**14.1684**	**3.5852**	**0.0377**	**3.6229**	**0.0000**	**5,559.9825**	**5,559.9825**	**0.1991**	**0.0000**	**5,564.9593**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1766	1.6133	1.9400	3.2300e-003		0.0736	0.0736		0.0692	0.0692	0.0000	278.2189	278.2189	0.0658	0.0000	279.8637
Total	**0.1766**	**1.6133**	**1.9400**	**3.2300e-003**		**0.0736**	**0.0736**		**0.0692**	**0.0692**	**0.0000**	**278.2189**	**278.2189**	**0.0658**	**0.0000**	**279.8637**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2020	7.2167	2.1050	0.0190	1.0848	0.0101	1.0949	0.2859	9.6600e-003	0.2955	0.0000	1,839.2858	1,839.2858	0.0986	0.0000	1,841.7501
Worker	1.5413	1.1781	10.9301	0.0349	11.9566	0.0257	11.9823	3.0236	0.0237	3.0473	0.0000	3,155.2392	3,155.2392	0.0769	0.0000	3,157.1613
Total	**1.7434**	**8.3948**	**13.0350**	**0.0539**	**13.0413**	**0.0358**	**13.0771**	**3.3095**	**0.0334**	**3.3429**	**0.0000**	**4,994.5250**	**4,994.5250**	**0.1755**	**0.0000**	**4,998.9113**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0103**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**	**0.0000**	**20.0269**	**20.0269**	**6.4800e-003**	**0.0000**	**20.1888**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	4.3000e-004	3.9100e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.0830	1.0830	3.0000e-005	0.0000	1.0837
Total	**5.4000e-004**	**4.3000e-004**	**3.9100e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.0830**	**1.0830**	**3.0000e-005**	**0.0000**	**1.0837**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1186	1.1430	1.7551	2.7400e-003		0.0562	0.0562		0.0517	0.0517	0.0000	240.3184	240.3184	0.0777	0.0000	242.2615
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1186**	**1.1430**	**1.7551**	**2.7400e-003**		**0.0562**	**0.0562**		**0.0517**	**0.0517**	**0.0000**	**240.3184**	**240.3184**	**0.0777**	**0.0000**	**242.2615**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-003	4.6600e-003	0.0433	1.4000e-004	0.0173	1.0000e-004	0.0174	4.6100e-003	9.0000e-005	4.7000e-003	0.0000	12.4911	12.4911	3.0000e-004	0.0000	12.4987
Total	**6.1000e-003**	**4.6600e-003**	**0.0433**	**1.4000e-004**	**0.0173**	**1.0000e-004**	**0.0174**	**4.6100e-003**	**9.0000e-005**	**4.7000e-003**	**0.0000**	**12.4911**	**12.4911**	**3.0000e-004**	**0.0000**	**12.4987**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.9132					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0237	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4947
Total	**5.9369**	**0.1597**	**0.2371**	**3.9000e-004**		**7.9800e-003**	**7.9800e-003**		**7.9800e-003**	**7.9800e-003**	**0.0000**	**33.4476**	**33.4476**	**1.8800e-003**	**0.0000**	**33.4947**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2247	0.1718	1.5935	5.0900e-003	1.1906	3.7500e-003	1.1944	0.3052	3.4600e-003	0.3087	0.0000	459.9899	459.9899	0.0112	0.0000	460.2701
Total	**0.2247**	**0.1718**	**1.5935**	**5.0900e-003**	**1.1906**	**3.7500e-003**	**1.1944**	**0.3052**	**3.4600e-003**	**0.3087**	**0.0000**	**459.9899**	**459.9899**	**0.0112**	**0.0000**	**460.2701**

Air Quality
Master Plan Mitigation

CSU San Luis Obispo Master Plan

San Luis Obispo County, Winter

Daily Area + Energy Mitigated (Campus)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	22,500.00	Student	0.00	1,040,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Baseline

Construction Phase -

Woodstoves - .

Area Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	BuildingSpaceSquareFeet	4,135,443.04	1,040,000.00
tblLandUse	LandUseSquareFeet	4,135,443.04	1,040,000.00

tblLandUse	LotAcreage	94.94	0.00
tblProjectCharacteristics	OperationalYear	2018	2035

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	29.0682	0.0205	2.2842	1.7000e-004		8.1000e-003	8.1000e-003		8.1000e-003	8.1000e-003		4.9242	4.9242	0.0127		5.2413
Energy	0.7445	6.7685	5.6856	0.0406		0.5144	0.5144		0.5144	0.5144		8,122.2240	8,122.2240	0.1557	0.1489	8,170.4903
Mobile	26.5969	117.7535	276.7377	1.1723	152.0430	0.6780	152.7210	40.5488	0.6305	41.1793		119,186.2932	119,186.2932	3.8725		119,283.1062
Total	**56.4097**	**124.5425**	**284.7074**	**1.2131**	**152.0430**	**1.2005**	**153.2435**	**40.5488**	**1.1530**	**41.7018**		**127,313.4414**	**127,313.4414**	**4.0409**	**0.1489**	**127,458.8378**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	27.4042	0.0205	2.2842	1.7000e-004		8.1000e-003	8.1000e-003		8.1000e-003	8.1000e-003		4.9242	4.9242	0.0127		5.2413
Energy	0.6481	5.8915	4.9489	0.0354		0.4478	0.4478		0.4478	0.4478		7,069.8211	7,069.8211	0.1355	0.1296	7,111.8335
Mobile	26.5969	117.7535	276.7377	1.1723	152.0430	0.6780	152.7210	40.5488	0.6305	41.1793		119,186.2932	119,186.2932	3.8725		119,283.1062
Total	**54.6492**	**123.6655**	**283.9707**	**1.2078**	**152.0430**	**1.1338**	**153.1769**	**40.5488**	**1.0864**	**41.6352**		**126,261.0385**	**126,261.0385**	**4.0207**	**0.1296**	**126,400.1810**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

Percent Reduction	**3.12**	**0.70**	**0.26**	**0.43**	**0.00**	**5.55**	**0.04**	**0.00**	**5.78**	**0.16**	**0.00**	**0.83**	**0.83**	**0.50**	**12.96**	**0.83**

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.6481	5.8915	4.9489	0.0354		0.4478	0.4478		0.4478	0.4478		7,069.8211	7,069.8211	0.1355	0.1296	7,111.8335
NaturalGas Unmitigated	0.7445	6.7685	5.6856	0.0406		0.5144	0.5144		0.5144	0.5144		8,122.2240	8,122.2240	0.1557	0.1489	8,170.4903

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
University/College (4Yr)	60.0935	0.6481	5.8915	4.9489	0.0354		0.4478	0.4478		0.4478	0.4478		7,069.8211	7,069.8211	0.1355	0.1296	7,111.8335
Total		**0.6481**	**5.8915**	**4.9489**	**0.0354**		**0.4478**	**0.4478**		**0.4478**	**0.4478**		**7,069.8211**	**7,069.8211**	**0.1355**	**0.1296**	**7,111.8335**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	27.4042	0.0205	2.2842	1.7000e-004		8.1000e-003	8.1000e-003		8.1000e-003	8.1000e-003		4.9242	4.9242	0.0127		5.2413
Unmitigated	29.0682	0.0205	2.2842	1.7000e-004		8.1000e-003	8.1000e-003		8.1000e-003	8.1000e-003		4.9242	4.9242	0.0127		5.2413

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.6033					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	20.5920					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.2089	0.0205	2.2842	1.7000e-004		8.1000e-003	8.1000e-003		8.1000e-003	8.1000e-003		4.9242	4.9242	0.0127		5.2413
Total	**27.4042**	**0.0205**	**2.2842**	**1.7000e-004**		**8.1000e-003**	**8.1000e-003**		**8.1000e-003**	**8.1000e-003**		**4.9242**	**4.9242**	**0.0127**		**5.2413**

CSU San Luis Obispo Master Plan

San Luis Obispo County, Winter

Daily Area + Energy Mitigated (Technology Park)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	75.00	1000sqft	0.00	75,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Baseline

Construction Phase -

Woodstoves - .

Area Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	LotAcreage	1.72	0.00
tblProjectCharacteristics	OperationalYear	2018	2035

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0819	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175
Energy	0.0470	0.4275	0.3591	2.5600e-003		0.0325	0.0325		0.0325	0.0325		512.9734	512.9734	9.8300e-003	9.4000e-003	516.0218
Mobile	0.6396	2.8898	7.3318	0.0327	4.3160	0.0184	4.3345	1.1511	0.0172	1.1682		3,318.7931	3,318.7931	0.1023		3,321.3515
Total	**2.7685**	**3.3174**	**7.6985**	**0.0352**	**4.3160**	**0.0510**	**4.3670**	**1.1511**	**0.0497**	**1.2007**		**3,831.7829**	**3,831.7829**	**0.1122**	**9.4000e-003**	**3,837.3907**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.9619	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175
Energy	0.0400	0.3636	0.3054	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.3175	436.3175	8.3600e-003	8.0000e-003	438.9103
Mobile	0.6396	2.8898	7.3318	0.0327	4.3160	0.0184	4.3345	1.1511	0.0172	1.1682		3,318.7931	3,318.7931	0.1023		3,321.3515
Total	**2.6415**	**3.2535**	**7.6449**	**0.0348**	**4.3160**	**0.0461**	**4.3621**	**1.1511**	**0.0448**	**1.1959**		**3,755.1270**	**3,755.1270**	**0.1107**	**8.0000e-003**	**3,760.2793**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**4.59**	**1.93**	**0.70**	**1.08**	**0.00**	**9.54**	**0.11**	**0.00**	**9.78**	**0.40**	**0.00**	**2.00**	**2.00**	**1.31**	**14.89**	**2.01**

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0400	0.3636	0.3054	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.3175	436.3175	8.3600e-003	8.0000e-003	438.9103
NaturalGas Unmitigated	0.0470	0.4275	0.3591	2.5600e-003		0.0325	0.0325		0.0325	0.0325		512.9734	512.9734	9.8300e-003	9.4000e-003	516.0218

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Office Park	3.7087	0.0400	0.3636	0.3054	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.3175	436.3175	8.3600e-003	8.0000e-003	438.9103
Total		**0.0400**	**0.3636**	**0.3054**	**2.1800e-003**		**0.0276**	**0.0276**		**0.0276**	**0.0276**		**436.3175**	**436.3175**	**8.3600e-003**	**8.0000e-003**	**438.9103**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9619	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175
Unmitigated	2.0819	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4762					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4850					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175
Total	**1.9619**	**7.0000e-005**	**7.6100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0164**	**0.0164**	**4.0000e-005**		**0.0175**

CSU San Luis Obispo Master Plan

San Luis Obispo County, Winter

Daily Area + Energy + Mobile Mitigated (Residential)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Retail	11.30	User Defined Unit	0.00	11,300.00	0
Apartments Mid Rise	1,470.00	Dwelling Unit	88.00	1,470,000.00	3381

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Slack and Grand site is 22 acres, use proportion for acreage estimate for all residential development. 22 acre x 4 = 88 acres. Total population = 1,470 units x 2.3 residents per unit (based on county average) = 3,381

Construction Phase -

Vehicle Trips - Consistent with traffic study.

Woodstoves - No woodstove.

Area Coating - Low VOC paint.

Area Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value

tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	BuildingSpaceSquareFeet	0.00	11,300.00
tblLandUse	LandUseSquareFeet	0.00	11,300.00
tblLandUse	LotAcreage	38.68	88.00
tblLandUse	Population	4,204.00	3,381.00
tblProjectCharacteristics	OperationalYear	2018	2024
tblVehicleTrips	CC_TTP	0.00	35.80
tblVehicleTrips	CNW_TTP	0.00	43.20
tblVehicleTrips	CW_TL	13.00	5.00
tblVehicleTrips	CW_TTP	0.00	21.00
tblVehicleTrips	DV_TP	0.00	45.00
tblVehicleTrips	PB_TP	0.00	45.00
tblVehicleTrips	PR_TP	0.00	10.00
tblVehicleTrips	ST_TR	6.39	7.50
tblVehicleTrips	ST_TR	0.00	46.00
tblVehicleTrips	SU_TR	5.86	7.50
tblVehicleTrips	SU_TR	0.00	46.00
tblVehicleTrips	WD_TR	6.65	7.50
tblVehicleTrips	WD_TR	0.00	46.00
tblWoodstoves	WoodstoveDayYear	60.00	0.00
tblWoodstoves	WoodstoveWoodMass	2,016.00	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	37.8793	1.3968	121.2270	6.4000e-003		0.6719	0.6719		0.6719	0.6719	0.0000	218.3744	218.3744	0.2095	0.0000	223.6127
Energy	0.4808	4.1083	1.7482	0.0262		0.3322	0.3322		0.3322	0.3322		5,244.6520	5,244.6520	0.1005	0.0962	5,275.8184
Mobile	16.4685	64.5068	186.4706	0.5851	59.7470	0.5321	60.2791	15.9533	0.4973	16.4506		59,109.7627	59,109.7627	2.1794		59,164.2483
Total	**54.8285**	**70.0119**	**309.4458**	**0.6177**	**59.7470**	**1.5362**	**61.2831**	**15.9533**	**1.5014**	**17.4546**	**0.0000**	**64,572.7891**	**64,572.7891**	**2.4895**	**0.0962**	**64,663.6793**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	35.5092	1.3968	121.227	6.40E-03		0.6719	0.6719		0.6719	0.6719	0	218.3744	218.3744	0.2095	0	223.6127
Energy	0.4292	3.6677	1.5607	0.0234		0.2965	0.2965		0.2965	0.2965		4,682.19	4,682.19	0.0897	0.0858	4,710.01
Mobile	16.4685	64.5068	186.4706	0.5851	59.747	0.5321	60.2791	15.9533	0.4973	16.4506		59,109.76	59,109.76	2.1794		59,164.25
Total	**52.4069**	**69.5713**	**309.2583**	**0.6149**	**59.7470**	**1.5005**	**61.2475**	**15.9533**	**1.4658**	**17.4190**	**0.0000**	**64,010.3226**	**64,010.3226**	**2.4787**	**0.0858**	**64,097.8703**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**4.42**	**0.63**	**0.06**	**0.45**	**0.00**	**2.32**	**0.06**	**0.00**	**2.37**	**0.20**	**0.00**	**0.87**	**0.87**	**0.43**	**10.72**	**0.88**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	16.4685	64.5068	186.4706	0.5851	59.7470	0.5321	60.2791	15.9533	0.4973	16.4506		59,109.7627	59,109.7627	2.1794		59,164.2483
Unmitigated	16.4685	64.5068	186.4706	0.5851	59.7470	0.5321	60.2791	15.9533	0.4973	16.4506		59,109.7627	59,109.7627	2.1794		59,164.2483

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.4292	3.6677	1.5607	0.0234		0.2965	0.2965		0.2965	0.2965		4,682.1855	4,682.1855	0.0897	0.0858	4,710.0094
NaturalGas Unmitigated	0.4808	4.1083	1.7482	0.0262		0.3322	0.3322		0.3322	0.3322		5,244.6520	5,244.6520	0.1005	0.0962	5,275.8184

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	39.7986	0.4292	3.6677	1.5607	0.0234		0.2965	0.2965		0.2965	0.2965		4,682.1855	4,682.1855	0.0897	0.0858	4,710.0094
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.4292**	**3.6677**	**1.5607**	**0.0234**		**0.2965**	**0.2965**		**0.2965**	**0.2965**		**4,682.1855**	**4,682.1855**	**0.0897**	**0.0858**	**4,710.0094**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	35.5092	1.3968	121.2270	6.4000e-003		0.6719	0.6719		0.6719	0.6719	0.0000	218.3744	218.3744	0.2095	0.0000	223.6127
Unmitigated	37.8793	1.3968	121.2270	6.4000e-003		0.6719	0.6719		0.6719	0.6719	0.0000	218.3744	218.3744	0.2095	0.0000	223.6127

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	29.3297					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.6451	1.3968	121.2270	6.4000e-003		0.6719	0.6719		0.6719	0.6719		218.3744	218.3744	0.2095		223.6127
Total	**35.5092**	**1.3968**	**121.2270**	**6.4000e-003**		**0.6719**	**0.6719**		**0.6719**	**0.6719**	**0.0000**	**218.3744**	**218.3744**	**0.2095**	**0.0000**	**223.6127**

CSU San Luis Obispo Master Plan - San Luis Obispo County, Annual

CSU San Luis Obispo Master Plan

San Luis Obispo County, Annual

Annual Area + Energy Mitigated (Campus)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	22,500.00	Student	0.00	1,040,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Baseline

Construction Phase -

Woodstoves - .

Area Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	BuildingSpaceSquareFeet	4,135,443.04	1,040,000.00
tblLandUse	LandUseSquareFeet	4,135,443.04	1,040,000.00

tblLandUse	LotAcreage	94.94	0.00
tblProjectCharacteristics	OperationalYear	2018	2035

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.3013	3.3900e-003	0.3769	3.0000e-005		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	0.7371	0.7371	1.9000e-003	0.0000	0.7846
Energy	0.1359	1.2353	1.0376	7.4100e-003		0.0939	0.0939		0.0939	0.0939	0.0000	3,804.4399	3,804.4399	0.1370	0.0477	3,822.0688
Mobile	3.9212	17.7254	40.6561	0.1771	22.1808	0.1012	22.2821	5.9280	0.0942	6.0222	0.0000	16,345.6928	16,345.6928	0.5158	0.0000	16,358.5883
Waste						0.0000	0.0000		0.0000	0.0000	833.5316	0.0000	833.5316	49.2603	0.0000	2,065.0394
Water						0.0000	0.0000		0.0000	0.0000	15.2836	152.5538	167.8374	1.5767	0.0385	218.7252
Total	**9.3584**	**18.9640**	**42.0706**	**0.1846**	**22.1808**	**0.1965**	**22.3773**	**5.9280**	**0.1894**	**6.1174**	**848.8153**	**20,303.4236**	**21,152.2389**	**51.4917**	**0.0862**	**22,465.2062**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.9976	3.3900e-003	0.3769	3.0000e-005		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	0.7371	0.7371	1.9000e-003	0.0000	0.7846
Energy	0.1183	1.0752	0.9032	6.4500e-003		0.0817	0.0817		0.0817	0.0817	0.0000	3,499.9559	3,499.9559	0.1278	0.0433	3,516.0391
Mobile	3.9212	17.7254	40.6561	0.1771	22.1808	0.1012	22.2821	5.9280	0.0942	6.0222	0.0000	16,345.6928	16,345.6928	0.5158	0.0000	16,358.5883
Waste						0.0000	0.0000		0.0000	0.0000	833.5316	0.0000	833.5316	49.2603	0.0000	2,065.0394

Water						0.0000	0.0000		0.0000	0.0000	15.2836	152.5538	167.8374	1.5767	0.0385	218.7252
Total	**9.0371**	**18.8040**	**41.9361**	**0.1836**	**22.1808**	**0.1843**	**22.3651**	**5.9280**	**0.1772**	**6.1052**	**848.8153**	**19,998.9396**	**20,847.7549**	**51.4825**	**0.0817**	**22,159.1764**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.43**	**0.84**	**0.32**	**0.52**	**0.00**	**6.19**	**0.05**	**0.00**	**6.42**	**0.20**	**0.00**	**1.50**	**1.44**	**0.02**	**5.12**	**1.36**

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,329.4678	2,329.4678	0.1053	0.0218	2,338.5953
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,459.7146	2,459.7146	0.1112	0.0230	2,469.3525
NaturalGas Mitigated	0.1183	1.0752	0.9032	6.4500e-003		0.0817	0.0817		0.0817	0.0817	0.0000	1,170.4882	1,170.4882	0.0224	0.0215	1,177.4438
NaturalGas Unmitigated	0.1359	1.2353	1.0376	7.4100e-003		0.0939	0.0939		0.0939	0.0939	0.0000	1,344.7253	1,344.7253	0.0258	0.0247	1,352.7163

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
University/College (4Yr)	2.19341e+007	0.1183	1.0752	0.9032	6.4500e-003		0.0817	0.0817		0.0817	0.0817	0.0000	1,170.4882	1,170.4882	0.0224	0.0215	1,177.4438

Total		**0.1183**	**1.0752**	**0.9032**	**6.4500e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**1,170.4882**	**1,170.4882**	**0.0224**	**0.0215**	**1,177.4438**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
University/College (4Yr)	8.00748e+006	2,329.4678	0.1053	0.0218	2,338.5953
Total		**2,329.4678**	**0.1053**	**0.0218**	**2,338.5953**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.9976	3.3900e-003	0.3769	3.0000e-005		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	0.7371	0.7371	1.9000e-003	0.0000	0.7846
Unmitigated	5.3013	3.3900e-003	0.3769	3.0000e-005		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	0.7371	0.7371	1.9000e-003	0.0000	0.7846

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2051					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.7580					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0345	3.3900e-003	0.3769	3.0000e-005		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	0.7371	0.7371	1.9000e-003	0.0000	0.7846
Total	**4.9976**	**3.3900e-003**	**0.3769**	**3.0000e-005**		**1.3400e-003**	**1.3400e-003**		**1.3400e-003**	**1.3400e-003**	**0.0000**	**0.7371**	**0.7371**	**1.9000e-003**	**0.0000**	**0.7846**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	167.8374	1.5767	0.0385	218.7252
Unmitigated	167.8374	1.5767	0.0385	218.7252

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
University/College (4Yr)	48.1748 / 75.3503	167.8374	1.5767	0.0385	218.7252
Total		**167.8374**	**1.5767**	**0.0385**	**218.7252**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	833.5316	49.2603	0.0000	2,065.0394
Unmitigated	833.5316	49.2603	0.0000	2,065.0394

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
University/College (4Yr)	4106.25	833.5316	49.2603	0.0000	2,065.0394
Total		**833.5316**	**49.2603**	**0.0000**	**2,065.0394**

CSU San Luis Obispo Master Plan - San Luis Obispo County, Annual

CSU San Luis Obispo Master Plan

San Luis Obispo County, Annual

Annual Area + Energy Mitigated (Technology Park)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	75.00	1000sqft	0.00	75,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Baseline

Construction Phase -

Woodstoves - .

Area Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	LotAcreage	1.72	0.00
tblProjectCharacteristics	OperationalYear	2018	2035

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3799	1.0000e-005	1.2600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4600e-003	2.4600e-003	1.0000e-005	0.0000	2.6200e-003
Energy	8.5800e-003	0.0780	0.0655	4.7000e-004		5.9300e-003	5.9300e-003		5.9300e-003	5.9300e-003	0.0000	521.5139	521.5139	0.0214	5.6400e-003	523.7292
Mobile	0.0854	0.3933	0.9781	4.4600e-003	0.5695	2.4900e-003	0.5720	0.1522	2.3200e-003	0.1545	0.0000	411.3291	411.3291	0.0124	0.0000	411.6383
Waste						0.0000	0.0000		0.0000	0.0000	14.1586	0.0000	14.1586	0.8368	0.0000	35.0774
Water						0.0000	0.0000		0.0000	0.0000	4.2290	29.3017	33.5307	0.4357	0.0105	47.5609
Total	**0.4739**	**0.4713**	**1.0449**	**4.9300e-003**	**0.5695**	**8.4200e-003**	**0.5779**	**0.1522**	**8.2500e-003**	**0.1605**	**18.3876**	**962.1472**	**980.5348**	**1.3062**	**0.0162**	**1,018.0084**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3580	1.0000e-005	1.2600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4600e-003	2.4600e-003	1.0000e-005	0.0000	2.6200e-003
Energy	7.3000e-003	0.0664	0.0557	4.0000e-004		5.0400e-003	5.0400e-003		5.0400e-003	5.0400e-003	0.0000	483.8188	483.8188	0.0200	5.1700e-003	485.8608
Mobile	0.0854	0.3933	0.9781	4.4600e-003	0.5695	2.4900e-003	0.5720	0.1522	2.3200e-003	0.1545	0.0000	411.3291	411.3291	0.0124	0.0000	411.6383
Waste						0.0000	0.0000		0.0000	0.0000	14.1586	0.0000	14.1586	0.8368	0.0000	35.0774
Water						0.0000	0.0000		0.0000	0.0000	4.2290	29.3017	33.5307	0.4357	0.0105	47.5609
Total	**0.4507**	**0.4596**	**1.0351**	**4.8600e-003**	**0.5695**	**7.5300e-003**	**0.5771**	**0.1522**	**7.3600e-003**	**0.1596**	**18.3876**	**924.4521**	**942.8397**	**1.3048**	**0.0157**	**980.1399**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**4.89**	**2.47**	**0.94**	**1.42**	**0.00**	**10.57**	**0.15**	**0.00**	**10.79**	**0.55**	**0.00**	**3.92**	**3.84**	**0.10**	**2.91**	**3.72**

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	411.5815	411.5815	0.0186	3.8500e-003	413.1942
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	436.5854	436.5854	0.0197	4.0800e-003	438.2961
NaturalGas Mitigated	7.3000e-003	0.0664	0.0557	4.0000e-004		5.0400e-003	5.0400e-003		5.0400e-003	5.0400e-003	0.0000	72.2373	72.2373	1.3800e-003	1.3200e-003	72.6665
NaturalGas Unmitigated	8.5800e-003	0.0780	0.0655	4.7000e-004		5.9300e-003	5.9300e-003		5.9300e-003	5.9300e-003	0.0000	84.9285	84.9285	1.6300e-003	1.5600e-003	85.4332

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Office Park	1.35368e+006	7.3000e-003	0.0664	0.0557	4.0000e-004		5.0400e-003	5.0400e-003		5.0400e-003	5.0400e-003	0.0000	72.2373	72.2373	1.3800e-003	1.3200e-003	72.6665
Total		**7.3000e-003**	**0.0664**	**0.0557**	**4.0000e-004**		**5.0400e-003**	**5.0400e-003**		**5.0400e-003**	**5.0400e-003**	**0.0000**	**72.2373**	**72.2373**	**1.3800e-003**	**1.3200e-003**	**72.6665**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Office Park	1.4148e+006	411.5815	0.0186	3.8500e-003	413.1942
Total		**411.5815**	**0.0186**	**3.8500e-003**	**413.1942**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3580	1.0000e-005	1.2600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4600e-003	2.4600e-003	1.0000e-005	0.0000	2.6200e-003
Unmitigated	0.3799	1.0000e-005	1.2600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4600e-003	2.4600e-003	1.0000e-005	0.0000	2.6200e-003

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0869					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2710					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2600e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4600e-003	2.4600e-003	1.0000e-005	0.0000	2.6200e-003
Total	**0.3580**	**1.0000e-005**	**1.2600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.4600e-003**	**2.4600e-003**	**1.0000e-005**	**0.0000**	**2.6200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	33.5307	0.4357	0.0105	47.5609
Unmitigated	33.5307	0.4357	0.0105	47.5609

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Office Park	13.33 / 8.17002	33.5307	0.4357	0.0105	47.5609
Total		**33.5307**	**0.4357**	**0.0105**	**47.5609**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	14.1586	0.8368	0.0000	35.0774
Unmitigated	14.1586	0.8368	0.0000	35.0774

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Office Park	69.75	14.1586	0.8368	0.0000	35.0774
Total		**14.1586**	**0.8368**	**0.0000**	**35.0774**

CSU San Luis Obispo Master Plan

San Luis Obispo County, Annual

Annual Area + Energy + Mobile Mitigated (Residential)

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Retail	11.30	User Defined Unit	0.00	11,300.00	0
Apartments Mid Rise	1,470.00	Dwelling Unit	88.00	1,470,000.00	3381

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Slack and Grand site is 22 acres, use proportion for acreage estimate for all residential development. 22 acre x 4 = 88 acres. Total population = 1,470 units x 2.3 residents per unit (based on county average) = 3,381

Construction Phase -

Vehicle Trips - Consistent with traffic study.

Woodstoves - No woodstove.

Area Coating - Low VOC paint.

Area Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value

tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	BuildingSpaceSquareFeet	0.00	11,300.00
tblLandUse	LandUseSquareFeet	0.00	11,300.00
tblLandUse	LotAcreage	38.68	88.00
tblLandUse	Population	4,204.00	3,381.00
tblProjectCharacteristics	OperationalYear	2018	2024
tblVehicleTrips	CC_TTP	0.00	35.80
tblVehicleTrips	CNW_TTP	0.00	43.20
tblVehicleTrips	CW_TL	13.00	5.00
tblVehicleTrips	CW_TTP	0.00	21.00
tblVehicleTrips	DV_TP	0.00	45.00
tblVehicleTrips	PB_TP	0.00	45.00
tblVehicleTrips	PR_TP	0.00	10.00
tblVehicleTrips	ST_TR	6.39	7.50
tblVehicleTrips	ST_TR	0.00	46.00
tblVehicleTrips	SU_TR	5.86	7.50
tblVehicleTrips	SU_TR	0.00	46.00
tblVehicleTrips	WD_TR	6.65	7.50
tblVehicleTrips	WD_TR	0.00	46.00
tblWoodstoves	WoodstoveDayYear	60.00	0.00
tblWoodstoves	WoodstoveWoodMass	2,016.00	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.8492	0.2305	20.0025	1.0600e-003		0.1109	0.1109		0.1109	0.1109	0.0000	32.6875	32.6875	0.0314	0.0000	33.4716
Energy	0.0877	0.7498	0.3191	4.7900e-003		0.0606	0.0606		0.0606	0.0606	0.0000	2,754.6175	2,754.6175	0.1019	0.0336	2,767.1686
Mobile	2.9387	11.7539	33.3519	0.1073	10.5927	0.0965	10.6892	2.8345	0.0902	2.9246	0.0000	9,835.0392	9,835.0392	0.3557	0.0000	9,843.9306
Waste						0.0000	0.0000		0.0000	0.0000	137.2625	0.0000	137.2625	8.1120	0.0000	340.0620
Water						0.0000	0.0000		0.0000	0.0000	30.3854	212.2429	242.6283	3.1305	0.0757	343.4417
Total	**9.8756**	**12.7341**	**53.6734**	**0.1131**	**10.5927**	**0.2680**	**10.8607**	**2.8345**	**0.2617**	**3.0961**	**167.6479**	**12,834.5871**	**13,002.2350**	**11.7314**	**0.1093**	**13,328.0744**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.4167	0.2305	20.0025	1.0600e-003		0.1109	0.1109		0.1109	0.1109	0.0000	32.6875	32.6875	0.0314	0.0000	33.4716
Energy	0.0783	0.6694	0.2848	4.2700e-003		0.0541	0.0541		0.0541	0.0541	0.0000	2,636.3195	2,636.3195	0.0990	0.0316	2,648.2185
Mobile	2.9387	11.7539	33.3519	0.1073	10.5927	0.0965	10.6892	2.8345	0.0902	2.9246	0.0000	9,835.0392	9,835.0392	0.3557	0.0000	9,843.9306
Waste						0.0000	0.0000		0.0000	0.0000	137.2625	0.0000	137.2625	8.1120	0.0000	340.0620
Water						0.0000	0.0000		0.0000	0.0000	30.3854	212.2429	242.6283	3.1305	0.0757	343.4417
Total	**9.4336**	**12.6537**	**53.6392**	**0.1126**	**10.5927**	**0.2615**	**10.8542**	**2.8345**	**0.2552**	**3.0896**	**167.6479**	**12,716.2891**	**12,883.9370**	**11.7285**	**0.1073**	**13,209.1244**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**4.48**	**0.63**	**0.06**	**0.46**	**0.00**	**2.43**	**0.06**	**0.00**	**2.48**	**0.21**	**0.00**	**0.92**	**0.91**	**0.02**	**1.78**	**0.89**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.9387	11.7539	33.3519	0.1073	10.5927	0.0965	10.6892	2.8345	0.0902	2.9246	0.0000	9,835.0392	9,835.0392	0.3557	0.0000	9,843.9306
Unmitigated	2.9387	11.7539	33.3519	0.1073	10.5927	0.0965	10.6892	2.8345	0.0902	2.9246	0.0000	9,835.0392	9,835.0392	0.3557	0.0000	9,843.9306

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,861.1312	1,861.1312	0.0842	0.0174	1,868.4237
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,886.3066	1,886.3066	0.0853	0.0177	1,893.6977
NaturalGas Mitigated	0.0783	0.6694	0.2848	4.2700e-003		0.0541	0.0541		0.0541	0.0541	0.0000	775.1883	775.1883	0.0149	0.0142	779.7949
NaturalGas Unmitigated	0.0877	0.7498	0.3191	4.7900e-003		0.0606	0.0606		0.0606	0.0606	0.0000	868.3110	868.3110	0.0166	0.0159	873.4709

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.45265e+007	0.0783	0.6694	0.2848	4.2700e-003		0.0541	0.0541		0.0541	0.0541	0.0000	775.1883	775.1883	0.0149	0.0142	779.7949
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0783**	**0.6694**	**0.2848**	**4.2700e-003**		**0.0541**	**0.0541**		**0.0541**	**0.0541**	**0.0000**	**775.1883**	**775.1883**	**0.0149**	**0.0142**	**779.7949**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	6.39759e+006	1,861.1312	0.0842	0.0174	1,868.4237
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000
Total		**1,861.1312**	**0.0842**	**0.0174**	**1,868.4237**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.4167	0.2305	20.0025	1.0600e-003		0.1109	0.1109		0.1109	0.1109	0.0000	32.6875	32.6875	0.0314	0.0000	33.4716
Unmitigated	6.8492	0.2305	20.0025	1.0600e-003		0.1109	0.1109		0.1109	0.1109	0.0000	32.6875	32.6875	0.0314	0.0000	33.4716

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4625					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.3527					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6014	0.2305	20.0025	1.0600e-003		0.1109	0.1109		0.1109	0.1109	0.0000	32.6875	32.6875	0.0314	0.0000	33.4716
Total	**6.4167**	**0.2305**	**20.0025**	**1.0600e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**32.6875**	**32.6875**	**0.0314**	**0.0000**	**33.4716**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	242.6283	3.1305	0.0757	343.4417
Unmitigated	242.6283	3.1305	0.0757	343.4417

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	95.7764 / 60.3808	242.6283	3.1305	0.0757	343.4417
User Defined Retail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**242.6283**	**3.1305**	**0.0757**	**343.4417**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	137.2625	8.1120	0.0000	340.0620
Unmitigated	137.2625	8.1120	0.0000	340.0620

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	676.2	137.2625	8.1120	0.0000	340.0620
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000
Total		**137.2625**	**8.1120**	**0.0000**	**340.0620**

Air Quality
Slack and Grand Operational

CSU San Luis Obispo Master Plan - San Luis Obispo County, Winter

CSU San Luis Obispo Master Plan

San Luis Obispo County, Winter

Daily Slack and Grand

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	420.00	Dwelling Unit	22.00	420,000.00	966
User Defined Retail	8.50	User Defined Unit	0.00	8,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Population = 420 units x 2.3 person per unit = 966 (consistent with county statistics)

Project defined square footage for retail component

Construction Phase - Based on actual construction schedule for the project.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading - Area of project site.

Architectural Coating - Low VOC paint.

Vehicle Trips - Consistent with traffic study.

Area Coating - Low VOC paint.

Woodstoves - No wood stove.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	NumDays	20.00	652.00
tblConstructionPhase	NumDays	370.00	730.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	35.00	387.00
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	10.00	12.00
tblConstructionPhase	PhaseEndDate	2/7/2020	10/12/2021
tblConstructionPhase	PhaseEndDate	12/13/2019	9/12/2021
tblConstructionPhase	PhaseEndDate	5/11/2018	4/15/2018
tblConstructionPhase	PhaseEndDate	7/13/2018	10/23/2019
tblConstructionPhase	PhaseEndDate	1/10/2020	9/12/2021
tblConstructionPhase	PhaseEndDate	5/25/2018	5/1/2018
tblConstructionPhase	PhaseStartDate	1/11/2020	4/13/2019
tblConstructionPhase	PhaseStartDate	7/14/2018	11/25/2018

tblConstructionPhase	PhaseStartDate	5/26/2018	5/1/2018
tblConstructionPhase	PhaseStartDate	12/14/2019	9/12/2020
tblConstructionPhase	PhaseStartDate	5/12/2018	4/16/2018
tblGrading	AcresOfGrading	967.50	22.00
tblLandUse	BuildingSpaceSquareFeet	0.00	8,500.00
tblLandUse	LandUseSquareFeet	0.00	8,500.00
tblLandUse	LotAcreage	11.05	22.00
tblLandUse	Population	1,201.00	966.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblVehicleTrips	CC_TTP	0.00	35.80
tblVehicleTrips	CNW_TTP	0.00	43.20
tblVehicleTrips	CW_TL	13.00	5.00
tblVehicleTrips	CW_TTP	0.00	21.00
tblVehicleTrips	DV_TP	0.00	45.00
tblVehicleTrips	PB_TP	0.00	45.00
tblVehicleTrips	PR_TP	0.00	10.00
tblVehicleTrips	ST_TR	6.39	9.42
tblVehicleTrips	ST_TR	0.00	46.00
tblVehicleTrips	SU_TR	5.86	9.42
tblVehicleTrips	SU_TR	0.00	46.00
tblVehicleTrips	WD_TR	6.65	9.42
tblVehicleTrips	WD_TR	0.00	46.00
tblWoodstoves	WoodstoveDayYear	60.00	0.00
tblWoodstoves	WoodstoveWoodMass	2,016.00	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.9529	0.4009	34.7267	1.8300e-003		0.1914	0.1914		0.1914	0.1914	0.0000	62.3938	62.3938	0.0605	0.0000	63.9055
Energy	0.1374	1.1738	0.4995	7.4900e-003		0.0949	0.0949		0.0949	0.0949		1,498.4720	1,498.4720	0.0287	0.0275	1,507.3767
Mobile	7.8743	32.5548	89.1604	0.2363	21.6416	0.2557	21.8973	5.7828	0.2402	6.0230		23,817.0953	23,817.0953	1.0106		23,842.3606
Total	**18.9645**	**34.1295**	**124.3866**	**0.2456**	**21.6416**	**0.5420**	**22.1836**	**5.7828**	**0.5265**	**6.3093**	**0.0000**	**25,377.9611**	**25,377.9611**	**1.0998**	**0.0275**	**25,413.6428**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.8743	32.5548	89.1604	0.2363	21.6416	0.2557	21.8973	5.7828	0.2402	6.0230		23,817.0953	23,817.0953	1.0106		23,842.3606
Unmitigated	7.8743	32.5548	89.1604	0.2363	21.6416	0.2557	21.8973	5.7828	0.2402	6.0230		23,817.0953	23,817.0953	1.0106		23,842.3606

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	3,956.40	3,956.40	3956.40	10,055,417	10,055,417
User Defined Retail	391.00	391.00	391.00	157,624	157,624
Total	4,347.40	4,347.40	4,347.40	10,213,041	10,213,041

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
User Defined Retail	5.00	5.00	5.00	21.00	35.80	43.20	10	45	45

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.567875	0.030811	0.198391	0.124124	0.028385	0.006896	0.012949	0.019383	0.002368	0.001236	0.005232	0.000797	0.001552
User Defined Retail	0.567875	0.030811	0.198391	0.124124	0.028385	0.006896	0.012949	0.019383	0.002368	0.001236	0.005232	0.000797	0.001552

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1374	1.1738	0.4995	7.4900e-003		0.0949	0.0949		0.0949	0.0949		1,498.4720	1,498.4720	0.0287	0.0275	1,507.3767
NaturalGas Unmitigated	0.1374	1.1738	0.4995	7.4900e-003		0.0949	0.0949		0.0949	0.0949		1,498.4720	1,498.4720	0.0287	0.0275	1,507.3767

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	12737	0.1374	1.1738	0.4995	7.4900e-003		0.0949	0.0949		0.0949	0.0949		1,498.4720	1,498.4720	0.0287	0.0275	1,507.3767
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1374**	**1.1738**	**0.4995**	**7.4900e-003**		**0.0949**	**0.0949**		**0.0949**	**0.0949**		**1,498.4720**	**1,498.4720**	**0.0287**	**0.0275**	**1,507.3767**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.9529	0.4009	34.7267	1.8300e-003		0.1914	0.1914		0.1914	0.1914	0.0000	62.3938	62.3938	0.0605	0.0000	63.9055
Unmitigated	10.9529	0.4009	34.7267	1.8300e-003		0.1914	0.1914		0.1914	0.1914	0.0000	62.3938	62.3938	0.0605	0.0000	63.9055

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.1699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0522	0.4009	34.7267	1.8300e-003		0.1914	0.1914		0.1914	0.1914		62.3938	62.3938	0.0605		63.9055
Total	**10.9529**	**0.4009**	**34.7267**	**1.8300e-003**		**0.1914**	**0.1914**		**0.1914**	**0.1914**	**0.0000**	**62.3938**	**62.3938**	**0.0605**	**0.0000**	**63.9055**

CSU San Luis Obispo Master Plan

San Luis Obispo County, Annual

Annual Slack and Grand

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	420.00	Dwelling Unit	22.00	420,000.00	966
User Defined Retail	8.50	User Defined Unit	0.00	8,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Population = 420 units x 2.3 person per unit = 966 (consistent with county statistics)

Project defined square footage for retail component

Construction Phase - Based on actual construction schedule for the project.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading - Area of project site.

Architectural Coating - Low VOC paint.

Vehicle Trips - Consistent with traffic study.

Area Coating - Low VOC paint.

Woodstoves - No wood stove.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	NumDays	20.00	652.00
tblConstructionPhase	NumDays	370.00	730.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	35.00	387.00
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	10.00	12.00
tblConstructionPhase	PhaseEndDate	2/7/2020	10/12/2021
tblConstructionPhase	PhaseEndDate	12/13/2019	9/12/2021
tblConstructionPhase	PhaseEndDate	5/11/2018	4/15/2018
tblConstructionPhase	PhaseEndDate	7/13/2018	10/23/2019
tblConstructionPhase	PhaseEndDate	1/10/2020	9/12/2021
tblConstructionPhase	PhaseEndDate	5/25/2018	5/1/2018
tblConstructionPhase	PhaseStartDate	1/11/2020	4/13/2019
tblConstructionPhase	PhaseStartDate	7/14/2018	11/25/2018

tblConstructionPhase	PhaseStartDate	5/26/2018	5/1/2018
tblConstructionPhase	PhaseStartDate	12/14/2019	9/12/2020
tblConstructionPhase	PhaseStartDate	5/12/2018	4/16/2018
tblGrading	AcresOfGrading	967.50	22.00
tblLandUse	BuildingSpaceSquareFeet	0.00	8,500.00
tblLandUse	LandUseSquareFeet	0.00	8,500.00
tblLandUse	LotAcreage	11.05	22.00
tblLandUse	Population	1,201.00	966.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblVehicleTrips	CC_TTP	0.00	35.80
tblVehicleTrips	CNW_TTP	0.00	43.20
tblVehicleTrips	CW_TL	13.00	5.00
tblVehicleTrips	CW_TTP	0.00	21.00
tblVehicleTrips	DV_TP	0.00	45.00
tblVehicleTrips	PB_TP	0.00	45.00
tblVehicleTrips	PR_TP	0.00	10.00
tblVehicleTrips	ST_TR	6.39	9.42
tblVehicleTrips	ST_TR	0.00	46.00
tblVehicleTrips	SU_TR	5.86	9.42
tblVehicleTrips	SU_TR	0.00	46.00
tblVehicleTrips	WD_TR	6.65	9.42
tblVehicleTrips	WD_TR	0.00	46.00
tblWoodstoves	WoodstoveDayYear	60.00	0.00
tblWoodstoves	WoodstoveWoodMass	2,016.00	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.9805	0.0661	5.7299	3.0000e-004		0.0316	0.0316		0.0316	0.0316	0.0000	9.3395	9.3395	9.0500e-003	0.0000	9.5657
Energy	0.0251	0.2142	0.0912	1.3700e-003		0.0173	0.0173		0.0173	0.0173	0.0000	787.0336	787.0336	0.0291	9.5900e-003	790.6196
Mobile	1.4019	5.9343	15.8985	0.0433	3.8370	0.0462	3.8832	1.0275	0.0434	1.0709	0.0000	3,961.9840	3,961.9840	0.1648	0.0000	3,966.1034
Waste						0.0000	0.0000		0.0000	0.0000	39.2179	0.0000	39.2179	2.3177	0.0000	97.1606
Water						0.0000	0.0000		0.0000	0.0000	8.6816	60.6408	69.3224	0.8944	0.0216	98.1262
Total	**3.4075**	**6.2147**	**21.7196**	**0.0450**	**3.8370**	**0.0951**	**3.9321**	**1.0275**	**0.0923**	**1.1198**	**47.8994**	**4,818.9978**	**4,866.8972**	**3.4151**	**0.0312**	**4,961.5755**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4019	5.9343	15.8985	0.0433	3.8370	0.0462	3.8832	1.0275	0.0434	1.0709	0.0000	3,961.9840	3,961.9840	0.1648	0.0000	3,966.1034
Unmitigated	1.4019	5.9343	15.8985	0.0433	3.8370	0.0462	3.8832	1.0275	0.0434	1.0709	0.0000	3,961.9840	3,961.9840	0.1648	0.0000	3,966.1034

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	3,956.40	3,956.40	3956.40	10,055,417	10,055,417
User Defined Retail	391.00	391.00	391.00	157,624	157,624
Total	4,347.40	4,347.40	4,347.40	10,213,041	10,213,041

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
User Defined Retail	5.00	5.00	5.00	21.00	35.80	43.20	10	45	45

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.567875	0.030811	0.198391	0.124124	0.028385	0.006896	0.012949	0.019383	0.002368	0.001236	0.005232	0.000797	0.001552
User Defined Retail	0.567875	0.030811	0.198391	0.124124	0.028385	0.006896	0.012949	0.019383	0.002368	0.001236	0.005232	0.000797	0.001552

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	538.9447	538.9447	0.0244	5.0400e-003	541.0565
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	538.9447	538.9447	0.0244	5.0400e-003	541.0565
NaturalGas Mitigated	0.0251	0.2142	0.0912	1.3700e-003		0.0173	0.0173		0.0173	0.0173	0.0000	248.0889	248.0889	4.7600e-003	4.5500e-003	249.5631
NaturalGas Unmitigated	0.0251	0.2142	0.0912	1.3700e-003		0.0173	0.0173		0.0173	0.0173	0.0000	248.0889	248.0889	4.7600e-003	4.5500e-003	249.5631

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	4.64901e+006	0.0251	0.2142	0.0912	1.3700e-003		0.0173	0.0173		0.0173	0.0173	0.0000	248.0889	248.0889	4.7600e-003	4.5500e-003	249.5631
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0251**	**0.2142**	**0.0912**	**1.3700e-003**		**0.0173**	**0.0173**		**0.0173**	**0.0173**	**0.0000**	**248.0889**	**248.0889**	**4.7600e-003**	**4.5500e-003**	**249.5631**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.85261e+006	538.9447	0.0244	5.0400e-003	541.0565
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000
Total		**538.9447**	**0.0244**	**5.0400e-003**	**541.0565**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.9805	0.0661	5.7299	3.0000e-004		0.0316	0.0316		0.0316	0.0316	0.0000	9.3395	9.3395	9.0500e-003	0.0000	9.5657
Unmitigated	1.9805	0.0661	5.7299	3.0000e-004		0.0316	0.0316		0.0316	0.0316	0.0000	9.3395	9.3395	9.0500e-003	0.0000	9.5657

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1334					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6735					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1736	0.0661	5.7299	3.0000e-004		0.0316	0.0316		0.0316	0.0316	0.0000	9.3395	9.3395	9.0500e-003	0.0000	9.5657
Total	**1.9805**	**0.0661**	**5.7299**	**3.0000e-004**		**0.0316**	**0.0316**		**0.0316**	**0.0316**	**0.0000**	**9.3395**	**9.3395**	**9.0500e-003**	**0.0000**	**9.5657**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	69.3224	0.8944	0.0216	98.1262
Unmitigated	69.3224	0.8944	0.0216	98.1262

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	27.3647 / 17.2517	69.3224	0.8944	0.0216	98.1262

User Defined Retail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**69.3224**	**0.8944**	**0.0216**	**98.1262**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	39.2179	2.3177	0.0000	97.1606
Unmitigated	39.2179	2.3177	0.0000	97.1606

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	193.2	39.2179	2.3177	0.0000	97.1606
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000
Total		**39.2179**	**2.3177**	**0.0000**	**97.1606**

Air Quality
Slack and Grand Construction

CSU San Luis Obispo Master Plan

San Luis Obispo County, Annual

Slack and Grand Annual Construction

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	420.00	Dwelling Unit	22.00	420,000.00	966
User Defined Retail	8.50	User Defined Unit	0.00	8,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Population = 420 units x 2.3 person per unit = 966 (consistent with county statistics)

Project defined square footage for retail component

Construction Phase - Based on actual construction schedule for the project.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading - Area of project site.

Architectural Coating - Low VOC paint.

Vehicle Trips - Consistent with traffic study.

Area Coating - Low VOC paint.

Woodstoves - No wood stove.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	NumDays	20.00	652.00
tblConstructionPhase	NumDays	370.00	730.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	35.00	387.00
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	10.00	12.00
tblConstructionPhase	PhaseEndDate	2/7/2020	10/12/2021
tblConstructionPhase	PhaseEndDate	12/13/2019	9/12/2021
tblConstructionPhase	PhaseEndDate	5/11/2018	4/15/2018
tblConstructionPhase	PhaseEndDate	7/13/2018	10/23/2019
tblConstructionPhase	PhaseEndDate	1/10/2020	9/12/2021
tblConstructionPhase	PhaseEndDate	5/25/2018	5/1/2018
tblConstructionPhase	PhaseStartDate	1/11/2020	4/13/2019
tblConstructionPhase	PhaseStartDate	7/14/2018	11/25/2018

tblConstructionPhase	PhaseStartDate	5/26/2018	5/1/2018
tblConstructionPhase	PhaseStartDate	12/14/2019	9/12/2020
tblConstructionPhase	PhaseStartDate	5/12/2018	4/16/2018
tblGrading	AcresOfGrading	967.50	22.00
tblLandUse	BuildingSpaceSquareFeet	0.00	8,500.00
tblLandUse	LandUseSquareFeet	0.00	8,500.00
tblLandUse	LotAcreage	11.05	22.00
tblLandUse	Population	1,201.00	966.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblVehicleTrips	CC_TTP	0.00	35.80
tblVehicleTrips	CNW_TTP	0.00	43.20
tblVehicleTrips	CW_TL	13.00	5.00
tblVehicleTrips	CW_TTP	0.00	21.00
tblVehicleTrips	DV_TP	0.00	45.00
tblVehicleTrips	PB_TP	0.00	45.00
tblVehicleTrips	PR_TP	0.00	10.00
tblVehicleTrips	ST_TR	6.39	9.42
tblVehicleTrips	ST_TR	0.00	46.00
tblVehicleTrips	SU_TR	5.86	9.42
tblVehicleTrips	SU_TR	0.00	46.00
tblVehicleTrips	WD_TR	6.65	9.42
tblVehicleTrips	WD_TR	0.00	46.00
tblWoodstoves	WoodstoveDayYear	60.00	0.00
tblWoodstoves	WoodstoveWoodMass	2,016.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.5420	5.9032	3.7177	6.6800e-003	1.3441	0.2665	1.6106	0.7171	0.2456	0.9626	0.0000	608.8538	608.8538	0.1712	0.0000	613.1337
2019	1.4748	9.6011	8.0262	0.0160	1.6627	0.4415	2.1042	0.7715	0.4108	1.1823	0.0000	1,432.5991	1,432.5991	0.2858	0.0000	1,439.7428
2020	1.1336	4.1097	4.8854	0.0103	0.4947	0.1971	0.6918	0.1321	0.1856	0.3177	0.0000	922.8345	922.8345	0.1220	0.0000	925.8855
2021	0.8791	3.4229	4.2226	8.6500e-003	0.3573	0.1609	0.5182	0.0954	0.1506	0.2460	0.0000	769.8352	769.8352	0.1239	0.0000	772.9336
Maximum	**1.4748**	**9.6011**	**8.0262**	**0.0160**	**1.6627**	**0.4415**	**2.1042**	**0.7715**	**0.4108**	**1.1823**	**0.0000**	**1,432.5991**	**1,432.5991**	**0.2858**	**0.0000**	**1,439.7428**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-14-2018	7-13-2018	2.0153	2.0153
2	7-14-2018	10-13-2018	2.1296	2.1296
3	10-14-2018	1-13-2019	2.7183	2.7183
4	1-14-2019	4-13-2019	2.9362	2.9362
5	4-14-2019	7-13-2019	3.1744	3.1744
6	7-14-2019	10-13-2019	3.2114	3.2114
7	10-14-2019	1-13-2020	1.4682	1.4682
8	1-14-2020	4-13-2020	1.1517	1.1517
9	4-14-2020	7-13-2020	1.1410	1.1410
10	7-14-2020	10-13-2020	1.3330	1.3330
11	10-14-2020	1-13-2021	1.6581	1.6581
12	1-14-2021	4-13-2021	1.5065	1.5065
13	4-14-2021	7-13-2021	1.5133	1.5133
14	7-14-2021	9-30-2021	1.0547	1.0547
		Highest	3.2114	3.2114

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/14/2018	4/15/2018	5	0	
2	Site Preparation	Site Preparation	4/16/2018	5/1/2018	5	12	
3	Grading	Grading	5/1/2018	10/23/2019	5	387	
4	Building Construction	Building Construction	11/25/2018	9/12/2021	5	730	
5	Paving	Paving	9/12/2020	9/12/2021	5	260	
6	Architectural Coating	Architectural Coating	4/13/2019	10/12/2021	5	652	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 22

Acres of Paving: 0

Residential Indoor: 850,500; Residential Outdoor: 283,500; Non-Residential Indoor: 12,750; Non-Residential Outdoor: 4,250; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	61.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	305.00	46.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1084	0.0000	0.1084	0.0596	0.0000	0.0596	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0274	0.2892	0.1349	2.3000e-004		0.0155	0.0155		0.0142	0.0142	0.0000	20.8559	20.8559	6.4900e-003	0.0000	21.0183
Total	**0.0274**	**0.2892**	**0.1349**	**2.3000e-004**	**0.1084**	**0.0155**	**0.1239**	**0.0596**	**0.0142**	**0.0738**	**0.0000**	**20.8559**	**20.8559**	**6.4900e-003**	**0.0000**	**21.0183**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	5.6000e-004	4.8200e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0500e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.9248	0.9248	4.0000e-005	0.0000	0.9258
Total	**5.8000e-004**	**5.6000e-004**	**4.8200e-003**	**1.0000e-005**	**1.0400e-003**	**1.0000e-005**	**1.0500e-003**	**2.8000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.9248**	**0.9248**	**4.0000e-005**	**0.0000**	**0.9258**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1769	0.0000	1.1769	0.6418	0.0000	0.6418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4454	5.2082	3.0703	5.4300e-003		0.2305	0.2305		0.2120	0.2120	0.0000	495.6744	495.6744	0.1543	0.0000	499.5321
Total	**0.4454**	**5.2082**	**3.0703**	**5.4300e-003**	**1.1769**	**0.2305**	**1.4074**	**0.6418**	**0.2120**	**0.8538**	**0.0000**	**495.6744**	**495.6744**	**0.1543**	**0.0000**	**499.5321**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3700e-003	9.0200e-003	0.0781	1.7000e-004	0.0169	1.2000e-004	0.0170	4.4800e-003	1.1000e-004	4.5900e-003	0.0000	14.9852	14.9852	6.2000e-004	0.0000	15.0006
Total	**9.3700e-003**	**9.0200e-003**	**0.0781**	**1.7000e-004**	**0.0169**	**1.2000e-004**	**0.0170**	**4.4800e-003**	**1.1000e-004**	**4.5900e-003**	**0.0000**	**14.9852**	**14.9852**	**6.2000e-004**	**0.0000**	**15.0006**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1769	0.0000	1.1769	0.6418	0.0000	0.6418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5023	5.7791	3.5379	6.5700e-003		0.2526	0.2526		0.2324	0.2324	0.0000	590.4340	590.4340	0.1868	0.0000	595.1042
Total	**0.5023**	**5.7791**	**3.5379**	**6.5700e-003**	**1.1769**	**0.2526**	**1.4295**	**0.6418**	**0.2324**	**0.8742**	**0.0000**	**590.4340**	**590.4340**	**0.1868**	**0.0000**	**595.1042**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	9.5700e-003	0.0829	2.0000e-004	0.0204	1.4000e-004	0.0206	5.4200e-003	1.3000e-004	5.5500e-003	0.0000	17.6199	17.6199	6.6000e-004	0.0000	17.6363
Total	**0.0102**	**9.5700e-003**	**0.0829**	**2.0000e-004**	**0.0204**	**1.4000e-004**	**0.0206**	**5.4200e-003**	**1.3000e-004**	**5.5500e-003**	**0.0000**	**17.6199**	**17.6199**	**6.6000e-004**	**0.0000**	**17.6363**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0348	0.3041	0.2286	3.5000e-004		0.0195	0.0195		0.0183	0.0183	0.0000	30.9097	30.9097	7.5700e-003	0.0000	31.0991
Total	**0.0348**	**0.3041**	**0.2286**	**3.5000e-004**		**0.0195**	**0.0195**		**0.0183**	**0.0183**	**0.0000**	**30.9097**	**30.9097**	**7.5700e-003**	**0.0000**	**31.0991**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2200e-003	0.0718	0.0243	1.2000e-004	2.7200e-003	6.7000e-004	3.3800e-003	7.8000e-004	6.4000e-004	1.4200e-003	0.0000	11.5515	11.5515	7.7000e-004	0.0000	11.5707
Worker	0.0212	0.0204	0.1768	3.8000e-004	0.0382	2.7000e-004	0.0384	0.0101	2.5000e-004	0.0104	0.0000	33.9522	33.9522	1.4000e-003	0.0000	33.9872
Total	**0.0244**	**0.0922**	**0.2011**	**5.0000e-004**	**0.0409**	**9.4000e-004**	**0.0418**	**0.0109**	**8.9000e-004**	**0.0118**	**0.0000**	**45.5037**	**45.5037**	**2.1700e-003**	**0.0000**	**45.5579**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3081	2.7508	2.2399	3.5100e-003		0.1683	0.1683		0.1583	0.1583	0.0000	306.8110	306.8110	0.0747	0.0000	308.6795
Total	**0.3081**	**2.7508**	**2.2399**	**3.5100e-003**		**0.1683**	**0.1683**		**0.1583**	**0.1583**	**0.0000**	**306.8110**	**306.8110**	**0.0747**	**0.0000**	**308.6795**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0281	0.6847	0.2148	1.2000e-003	0.0273	5.4800e-003	0.0327	7.8800e-003	5.2400e-003	0.0131	0.0000	115.6492	115.6492	7.4300e-003	0.0000	115.8349
Worker	0.1912	0.1796	1.5557	3.6700e-003	0.3832	2.6000e-003	0.3858	0.1018	2.4000e-003	0.1042	0.0000	330.8089	330.8089	0.0123	0.0000	331.1172
Total	**0.2193**	**0.8643**	**1.7705**	**4.8700e-003**	**0.4104**	**8.0800e-003**	**0.4185**	**0.1097**	**7.6400e-003**	**0.1174**	**0.0000**	**446.4581**	**446.4581**	**0.0198**	**0.0000**	**446.9520**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4091**	**303.4091**	**0.0740**	**0.0000**	**305.2596**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0224	0.6273	0.1900	1.2000e-003	0.0274	3.4200e-003	0.0308	7.9100e-003	3.2700e-003	0.0112	0.0000	115.9333	115.9333	6.9700e-003	0.0000	116.1076
Worker	0.1747	0.1588	1.3743	3.5600e-003	0.3847	2.5300e-003	0.3872	0.1022	2.3300e-003	0.1046	0.0000	321.8008	321.8008	0.0106	0.0000	322.0657
Total	**0.1971**	**0.7860**	**1.5643**	**4.7600e-003**	**0.4120**	**5.9500e-003**	**0.4180**	**0.1101**	**5.6000e-003**	**0.1157**	**0.0000**	**437.7341**	**437.7341**	**0.0176**	**0.0000**	**438.1733**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1720	1.5776	1.5001	2.4400e-003		0.0868	0.0868		0.0816	0.0816	0.0000	209.6317	209.6317	0.0506	0.0000	210.8961
Total	**0.1720**	**1.5776**	**1.5001**	**2.4400e-003**		**0.0868**	**0.0868**		**0.0816**	**0.0816**	**0.0000**	**209.6317**	**209.6317**	**0.0506**	**0.0000**	**210.8961**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0127	0.3963	0.1161	8.2000e-004	0.0189	1.1300e-003	0.0200	5.4700e-003	1.0800e-003	6.5500e-003	0.0000	79.6112	79.6112	4.6900e-003	0.0000	79.7286
Worker	0.1125	0.0981	0.8605	2.3800e-003	0.2657	1.6900e-003	0.2674	0.0706	1.5600e-003	0.0722	0.0000	214.7361	214.7361	6.5000e-003	0.0000	214.8987
Total	**0.1252**	**0.4943**	**0.9766**	**3.2000e-003**	**0.2846**	**2.8200e-003**	**0.2875**	**0.0761**	**2.6400e-003**	**0.0787**	**0.0000**	**294.3473**	**294.3473**	**0.0112**	**0.0000**	**294.6273**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0536	0.5556	0.5788	9.0000e-004		0.0297	0.0297		0.0274	0.0274	0.0000	79.1115	79.1115	0.0256	0.0000	79.7511
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0536**	**0.5556**	**0.5788**	**9.0000e-004**		**0.0297**	**0.0297**		**0.0274**	**0.0274**	**0.0000**	**79.1115**	**79.1115**	**0.0256**	**0.0000**	**79.7511**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5900e-003	2.3500e-003	0.0204	5.0000e-005	5.7000e-003	4.0000e-005	5.7400e-003	1.5200e-003	3.0000e-005	1.5500e-003	0.0000	4.7720	4.7720	1.6000e-004	0.0000	4.7760
Total	**2.5900e-003**	**2.3500e-003**	**0.0204**	**5.0000e-005**	**5.7000e-003**	**4.0000e-005**	**5.7400e-003**	**1.5200e-003**	**3.0000e-005**	**1.5500e-003**	**0.0000**	**4.7720**	**4.7720**	**1.6000e-004**	**0.0000**	**4.7760**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1136	1.1692	1.3261	2.0600e-003		0.0613	0.0613		0.0564	0.0564	0.0000	181.2125	181.2125	0.0586	0.0000	182.6777
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1136**	**1.1692**	**1.3261**	**2.0600e-003**		**0.0613**	**0.0613**		**0.0564**	**0.0564**	**0.0000**	**181.2125**	**181.2125**	**0.0586**	**0.0000**	**182.6777**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5300e-003	4.8200e-003	0.0423	1.2000e-004	0.0131	8.0000e-005	0.0132	3.4700e-003	8.0000e-005	3.5500e-003	0.0000	10.5608	10.5608	3.2000e-004	0.0000	10.5688
Total	**5.5300e-003**	**4.8200e-003**	**0.0423**	**1.2000e-004**	**0.0131**	**8.0000e-005**	**0.0132**	**3.4700e-003**	**8.0000e-005**	**3.5500e-003**	**0.0000**	**10.5608**	**10.5608**	**3.2000e-004**	**0.0000**	**10.5688**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3825					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0249	0.1716	0.1722	2.8000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	23.8729	23.8729	2.0200e-003	0.0000	23.9233
Total	**0.4074**	**0.1716**	**0.1722**	**2.8000e-004**		**0.0120**	**0.0120**		**0.0120**	**0.0120**	**0.0000**	**23.8729**	**23.8729**	**2.0200e-003**	**0.0000**	**23.9233**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0274	0.0257	0.2229	5.3000e-004	0.0549	3.7000e-004	0.0553	0.0146	3.4000e-004	0.0149	0.0000	47.4033	47.4033	1.7700e-003	0.0000	47.4474
Total	**0.0274**	**0.0257**	**0.2229**	**5.3000e-004**	**0.0549**	**3.7000e-004**	**0.0553**	**0.0146**	**3.4000e-004**	**0.0149**	**0.0000**	**47.4033**	**47.4033**	**1.7700e-003**	**0.0000**	**47.4474**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5359					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.2206	0.2399	3.9000e-004		0.0145	0.0145		0.0145	0.0145	0.0000	33.4476	33.4476	2.5900e-003	0.0000	33.5124
Total	**0.5677**	**0.2206**	**0.2399**	**3.9000e-004**		**0.0145**	**0.0145**		**0.0145**	**0.0145**	**0.0000**	**33.4476**	**33.4476**	**2.5900e-003**	**0.0000**	**33.5124**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0318	0.2749	7.1000e-004	0.0769	5.1000e-004	0.0774	0.0204	4.7000e-004	0.0209	0.0000	64.3602	64.3602	2.1200e-003	0.0000	64.4131
Total	**0.0350**	**0.0318**	**0.2749**	**7.1000e-004**	**0.0769**	**5.1000e-004**	**0.0774**	**0.0204**	**4.7000e-004**	**0.0209**	**0.0000**	**64.3602**	**64.3602**	**2.1200e-003**	**0.0000**	**64.4131**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4153					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0222	0.1550	0.1845	3.0000e-004		9.5500e-003	9.5500e-003		9.5500e-003	9.5500e-003	0.0000	25.9155	25.9155	1.7800e-003	0.0000	25.9600
Total	**0.4375**	**0.1550**	**0.1845**	**3.0000e-004**		**9.5500e-003**	**9.5500e-003**		**9.5500e-003**	**9.5500e-003**	**0.0000**	**25.9155**	**25.9155**	**1.7800e-003**	**0.0000**	**25.9600**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0252	0.0220	0.1930	5.3000e-004	0.0596	3.8000e-004	0.0600	0.0158	3.5000e-004	0.0162	0.0000	48.1673	48.1673	1.4600e-003	0.0000	48.2038
Total	**0.0252**	**0.0220**	**0.1930**	**5.3000e-004**	**0.0596**	**3.8000e-004**	**0.0600**	**0.0158**	**3.5000e-004**	**0.0162**	**0.0000**	**48.1673**	**48.1673**	**1.4600e-003**	**0.0000**	**48.2038**

Air Quality
Slack and Grand Mitigation

CSU San Luis Obispo Master Plan

San Luis Obispo County, Winter

Slack and Grand Daily Mitigated

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	420.00	Dwelling Unit	22.00	420,000.00	966
User Defined Retail	8.50	User Defined Unit	0.00	8,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - .

Land Use - Population = 420 units x 2.3 person per unit = 966 (consistent with county statistics)

Project defined square footage for retail component

Construction Phase - Based on actual construction schedule for the project.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading - Area of project site.

Architectural Coating - Low VOC paint.

Vehicle Trips - Consistent with traffic study.

Woodstoves - No wood stove.

Area Coating - Low VOC paint.

Energy Use -

Area Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	370.00	730.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	35.00	387.00
tblConstructionPhase	NumDays	20.00	652.00
tblConstructionPhase	NumDays	10.00	12.00
tblConstructionPhase	PhaseEndDate	2/9/2026	9/12/2021
tblConstructionPhase	PhaseEndDate	8/11/2022	9/12/2021
tblConstructionPhase	PhaseEndDate	4/13/2018	4/15/2018
tblConstructionPhase	PhaseEndDate	10/24/2019	10/23/2019

tblConstructionPhase	PhaseEndDate	8/10/2023	10/12/2021
tblConstructionPhase	PhaseStartDate	8/11/2023	9/12/2020
tblConstructionPhase	PhaseStartDate	10/25/2019	11/25/2018
tblConstructionPhase	PhaseStartDate	5/2/2018	5/1/2018
tblConstructionPhase	PhaseStartDate	8/12/2022	4/13/2019
tblConstructionPhase	PhaseStartDate	4/14/2018	4/16/2018
tblGrading	AcresOfGrading	967.50	22.00
tblLandUse	BuildingSpaceSquareFeet	0.00	8,500.00
tblLandUse	LandUseSquareFeet	0.00	8,500.00
tblLandUse	LotAcreage	11.05	22.00
tblLandUse	Population	1,201.00	966.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblVehicleTrips	CC_TTP	0.00	35.80
tblVehicleTrips	CNW_TTP	0.00	43.20
tblVehicleTrips	CW_TL	13.00	5.00
tblVehicleTrips	CW_TTP	0.00	21.00
tblVehicleTrips	DV_TP	0.00	45.00
tblVehicleTrips	PB_TP	0.00	45.00
tblVehicleTrips	PR_TP	0.00	10.00
tblVehicleTrips	ST_TR	6.39	9.42
tblVehicleTrips	ST_TR	0.00	46.00
tblVehicleTrips	SU_TR	5.86	9.42
tblVehicleTrips	SU_TR	0.00	46.00
tblVehicleTrips	WD_TR	6.65	9.42
tblVehicleTrips	WD_TR	0.00	46.00
tblWoodstoves	WoodstoveDayYear	60.00	0.00
tblWoodstoves	WoodstoveWoodMass	2,016.00	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.9529	0.4009	34.7267	1.8300e-003		0.1914	0.1914		0.1914	0.1914	0.0000	62.3938	62.3938	0.0605	0.0000	63.9055
Energy	0.1374	1.1738	0.4995	7.4900e-003		0.0949	0.0949		0.0949	0.0949		1,498.4720	1,498.4720	0.0287	0.0275	1,507.3767
Mobile	7.8743	32.5548	89.1604	0.2363	21.6416	0.2557	21.8973	5.7828	0.2402	6.0230		23,817.0953	23,817.0953	1.0106		23,842.3606
Total	**18.9645**	**34.1295**	**124.3866**	**0.2456**	**21.6416**	**0.5420**	**22.1836**	**5.7828**	**0.5265**	**6.3093**	**0.0000**	**25,377.9611**	**25,377.9611**	**1.0998**	**0.0275**	**25,413.6428**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.9529	0.4009	34.7267	1.8300e-003		0.1914	0.1914		0.1914	0.1914	0.0000	62.3938	62.3938	0.0605	0.0000	63.9055
Energy	0.1226	1.0479	0.4459	6.6900e-003		0.0847	0.0847		0.0847	0.0847		1,337.7673	1,337.7673	0.0256	0.0245	1,345.7170
Mobile	7.8743	32.5548	89.1604	0.2363	21.6416	0.2557	21.8973	5.7828	0.2402	6.0230		23,817.0953	23,817.0953	1.0106		23,842.3606
Total	**18.9498**	**34.0036**	**124.3331**	**0.2448**	**21.6416**	**0.5318**	**22.1734**	**5.7828**	**0.5163**	**6.2991**	**0.0000**	**25,217.2564**	**25,217.2564**	**1.0967**	**0.0245**	**25,251.9831**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.08**	**0.37**	**0.04**	**0.33**	**0.00**	**1.88**	**0.05**	**0.00**	**1.93**	**0.16**	**0.00**	**0.63**	**0.63**	**0.28**	**10.70**	**0.64**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.8743	32.5548	89.1604	0.2363	21.6416	0.2557	21.8973	5.7828	0.2402	6.0230		23,817.0953	23,817.0953	1.0106		23,842.3606
Unmitigated	7.8743	32.5548	89.1604	0.2363	21.6416	0.2557	21.8973	5.7828	0.2402	6.0230		23,817.0953	23,817.0953	1.0106		23,842.3606

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1226	1.0479	0.4459	6.6900e-003		0.0847	0.0847		0.0847	0.0847		1,337.7673	1,337.7673	0.0256	0.0245	1,345.7170
NaturalGas Unmitigated	0.1374	1.1738	0.4995	7.4900e-003		0.0949	0.0949		0.0949	0.0949		1,498.4720	1,498.4720	0.0287	0.0275	1,507.3767

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	11.371	0.1226	1.0479	0.4459	6.6900e-003		0.0847	0.0847		0.0847	0.0847		1,337.7673	1,337.7673	0.0256	0.0245	1,345.7170
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1226**	**1.0479**	**0.4459**	**6.6900e-003**		**0.0847**	**0.0847**		**0.0847**	**0.0847**		**1,337.7673**	**1,337.7673**	**0.0256**	**0.0245**	**1,345.7170**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.9529	0.4009	34.7267	1.8300e-003		0.1914	0.1914		0.1914	0.1914	0.0000	62.3938	62.3938	0.0605	0.0000	63.9055
Unmitigated	10.9529	0.4009	34.7267	1.8300e-003		0.1914	0.1914		0.1914	0.1914	0.0000	62.3938	62.3938	0.0605	0.0000	63.9055

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.1699					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0522	0.4009	34.7267	1.8300e-003		0.1914	0.1914		0.1914	0.1914		62.3938	62.3938	0.0605		63.9055
Total	**10.9529**	**0.4009**	**34.7267**	**1.8300e-003**		**0.1914**	**0.1914**		**0.1914**	**0.1914**	**0.0000**	**62.3938**	**62.3938**	**0.0605**	**0.0000**	**63.9055**