Appendix E

Transportation Supporting Data
and Calculations

KITTELSON & ASSOCIATES

ROSEVILLE EU OPERATIONS CENTER – TRAFFIC IMPACT ANALYSIS

Roseville, CA

December 9, 2025

Roseville EU Operations Center – Traffic Impact Analysis

Roseville, CA

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Summary

Kittelson & Associates, Inc. (Kittelson) prepared the Transportation Impact Analysis (TIA) for the proposed Roseville Environmental Utilities (EU) Operations Center (proposed project). The proposed project is being led by the City of Roseville (city) and includes developing a 150-acre portion of a 243-acre parcel at 8100 Phillip Road in Roseville, California. The proposed project would contain new facilities and services that would allow the city to cost effectively meet state-level waste management legislation requirements and city sustainability goals, while providing space to grow for those services as well as relocating staff and services currently operating at the city's corporation yard, located at 2020 Hilltop Circle in Roseville, California.

Kittelson used the VMT thresholds that are set forth in the VMT guidelines for evaluating the VMT of the proposed project. For evaluating traffic operations, i.e., level of service (LOS) for identifying operational deficiencies within the study area, Kittelson complied with the LOS goals and policies outlined in the City of Roseville General Plan[1].

PROJECT DESCRIPTION

The project site is currently owned by the city and is largely agricultural and leased for rice and hay farming. The proposed project is located east of South Brewer Road, between Pleasant Grove Creek to the north and Phillip Road to the south. Vehicular access to the project site will be provided via Phillip Road.

The proposed project would include two primary components:

- a Resource Recovery and Transfer Operations (RRTO) facility to manage the city's waste, recycling, and organics materials; and
- a Corporation Yard that would house various EU Services and an Equipment Maintenance Facility relocated from the existing Hilltop Circle Corporation Yard.

The project is planned to be developed in two phases. Phase 1, expected to be completed by 2028, will include the initial construction of the RRTO building, consisting of a large multipurpose facility and an administration building to support RRTO staff and management functions. This phase will also include an entrance/exit scale plaza, an administrative office with employee parking, and a Vendor Lease Area.

The entire project, including the Corporation Yard (EU Service Center and Equipment Maintenance Facility), is assumed to be fully constructed by 2040.

Site Access

The project would provide two access points on Phillip Road, one designated for passenger vehicles and the other for trucks. Based on the findings of the analysis in this report, the passenger vehicle driveway should include two outbound lanes (one left-turn and one right-turn) and would be stop-controlled for opening day but would require a signal in the future. The truck

[1] https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Development%20Services/Planning/City%20of%20Roseville%20GP.pdf

driveway can have a single outbound lane and stop-controlled but would operate at LOS D in the future scenario unless Phillip Road is widened to four lanes.

TRIP GENERATION

The information on the trip generation rates for RRTO facilities is not readily available from the Institute of Transportation Engineers (ITE) Trip Generation Manual. Therefore, Kittelson used the trip generation on the number of employees and the number of trucks anticipated for the project. The ITE Trip Generation Manual Land Use Code 710 (General office building) rates were used to estimate the number of trips made by employees and truck trips were estimated based on average truck tonnage. The truck trips and employee trips were combined to obtain the total number of daily trips generated by the project. The proposed project is expected to generate 2,250 daily trips with 320 AM (272 inbound and 48 outbound) peak hour trips and 296 PM (58 inbound and 238 outbound) peak hour trips in 2028. At full buildout in 2040, the project is expected to generate 2,904 daily trips with 400 AM (330 inbound and 70 outbound) peak hour trips and 372 PM (83 inbound and 289 outbound) peak hour trips.

CEQA TRANSPORTATION ANALYSIS

The proposed project would have less than significant environmental impacts in three of the four categories in the CEQA checklist for transportation impacts (conflicts with policies, hazards, and emergency access).

For the category of vehicle-miles of travel (VMT) in terms of VMT per service population, the project would exceed the City's impact thresholds for non-residential land uses and is deemed to have a **significant impact**.

The following mitigation measures are proposed to reduce the project's VMT impact:

1. Implement a Commute Trip reduction program
2. Provide an employee sponsored Vanpool program.
3. Contribute to implementation of extending transit network coverage and hours in Roseville, including potential transit service to the Project area

The feasibility and effectiveness of the VMT mitigation measures is either insufficient or unknown at this time. The project cannot demonstrate definitively that implementation of these policies would achieve VMT reductions to meet the VMT per service population thresholds. With implementation of the project and the recommended mitigation measures, this impact would remain **significant and unavoidable** under project and cumulative conditions.

LOCAL TRANSPORTATION ANALYSIS

The local transportation analysis identifies the effects of the project on traffic operations in terms of vehicle delay and level of service (LOS), queuing issues and signal warrants. Where adverse intersection operations are found because of the project, improvements are recommended to the intersections to reduce the effect of the project on the local transportation system.

Study Area

The City of Roseville confirmed the inclusion of 36 study intersections for the traffic operations analysis. These intersections represent key locations for site access and signalized intersections along corridors likely to be used by project-related traffic. In scenarios with the project, the two project driveways were also evaluated.

Traffic Operations Analysis Scenarios

The local transportation analysis examined traffic operations at the study intersections for the following scenarios in the AM and PM peak hours:

- Existing Conditions
- Opening Year (2028) No Project Conditions[2]
- Opening Year (2028) Plus Project Conditions
- Cumulative Year (2040) No Project Conditions
- Cumulative Year (2040) Plus Project Conditions

Existing Traffic Operations

- Of the 32 currently signalized intersections, 8 intersections operate at LOS D or worse during the AM peak hour and 6 intersections operate at LOS D or worse during the PM peak hour. Additionally, all the all-way stop-controlled Intersections currently operate at LOS C or better during both peak hours.

Opening Year No Project Traffic Operations

- With the planned lane configurations and traffic volumes for the opening year, 9 intersections operate at LOS D or worse during the AM peak hour, and 8 are projected to operate at LOS D or worse during the PM peak hour.

Opening Year Plus Project Traffic Operations

- All intersections operate at LOS C or better in this scenario, with two exceptions:
  - Intersection 3 (Fiddyment Road & Blue Oaks Boulevard) is projected to degrade from LOS C to LOS D during the PM peak hour.
  - Intersection 12 (Westbrook Boulevard & Pleasant Grove Boulevard) is also expected to degrade from LOS C to LOS D during the PM peak hour.
- Two stop-controlled project driveway intersections are projected to operate at LOS C during both the AM and PM peak hours.
- Modifications to the intersection of Westbrook Boulevard & Pleasant Grove Boulevard to restore operations to LOS C or better are provided in the Recommendations section.
- For Fiddyment Road & Blue Oaks Boulevard, an overlap phase to provide northbound right-turn movements with a green arrow during westbound left-turns was analyzed and found to improve operations to LOS C for the PM peak. However, this would restrict westbound U-turns which currently are desired to maintain circulation for the larger roadway network.

[2] Opening year volumes are calculated by adding Panattoni project trips to the existing count data. Opening year plus project volumes include existing counts, Panattoni project trips, and the proposed project trips as well.

Therefore, no improvements are recommended, and this location would degrade to LOS D during the PM peak hour.

Cumulative Year No Project Traffic Operations

- With the proposed lane configurations and traffic volumes, all intersections are expected to be signalized, with 19 intersections projected to operate at LOS D or worse during the AM and PM peak hours.

Cumulative Year With Project Traffic Operations

- All intersections are projected to operate at the same LOS as under the Cumulative No Project scenario.
- The unsignalized intersection of Phillip Road at the Passenger Vehicle Driveway is expected to operate at LOS D in the AM peak hour and LOS F in the PM peak hour. The intersection at the Truck Driveway is projected to operate at LOS C (AM) and LOS F (PM).
- Under cumulative plus project conditions, the Phillip Road/Passenger Vehicle Driveway meets the peak hour signal warrant, while the Truck Driveway intersection does not.

Recommendations

Recommendations are provided for changes in lanes for Westbrook Blvd & Pleasant Grove Blvd intersection.

RECOMMENDATIONS FOR OPENING YEAR PLUS PROJECT CONDITIONS

ID	Intersection	Lane Changes	Traffic Control Change
12	Westbrook Blvd & Pleasant Grove Blvd	Add an additional southbound left turn lane	No

Source: Kittelson & Associates, Inc., 2025

With the recommended improvements, the intersection is projected to operate at acceptable LOS in the opening year with the project. All queues are expected to be accommodated within the available storage and taper lengths without interfering with through traffic.

RECOMMENDATIONS FOR CUMULATIVE YEAR PLUS PROJECT CONDITIONS

ID	Intersection	Lane Changes	Traffic Control Change
37	Phillip Road & Passenger Vehicle Driveway	Add a southbound right turn storage pocket	Add a signal

Source: Kittelson & Associates, Inc., 2025

With the improvements, the Phillip Road/Passenger Vehicle Driveway intersection is expected to operate at LOS A (AM) and LOS D (PM). No feasible mitigation to achieve LOS C (PM) is identified for the Truck Driveway intersection unless Phillip Road is widened to four lanes in the future.

Introduction

Kittelson & Associates, Inc. (Kittelson) has prepared this Transportation Impact Analysis (TIA) for the proposed Roseville Environmental Utilities (EU) Operations Center project to determine the expected transportation-related effects of the project. The scope of the study was developed in coordination with the City of Roseville (city). The project encompasses a 150-acre portion of a 243-acre site located at 8100 Phillip Road in Roseville, California. The project site (regionally located as shown in Figure 1) is located east of S Brewer Road between Pleasant Grove Creek to the north and Phillip Road to the south. It is designed to include new facilities and services to help the city efficiently comply with state waste management legislation and achieve its sustainability goals. Additionally, the project will provide room for future growth and accommodate the relocation of staff and services currently based at the city's corporation yard at 2020 Hilltop Circle in Roseville.

The contents of the transportation impact analysis are consistent with policies provided in the City of Roseville Traffic Impact Study Standards (from the Design and Construction Standards section 4) and the General Plan, including two major components:

- The California Environmental Quality Act (CEQA) requires that the transportation analysis evaluate impacts using vehicle miles traveled (VMT) pursuant to Senate Bill 743 and State CEQA Guidelines Section 15064.3(a). In addition, for CEQA, this TIA addresses the project's potential to increase hazards due to project design features, consistency with circulation system plans and policies, impacts to bike/pedestrian/transit facilities, and impacts to emergency access.
- The Local Transportation Analysis (LTA) has been prepared for the City of Roseville for planning purposes. The LTA portion of this report evaluates other transportation issues such as intersection capacity and operations, which are not part of the environmental evaluation under CEQA, to support City's decision making around transportation facilities.

This introduction includes descriptions of the Roseville EU Operations Center, transportation study area and analysis methodologies.

The project would be located on Phillip Road on 243 acres of undeveloped land along the northwest boundary of Roseville, in the City of Roseville, Placer County. This project is approximately 9.0 miles from State Route (SR) 99, 7.0 miles from SR 65 and 10.0 from Interstate (I) 80. The city proposes to construct and operate a new Environmental Utilities (EU) Operations Center to address the City's growing demands for municipal services, State requirements to electrify the city's waste collection vehicles, as well as changing solid waste regulations. The project includes two primary components: a Resource Recovery and Transfer Operations facility, to manage the city's waste, recycling, and organics materials; and a Corporation Yard that would house various EU divisions that would be relocated from the existing Corporation Yard on Hilltop Drive. The project would be developed in phases over the next 12 years (2028-2040).

PROJECT DESCRIPTION

Project Location

As shown in Figure 2, the proposed project site is located on Phillip Road (near its western terminus at South Brewer Road) on 243 acres of undeveloped land along the northwest limit line

of the City of Roseville, in Placer County is located east of S Brewer Road between Pleasant Grove Creek to the north and Phillip Road to the south. Vehicular access to the project site will be provided via Phillip Road.

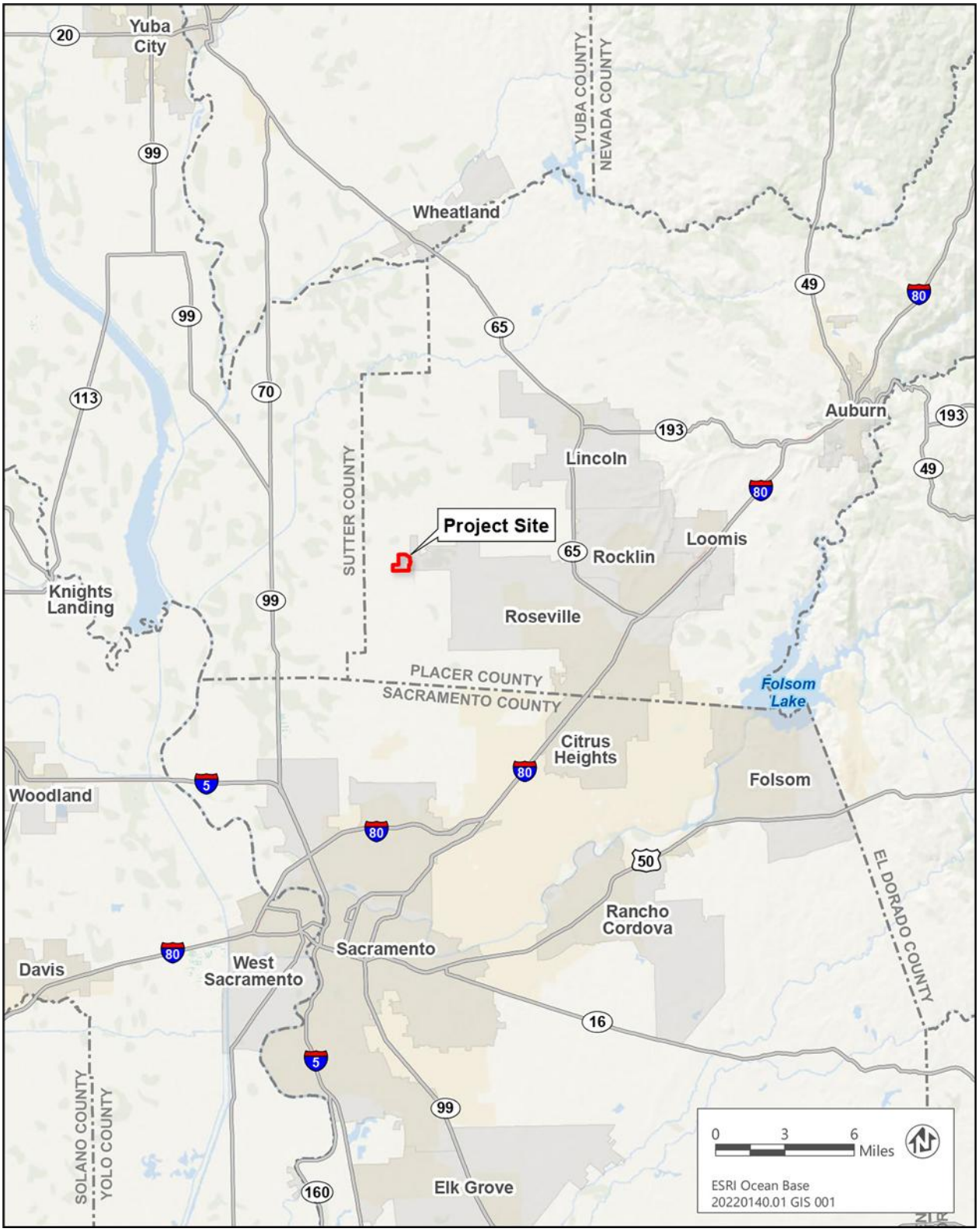
The proposed project would include the following components:

- The Resource Recovery and Transfer Operations (RRTO), which include the following:
  - A MRF to segregate recyclables into their source commodity,
  - MSW receipt and transfer, and
  - Organic waste receipt, pre-processing, and transfer.
- An EU Operations Facility Corporation Yard (Corporation Yard) consisting of the following two functions:
  - EU Services, which would include:
    - Business Services and Management,
    - Technical Services,
    - Stormwater Division,
    - Water Utilities, and
    - Storage (covered and uncovered) for Water Utilities, Refuse and Stormwater Division, Technical Services.
  - An Equipment Maintenance Facility for all EU divisions, which would include:
    - Equipment maintenance facilities,
    - Equipment washing facilities,
    - Equipment fueling facilities,
    - Equipment charging facilities, and
    - Administrative offices for Equipment Maintenance,
- A Vendor Lease Area for prospective Vendors to commit materials to the RRTO to improve economies of scale.
- A Potential Future Organic Processing Facility, which would consist of:
  - Potential Future Compost Facility, if deemed necessary, and/or
  - Potential Future Biomass Facility, if deemed necessary.

The project would be developed in two phases. The initial phase would include the first phase of the RRTO building, which will include one large multipurpose building that would serve all three waste streams (recyclables, municipal solid waste, and organic waste) along with an administration building to serve the RRTO's employee and management needs. The initial phase will also include an entrance/exit scale plaza, an administration office with employee parking, and a Vendor Lease Area.

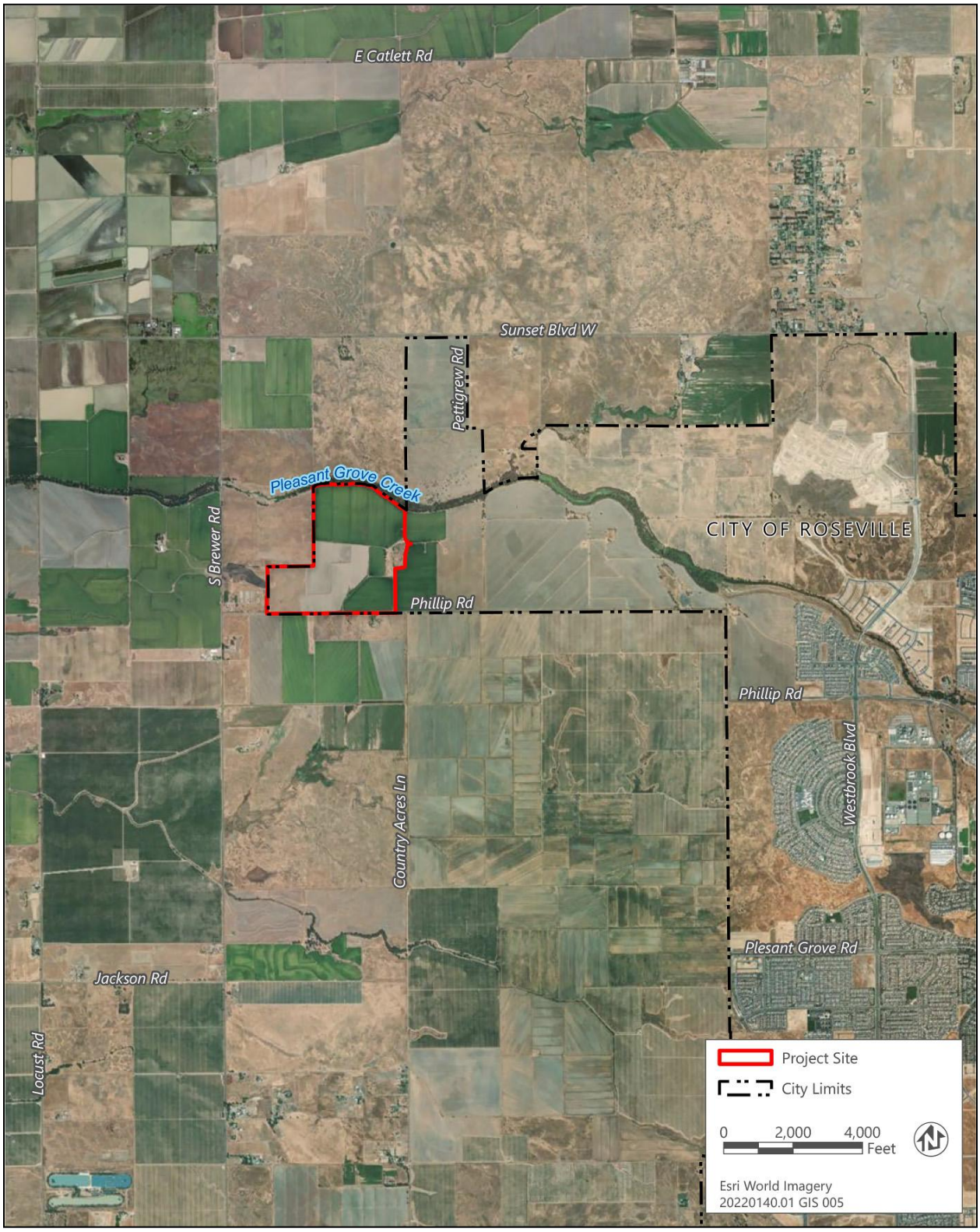
The Corporation Yard (EU Service Center and Equipment Maintenance Facility) is anticipated to be built in phases with full construction buildout assumed to occur by 2040.

Figure 1: Regional Location



Source: Adapted by Ascent in 2024

Figure 2: Project Location



Source: Roseville Environmental Utilities Operations Center Project Description by HDR, January 16, 2025.

Existing Site Uses

The proposed project site owned by the city is currently largely agricultural and is leased for rice and hay farming. Several structures are located on the site, which are remnants from a past pheasant club, farm uses, and former residence. These structures may be demolished prior to development or some of them may be repurposed. For example, the former residence may be used as a temporary office or could be used by a vendor as the Vendor Lease office.

The site is within an area of city-owned property known as the Warnick or Plunkette property, adjacent to Reason Farms. The Al Johnson Wildlife Area is located to the east of the site and is part of an area planned to accommodate the city's stormwater Regional Retention facility and potential recreation uses. Pleasant Grove Creek is located along the site's northern boundary. Other surrounding land uses include agriculture. The Creekview Specific Plan, West Roseville Specific Plan, the Regional University and Community, and Amoruso Ranch Specific Plan areas are located near or within a two-mile radius and are in various stages of development. These surrounding land uses represent a total of 13,630 residential units at buildout.

Proposed Site Uses

The proposed project is to be constructed on approximately 150 acres on the south end of a 243-acre city-owned parcel that is bordered by Phillip Road on the south and Pleasant Grove Creek on the north. The proposed project groups site components into five primary service/facility functional areas, Table 1 shows the estimated building and site areas for each of the functional areas at ultimate build-out, which is estimated to be in 2040.

Table 1: Proposed Project Summary of Components at Build-out in 2040

Facility Component	Approximate Building Area (SF)	Approximate Site Area (acres)
RRTO	322,000	40
EU Services Center	132,400	37
Equipment Maintenance Facility	60,000	34
Vendor Lease Area	10,000	5
Potential Future Organics Facility	37,000	34
Total	**561,400**	**150**

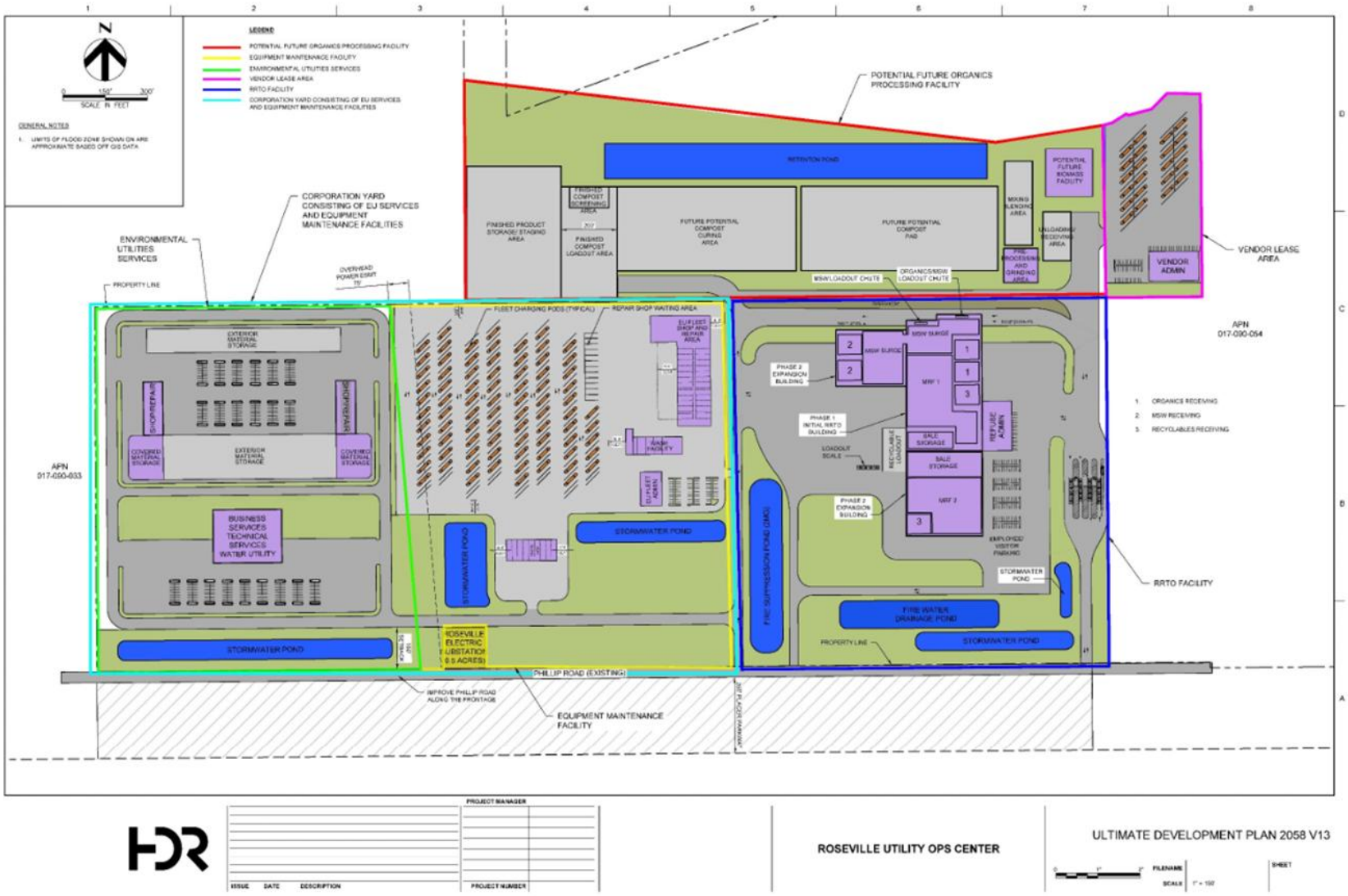
Source: Roseville Environmental Utilities Operations Center Project Description by HDR, January 16, 2025.

Project Access

As shown in the proposed site plan in Figure 3. The main entry to the project site for passenger vehicles and RRTO material arrivals would be located on Phillip Road, at the southeast corner of the site. A separate driveway for truck access would be located west of the main entry. Both driveways were assumed to have a single inbound lane, single outbound shared left-right turn lane, and be stop-controlled at the driveways.

Phillip Road is planned to be improved from its current condition along the frontage of the project site and east to the westerly terminus of Blue Oaks Boulevard. The improvements are expected to meet the City's standard for 48-foot right-of-way collector/commercial street requirements, with a sidewalk construction along the north side. The project would also include an internal vehicular circulation system providing access to a surface parking lot.

Figure 3: Project Site Plan



Source: Roseville Environmental Utilities Operations Center Project Description by HDR, January 16, 2025.

STUDY AREA

The study area for the project includes transportation facilities that would be expected to be affected by the development of the project. The study area includes:

- Project access driveways on Phillip Road
- Signalized intersections along routes likely used by project traffic
- Future intersections planned to be built by cumulative conditions
- Pedestrian, bicycle and transit facilities in the vicinity of the proposed Roseville EU Operations Center development

Study Intersections

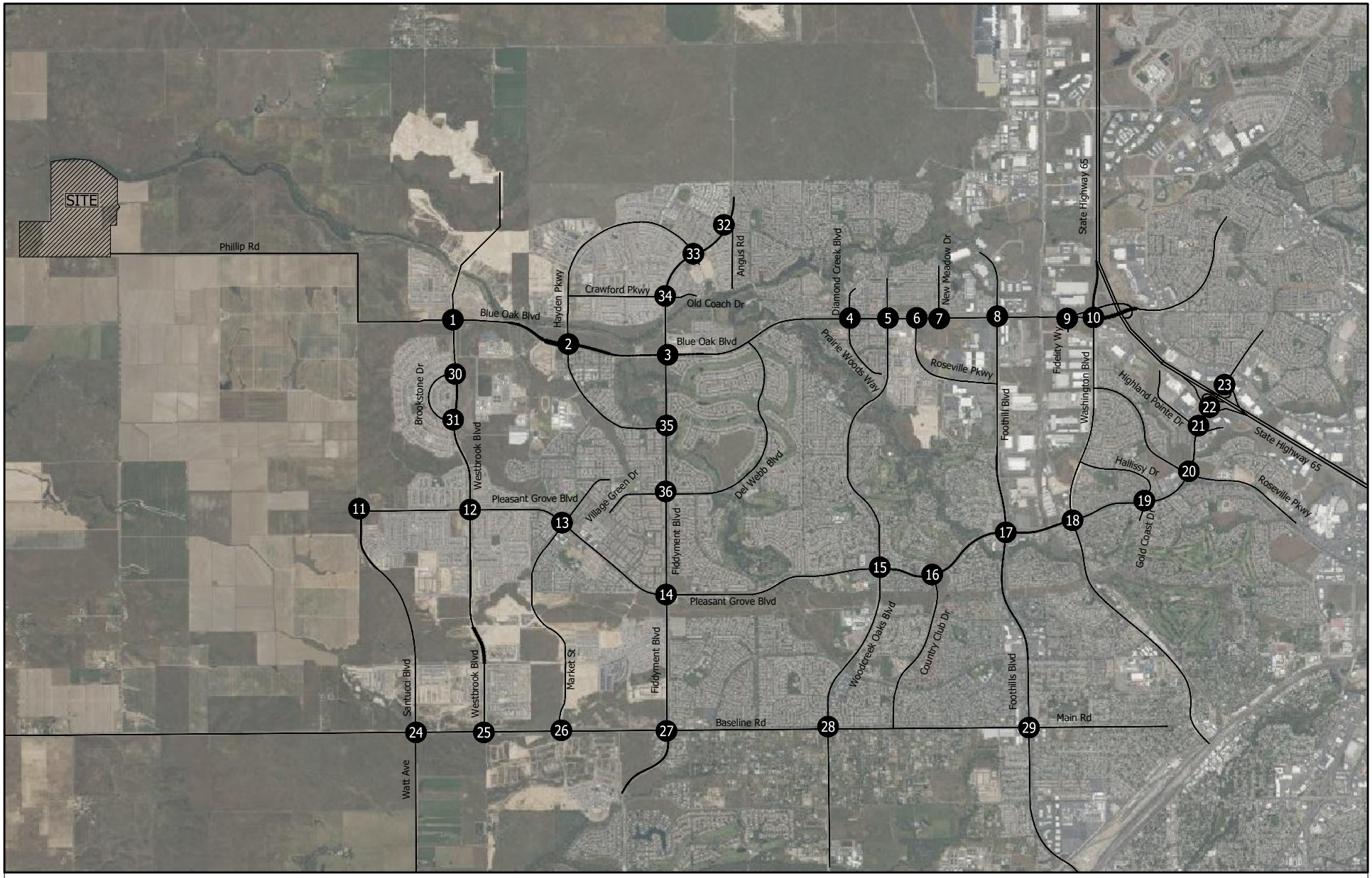
The Roseville EU Operations Center local transportation analysis (LTA) evaluates peak hour traffic operations at 36 study intersection locations (Figure 4). The study intersections include:

1. Blue Oaks Boulevard and Westbrook Boulevard*
2. Blue Oaks Boulevard and Hayden Parkway
3. Blue Oaks Boulevard and Fiddyment Road
4. Blue Oaks Boulevard and Diamond Creek Blvd/Prairie Woods Way
5. Blue Oaks Boulevard and Woodcreek Oaks Boulevard
6. Blue Oaks Boulevard and Walgreens Driveway/Roseville Parkway
7. Blue Oaks Boulevard and New Meadow Drive
8. Blue Oaks Boulevard and Foothills Boulevard
9. Blue Oaks Boulevard and Fidelity Way
10. Blue Oaks Boulevard and Washington Boulevard
11. Pleasant Grove Boulevard and Santucci Boulevard
12. Pleasant Grove Boulevard and Westbrook Boulevard
13. Pleasant Grove Boulevard and Market Street
14. Pleasant Grove Boulevard and Fiddyment Road
15. Pleasant Grove Boulevard and Woodcreek Oaks Boulevard
16. Pleasant Grove Boulevard and Country Club Drive
17. Pleasant Grove Boulevard and Foothills Boulevard
18. Pleasant Grove Boulevard and Washington Boulevard
19. Pleasant Grove Boulevard and Hallissy Drive/Gold Coast Drive
20. Pleasant Grove Boulevard and Roseville Parkway
21. Pleasant Grove Boulevard and Highland Point Drive
22. Pleasant Grove Boulevard and SR 65 SB Ramps

23. Pleasant Grove Boulevard and SR 65 NB Ramps
24. Baseline Road and Santucci Boulevard/Watt Avenue
25. Baseline Road and Westbrook Boulevard
26. Baseline Road and Market Street
27. Baseline Road and Fiddyment Road
28. Baseline Road and Woodcreek Oaks Boulevard
29. Baseline Road and Foothills Boulevard
30. Westbrook Boulevard and North Brookstone*
31. Westbrook Boulevard and South Brookstone*
32. Fiddyment Road and Angus Road/Parkland Way
33. Fiddyment Road and North Hayden Parkway
34. Fiddyment Road and Crawford Parkway/Old Coach Drive
35. Fiddyment Road and South Hayden Parkway
36. Fiddyment Road and Village Green Drive/Del Webb Boulevard

The intersections marked with an asterisk (*) were stop-controlled when the data collection was done in 2024 and analyzed accordingly under existing conditions. These intersections have been signalized in 2025 and are analyzed as signal control for Opening Year and Buildout conditions.

In addition, project driveway intersections on Phillip Road are included in the with project scenarios.



EXISTING ROADWAY

STATE HIGHWAY

PROJECT SITE LEGEND

STUDY INTERSECTION

Study Intersections

Figure 4

H:\28\28453 - Roseville Utility Operations Center\report\figs\28453_Figs_v2.dwg May 01, 2025 - 12:00pm - miiu Layout Tab: Study Intersections

KITTELSON & ASSOCIATES

Existing Conditions

This section provides a description of the existing roadway, transit, bicycle, and pedestrian components of the transportation system within the project study area.

ROADWAY NETWORK

The existing roadway network in the project study area is composed of state highways and local streets.

State Routes

California State Route 65 (SR 65) provides regional access to the project study area.

SR 65 is a north-south highway in California that passes through multiple counties, including Placer County, where it runs through the city of Roseville. In Roseville, SR 65 serves as a crucial transportation corridor, linking the city to Interstate 80, Lincoln County, and Yuba County. It plays a key role in regional traffic flow and development by providing access to commercial centers, residential areas, and shopping destinations such as the Westfield Galleria at Roseville. Within Roseville, it is typically a four-lane road with a posted speed limit of 65 mph.

Local Streets

In addition to state routes, several major arterials and local streets provide access to or serve the project site in the study area.

Blue Oaks Boulevard serves as a major east-west arterial connecting the cities of Roseville and Rocklin. It starts at Westbrook Boulevard in western Roseville and spans 6.5 miles, terminating at Sunset Boulevard in Rocklin. Between Westbrook Boulevard and Fiddyment Road, the roadway comprises one lane in each direction, separated by a two-way turn lane, with posted speed limits ranging from 45 to 50 mph. East of Fiddyment Road, Blue Oaks transitions into a six-lane, median-divided arterial with a posted speed limit of 45 mph. The SR 65/Blue Oaks Boulevard interchange is located approximately eight miles east of the project site, providing access to Interstate 80—a major east-west freeway that stretches from the Bay Area into Nevada—just three miles to the south.

Westbrook Boulevard is a north-south arterial beginning slightly north of Blue Oaks Boulevard and extending 1.8 miles to Pleasant Grove Boulevard. In the future, the roadway will connect from Baseline Road in the south to Sunset Boulevard West in the north, within the unincorporated Placer County. The completed section features two lanes in each direction, separated by a landscaped median, with a posted speed limit of 40 mph.

Fiddyment Road is another north-south arterial, starting at Baseline Road and extending north through Roseville into unincorporated Placer County and the City of Lincoln. Between Pleasant Grove Boulevard and the northern city limits (1.5 miles north of Blue Oaks Boulevard), Fiddyment consists of two lanes in each direction, with a posted speed limit of 45 mph. Beyond the city limits, the roadway transitions into a two-lane, undivided rural road.

Pleasant Grove Boulevard is an east-west arterial traversing the city of Roseville. It begins at Santucci Boulevard in the west and extends approximately 9 miles to the city limit and becomes

Park Drive. West of Wood Creek Oaks Boulevard, the roadway typically features two lanes in each direction, separated by a landscaped median. East of Wood Creek Oaks Boulevard, it transitions into a six-lane road with a raised median. The posted speed limit of the entire corridor is 45 mph. It intersects State Route 65 approximately 5 miles east of Fiddyment Road, offering direct access to regional destinations and connecting to Interstate 80 further south.

Baseline Road is a major east-west arterial serving Roseville and the surrounding areas of Placer County. It starts from Lincoln Street in the east and becomes Riego Road passing the west limit of Placer County. The roadway functions as a primary connector between rural, suburban, and urban areas, providing access to residential neighborhoods, agricultural lands, and commercial developments. In Roseville, Baseline Road typically consists of one eastbound lane and two westbound lanes, along with a center two-way left-turn lane. However, the segment between Santucci Boulevard and Market Street is being widened to two lanes in each direction with a center two-way left-turn lane. In addition, the segment between Market Street and Fiddyment Road is expected to be widened to two lanes in each direction by October 2026. The posted speed limit is 45 mph. This roadway plays a crucial role in facilitating east-west travel and supporting regional mobility across multiple jurisdictions.

Woodcreek Oaks Boulevard is a north-south arterial in Roseville, serving as a key corridor for residential and local traffic. It begins in a single-family area north of Blue Oaks Boulevard and extends south to Baseline Road. The roadway typically features two lanes in each direction, separated by a landscaped median, with a posted speed limit of 40 to 45 mph. Woodcreek Oaks provides access to several residential neighborhoods, parks, and schools. It serves as an important alternative route to more heavily traveled north-south roadways like Foothills Boulevard and Fiddyment Road, enhancing connectivity between suburban areas and major east-west corridors.

Foothills Boulevard is a major north-south arterial that connects residential, commercial, and industrial areas within Roseville. The roadway begins at Pleasant Grove Boulevard in the north and extends southward, passing through commercial centers, industrial zones, and business parks before connecting Baseline Boulevard/Main Street near the city's southern boundary. North of Pleasant Grove Boulevard, Foothills Boulevard generally consists of two lanes in each direction with a landscaped median, while south of Pleasant Grove, it expands to three lanes in each direction to accommodate higher traffic volumes. The posted speed limit is generally 45 mph.

Washington Boulevard is a key north-south corridor running through central Roseville, providing access to historic districts, downtown Roseville, and major employment centers. The roadway begins at Blue Oaks Boulevard in the north and extends southward through the city, where it intersects with key arterials such as Pleasant Grove Boulevard, Main Street, and Junction Boulevard. Washington Boulevard provides two lanes in each direction and has a posted speed limit of 45 mph.

Truck Facilities

According to the City of Roseville Truck Routes Map shown in Figure 5, Santucci Boulevard and Pleasant Grove Boulevard (between Santucci Boulevard and Fiddyment Road) are designated as existing California legal truck routes. Blue Oaks Boulevard, Westbrook Boulevard, Baseline Road (west of Foothills Boulevard), Foothills Boulevard (north of Pleasant Grove Boulevard and south of Baseline Road), Washington Boulevard (between Blue Oaks Boulevard and Pleasant Grove Boulevard), and Pleasant Grove Boulevard (between Foothills Boulevard and Washington Boulevard) are classified as existing terminal access (STAA) truck routes, permitting both "Green" STAA trucks and "Black" California legal trucks.

TRANSIT FACILITIES

The following section describes existing transit services near the study area.

Public Transit

The City of Roseville Transit system provides public transportation services within Roseville, California, offering fixed-route buses and dial-a-ride options for residents. Each local route is identified by a letter, and the system is designed to enhance mobility and reduce traffic congestion by serving key destinations such as shopping centers, schools, and employment hubs. Roseville Transit also collaborates with regional transit agencies, such as Placer County Transit and Sacramento Regional Transit, to provide seamless regional travel options for commuters.

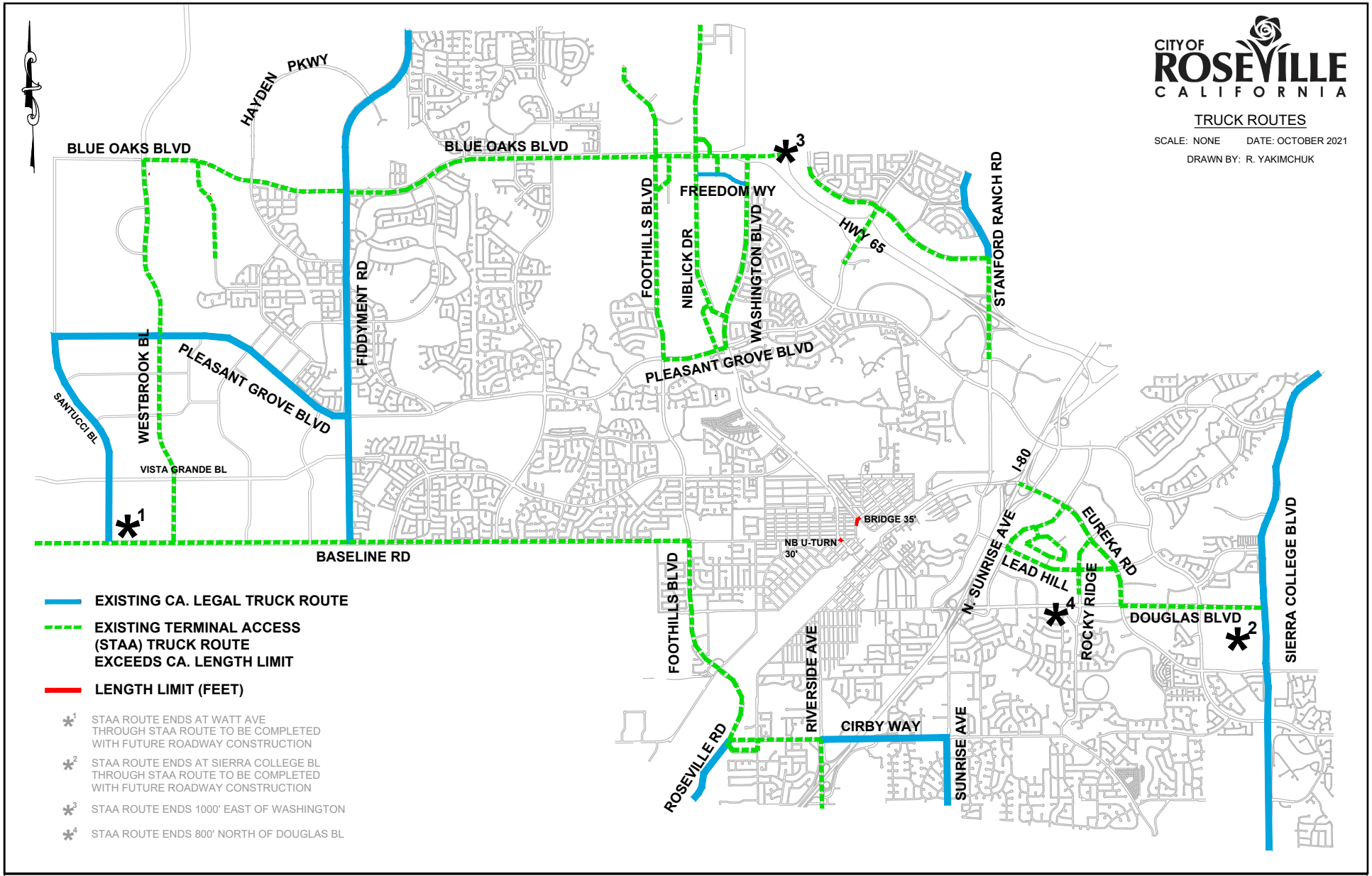
Routes D, M, R, and S use the roadways within the study area.

Route D provides service between the Civic Center Transfer Point and Hughes Park, traveling along Woodcreek Oaks Avenue, Foothills Boulevard, Junction Boulevard, and Pleasant Grove Boulevard, with connections to schools and residential areas. Weekday service operates from 5:42 AM to 6:35 PM with hourly departures. Saturday service runs from 7:42 AM to 4:35 PM, also on an hourly schedule.

Route M connects the Galleria Transfer Point to Pleasant Grove and Market Street, serving key locations along Pleasant Grove Boulevard. Weekday service operates from 5:56 AM to 9:52 PM on an hourly basis. Saturday service runs from 7:56 AM to 4:56 PM, also on an hourly schedule.

Route R runs between the Louis Orlando Transit Center and Foothills at PRIDE Industries, traveling along Foothills Boulevard. This route connects employment centers and residential areas but operates only twice in the morning and twice in the afternoon on weekdays. It does not operate on weekends.

Route S provides service between the Galleria Transfer Point and the Santucci Justice Center. Service is available during peak hours: 7:35 – 9:25 AM, 11:05 AM – 2:25 PM, and 4:10 – 5:25 PM. This route does not operate on weekends or on days when the justice center is closed.



Source: Roseville Truck Routes, Updated October 2021

Truck Route Map

Figure 5

H:\128\28453 - Roseville Utility Operations Center\report\figs\28453_Figs_v2.dwg May 01, 2025 - 12:00pm - miliu Layout Tab: Study Intersections

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BICYCLE AND PEDESTRIAN FACILITIES

The active transportation network consists of both pedestrian and bicycle infrastructure that work together to provide mobility options for all those that live, work, study, or play in Roseville. Bicycle and pedestrian facilities are important components of the transportation network in the study area. They not only offer non-vehicular opportunities for both commute and recreational trips but also provide connections to the region's transit network.

Existing Bicycle Facilities

The City of Roseville Parks, Trails & Bikeways Map classifies bicycle facilities into three categories:

- Multi-use Paths – Designed for cyclists, pedestrians, and non-motorized vehicles; family-friendly.
- Bike Lanes– On-street lanes for cyclists; speed and traffic levels vary; often accompanied by sidewalks open to cyclists.
- Bike Routes – Shared roadways for bicycles and vehicles, typically on streets with lower traffic volumes and speeds.

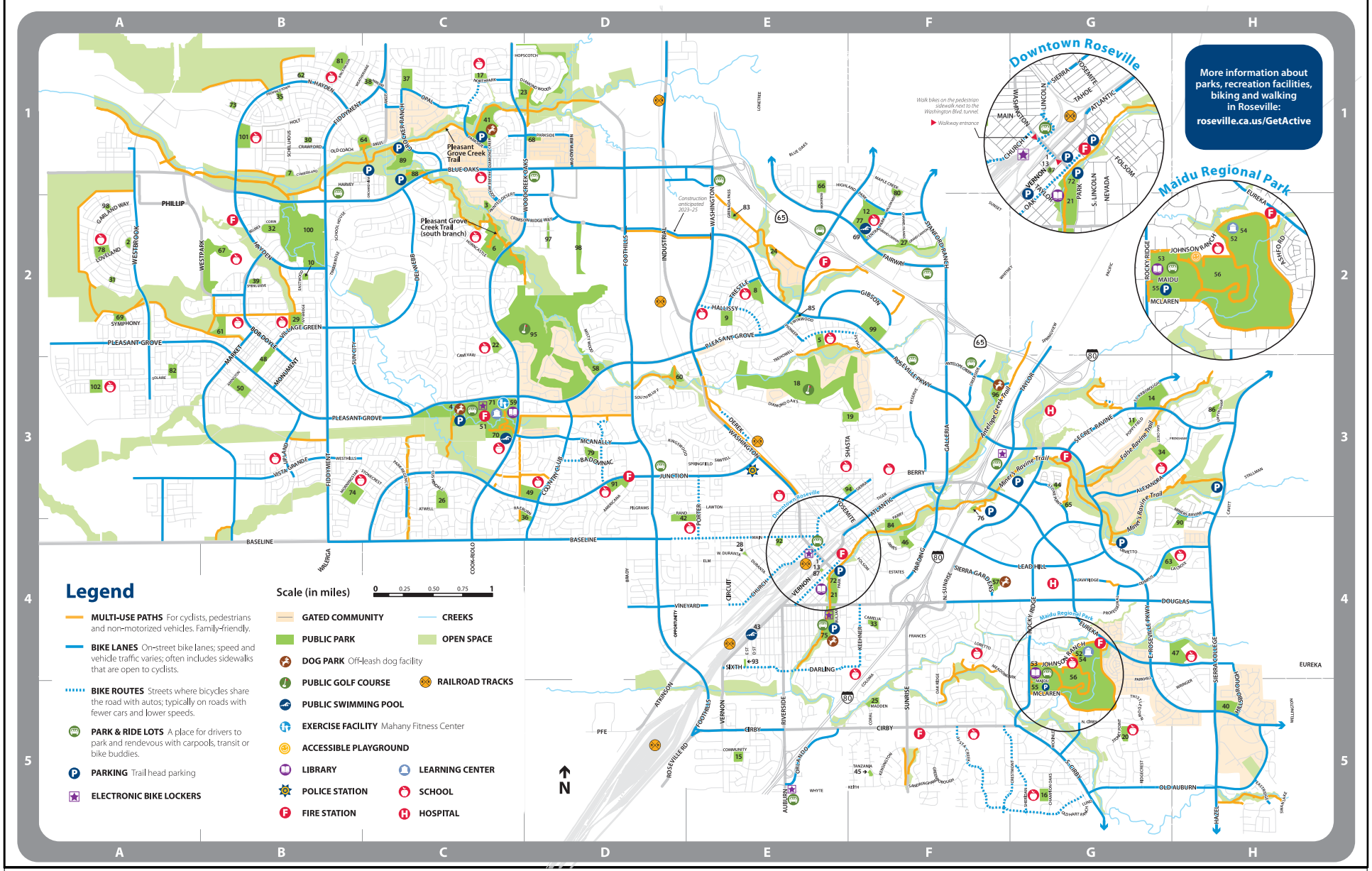
As shown in Figure 6, a multi-use path exists on Highland Pointe Drive north of Pleasant Grove Boulevard and bike routes are designated along Hallissy Drive/Gold Coast Drive. Bike lanes are present along all the roadway segments included in the study area.

CRASH HISTORY

The crash history analysis for the project was based on the most recent five years of data covering fatal and injury crashes in Placer County along Philip Road near the project frontage. The crash data spans from January 1, 2019, to December 31, 2023. The Transportation Injury Mapping System (TIMS), which is maintained by SafeTREC at the University of California, Berkeley,[3] was utilized to obtain the crash data and perform a crash analysis. TIMS only includes reports on fatal and injury crashes (severe injury other visible injury and complaint of pain) and excludes crashes that are property damage-only.

Philip Road had a total of two reported crashes during the period between January 1, 2019, to December 31, 2023. Both the crashes were reported as other visible injury crashes and occurred with a fixed object. While one crash had a primary crash factor of driving under the influence of alcohol or drugs, the other crash involved unsafe speed. Both the crashes did not involve a pedestrian/bicyclist/motorcyclist.

[3] Transportation Injury Mapping System (TIMS), *Safe Transportation Research and Education Center, University of California, Berkeley*. 2025. https://tims.berkeley.edu/



Source: Roseville Parks, Trails & Bikeways Map, Updated April 2024

Bicycle and Pedestrian Facility Map

Figure 6

H:\28\28453 - Roseville Utility Operations Center\report\figs\28453_Figs_v2.dwg May 01, 2025 - 12:00pm - miliu Layout Tab: Study Intersections

KITTELSON & ASSOCIATES

CEQA Evaluation

The California Environmental Quality Act (CEQA) transportation analysis for the proposed project, evaluates the transportation impact areas that may be considered in environmental documentation for the project. A separate Local Transportation Analysis (LTA) evaluates other transportation issues such as roadway and intersection capacity which are not part of the environmental evaluation under CEQA.

State CEQA Guidelines Appendix G, XVII. Transportation identifies the following factors that were evaluated:

1. Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
2. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (vehicle miles of travel (VMT) assessment)?
3. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
4. Would the project result in inadequate emergency access?

The following sections include regulations and policies which apply to the CEQA evaluation, and an assessment of each of the factors identified above.

REGULATORY SETTING

This section summarizes applicable federal, state, regional, and local plans, laws, and regulations that are relevant to this analysis. The information from these regulations provide context for the discussion related to the project's consistency with applicable policies, plans, laws, and regulations. The details of the plans and policies identified are provided in Appendix A.

Federal

No federal plans, policies, regulations or laws are applicable to the provision of land use or resources of the proposed project.

State

SENATE BILL 743

Senate Bill 743 (SB 743) was signed into law in September 2013 and took full effect in July 2020. Senate Bill 743 (Steinberg, 2013) required changes to the California Environmental Quality Act (CEQA) Guidelines regarding the analysis of transportation impacts. The purpose of SB 743 is to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.

CALIFORNIA TRANSPORTATION PLAN 2050 (2021) [4]

The California Transportation Plan 2050 is a long-range transportation roadmap to achieve a safe, resilient and universally accessible transportation system that supports vibrant communities,

[4] *https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/ctp-2050-v3-a11y.pdf*

advances racial and economic justice, and improves public and economic health in the State of California.

Regional

SACOG NEXT GENERATION TRANSIT STRATEGY (2021)[5]

SACOG's Next Generation Transit Strategy builds upon its 2020 MTP-SCS vision for a high quality, resilient and sustainable public transit system. The objectives of the strategy are as follows:

- Getting around by transit is fast, reliable and competitive with driving.
- Reduced disparities in travel time and cost; more travel options for disadvantaged communities.
- Improved transit access to top employment centers and destinations.
- Transit feels easy, seamless, and safe for all users.
- More coordination between agencies leads to better service for all.
- Makes the best use of public dollars by minimizing costs while maintaining or increasing ridership.
- Service is adequately and consistently funded.
- Meets or exceeds targets for renewable energy, emissions and VMT.

SACOG MTP/SCS (2020) [6]

SACOG's Metropolitan Transportation Plan and Sustainable Communities Strategy (MTP/SCS) outlines a transportation and land use strategy to support regional prosperity, enhance access to jobs and economic opportunities, and provide transportation options and affordable housing for all. The Plan is based on four priority policy areas:

- Build vibrant places for today's and tomorrow's residents.
- Foster the next generation of mobility solutions.
- Modernize the way we pay for transportation infrastructure.
- Build and maintain a safe, reliable, and multimodal transportation system.

SACOG CONGESTION MANAGEMENT PROCESS UPDATE (2020) [7]

Congestion management involves implementing strategies to enhance transportation system performance and reliability by minimizing the negative effects of congestion on the movement of people and goods. Congestion Management Process (CMP) provides updated data on transportation system performance and evaluates alternative strategies that address both state and local needs. The following are the objectives outlined in the CMP:

- Maintain or improve travel time reliability for freight and passenger vehicles
- Reduce traffic congestion for freight and passenger vehicles.
- Promote development that encourages making trips by public transit.
- Support proactive and innovative education and transportation demand management programs, covering all parts of the urbanized area, to offer a variety of choices to driving alone.

[5] *https://www.sacog.org/home/showpublisheddocument/308/638218230960130000*

[6] *https://www.sacog.org/home/showpublisheddocument/76/638212804736270000*

[7] *https://www.sacog.org/home/showpublisheddocument/1810/638376412235970000*

- Prioritize investments in transit, bike, and pedestrian improvements that reduce greenhouse gas emissions and vehicle miles traveled (VMT).
- Implement pilot projects aimed at making micromobility (such as bike and scooter share) work for urban, suburban, and low-income areas of the region.

SACOG REGIONAL MOBILITY HUB DESIGN GUIDANCE[8]

Mobility hubs provide a seamless connection between different transportation options, enabling people to easily transition between modes to reach their destinations. The vision of SACOG's Regional Mobility Hub Design Guidance is to establish a network of regional hubs that prioritize people, focusing on universal accessibility, safety, and community integration. These hubs are to be designed to seamlessly connect two or more transportation modes, including transit, biking, walking, shared mobility services, carpooling/vanpooling, and on-demand services and provide integrated, equitable mobility through flexible and user-friendly design.

PLACER COUNTY REGIONAL TRANSPORTATION PLAN (2019) [9]

The Placer County Regional Transportation Plan is a document developed to provide policy and funding guidelines for short-range and long-range transportation needs for the county's transportation system over the next twenty years. The Plan's goal is to support well-planned growth and land use patterns while improving environmental quality through better management of the transportation system. Additionally, the Plan seeks to improve access and mobility for all individuals, ensure viable travel options to jobs, services, and housing across the county.

PLACER COUNTY GENERAL PLAN (2013 UPDATE) [10]

Placer County General Plan (last updated in May 2013) serves as a guiding document for land use and development in the County. Several goals and policies of the Plan are applicable to the proposed project.

PLACER COUNTY SUSTAINABILITY PLAN (2020) [11]

The Placer County Sustainability Plan puts forward the analyzes and recommendations for GHG reduction and climate adaptation strategies in the unincorporated county. It sets GHG emission reduction targets for the years 2030 and 2050 for the county in MTCO2e/person and includes strategies to reduce transportation-related GHG emissions.

PLACER COUNTY REGIONAL BIKEWAY PLAN (2018) [12]

The Placer County Regional Bikeway Plan updates the prior Regional Bikeway Plan adopted in 2002 and establishes a vision to promote safe, convenient, and enjoyable bicycling by establishing a comprehensive system of bikeways that link the communities throughout the county. The Plan develops a regional system of bikeways that connect six incorporated cities and other unincorporated areas of the county and proposes bikeways in the unincorporated

[8] *https://www.sacog.org/planning/transportation/sustainable-mobility-program/mobility-hubs*

[9] *https://pctpa.specialdistrict.org/files/e9ce02f5b/Final_2040_RTP_Full_Document.pdf*

[10] *https://www.placer.ca.gov/DocumentCenter/View/8571/Introduction-PDF*

[11] *https://www.placer.ca.gov/DocumentCenter/View/42940/PCSP-ADOPTION?bidId=*

[12] *https://www.placer.ca.gov/DocumentCenter/View/57938/Placer-County-Regional-Bikeway-Plan-FINAL-20180629?bidId=*

county or bikeways requiring multijurisdictional coordination. The Plan aims to enhance bicycling for commuter and recreational use in the county through policies in three categories: safety, mobility and preservation.

The Plan proposes the following bikeways in the project's study area:

- Baseline Road between Fiddyment Road and West County limits – Buffered Bike Lane
- Pleasant Grove Road between Baseline Road and Moore Road – Shared Use Path/Side Path

Local

CITY OF ROSEVILLE GENERAL PLAN (2020) [13]

The City of Roseville General Plan 2035, adopted in 2020, acts as a policy guide for the city's future development and growth. The Plan is intended to be long-range, comprehensive and community focused. The Plan designates land use categories throughout the city, defining each land use category, including general uses, development, intensity, siting and compatibility standards.

The Circulation Element of the General Plan outlines Roseville's objectives for its circulation system, including the overall framework, level of service standards, design requirements, and policies that align with the city's broader planning, economic, social, and environmental goals. The objective of this element is to ensure accessibility to key destinations for all modes of travel, enhance travel options for residents, workers, and visitors, and maintain the transportation network in optimal condition.

The General Plan notes the LOS policy as "maintain a LOS "C" standard at a minimum of 70 percent of all signalized intersections and roadway segments in the City during the a.m. and p.m. peak hours. Exceptions to the LOS "C" standard may be considered where improvements required to achieve the standard would adversely affect pedestrian, bicycle, or transit access, and where feasible LOS improvements and travel demand reducing strategies have been exhausted."

CITY OF ROSEVILLE PEDESTRIAN MASTER PLAN (2011) [14]

The City of Roseville's Pedestrian Master Plan focuses on improving the design and development of public pedestrian pathways to create a safe, efficient, and visually appealing environment for all pedestrians. The Plan aims to establish a well-connected network of sidewalks and street crossings, providing Roseville residents with diverse transportation options, including walking, biking, transit, and driving. It prioritizes inclusive design, incorporating policies, projects, and programs to promote walking as a fundamental mode of transportation, while also supporting health and recreation for people of all ages and abilities. Additionally, it proposes the creation of Pedestrian Overlay Districts in areas where increased pedestrian activity is desired through the provision of enhanced pedestrian facilities.

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[13] *https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Development%20Services/Planning/City%20of%20Roseville%20GP.pdf*

[14] *https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Public%20Works/Biking%20&%20Walking/Planning/2-2011_Pedestrian%20Master%20Plan_WEB.pdf*

CITY OF ROSEVILLE COMMUNITYWIDE SUSTAINABILITY ACTION PLAN (2010) [15]

The City of Roseville Communitywide Sustainability Action Plan (SAP) outlines key objectives aimed at implementing transportation measures that reduce Vehicle Miles Traveled (VMT) and associated Greenhouse Gas (GHG), NOx and PM10 emissions. The objectives of the Plan aim to reduce the overall environmental footprint of the transportation system and serve as guidelines in setting VMT reduction strategies for the proposed project.

CITY OF ROSEVILLE BICYCLE MASTER PLAN (2008) [16]

The City of Roseville Bicycle Master Plan aims to achieve a balanced, multi-modal transportation system by developing a well-connected, safe, and accessible bikeway network that serves bicyclists of all levels and provides Roseville residents a variety of transportation choices, including automobile, transit, bicycle, and pedestrian options. The Plan also focuses on creating bikeway support facilities such as bike racks and repair stations to encourage both commuter and recreational cycling. The plan sets a goal to increase bicycle use in the City by 50 percent by 2020, promoting cycling for work, school, play and other destinations through incentives and encouragement efforts.

CITY OF ROSEVILLE COMMUNITY DESIGN GUIDELINES (2008) [17]

The Community Design Guidelines establishes design and technical guidelines including a list of specific recommendations and requirements for each land use category including commercial, office and industrial, multi-family and compact residential, for including in project design.

CITY OF ROSEVILLE DESIGN STANDARDS (2023) [18]

Section 4 of the Design Standards document establishes guidelines for the preparation of traffic studies to ensure consistency of analysis and adequate information to aid City staff and decision makers in the consideration of project approval regarding impacts to the City's transportation system.

CEQA TRANSPORTATION ANALYSIS

The transportation analysis assesses how the study area's transportation system would operate with the implementation of the proposed project. This analysis includes effects that would result in significant impacts under the State California Environmental Quality Act (CEQA) guidelines.

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15 *https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Public%20Works/Roseville%20Transit/Air%20Quality/SAP010611.pdf*

16 *https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Public%20Works/Biking%20&%20Walking/Planning/2008%20Bicycle%20Master%20Plan2.pdf*

17 *https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Development%20Services/Planning/General%20Plan/cdgweb032408.pdf*

18 *https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Development%20Services/Engineering/Transportation%20Planning/Traffic%20Impact%20Study%20Standards/DS-SECTION%204_2016%20100%20percent.pdf*

Thresholds of Significance

The Project's impact is considered significant if it would:

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
b) Conflict or be inconsistent with CEQA Guideline section 15064.3, subdivision (b).
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
d) Result in inadequate emergency access.

CEQA Project Impacts and Proposed Mitigations

TRAF-1	The proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. **(Finding: Less than significant)**

The project will not require substantial modifications to the transportation network except for Phillip Road along the project frontage. The modifications would not explicitly conflict with any program, plan, ordinance, or policy addressing the circulation system, including those relating to transit, bicycle, or pedestrian facilities. The project is not located within the Pedestrian Overlay Districts outlined in the City or Roseville's Pedestrian Master Plan (2011). The project does not prohibit implementation of bicycle facilities planned in the City of Roseville's Bicycle Master Plan (2008. Additionally, the project site is not directly served by any transit routes.

Therefore, the project impact due to a conflict with existing plans, ordinances, or policies will be **less than significant**.

TRAF-2	Project implementation may result in VMT metrics that are greater than the applicable thresholds (15 percent below the City's Baseline VMT metric) **(Finding: Significant and Unavoidable)**

Table 2 shows the City of Roseville's established VMT thresholds derived from Table 4.3-5 of the General Plan Update Environmental Impact Report (certified on August 5, 2020).[19] These thresholds are based on the City of Roseville travel forecasting model using 2016 land use assumptions and the VMT threshold is 15% below the Citywide baseline VMT metric.

Table 2: City of Roseville VMT Thresholds

Measure	Non-Residential Projects	Residential Projects
VMT Produced	5,459,700	1,822,100
No. of Residents	120,812	120,812
No. of Employees	67,530	--

[19] *https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Development%20Services/Engineering/Design%20and%20Construction%20Standards/2023%20City%20of%20Roseville%20Design%20and%20Construction%20Standards.pdf (page 62 of 630).*

Measure	Non-Residential Projects	Residential Projects
Service Population	188,342	--
Base year VMT Metric	29.0 VMT per service population	15.1 VMT per capita
VMT Threshold (15% below Base year VMT Metric)	24.5 VMT per service population	12.8 VMT per capita

The City uses VMT per service population as an efficiency metric to determine VMT impacts for non-residential projects. The service population is the sum of residents and employees. As shown in Table 2, the VMT per service population threshold for non-residential projects for the City of Roseville is 24.5.

Kittelson prepared a VMT calculation citywide and the project using the 2020 City of Roseville travel forecasting model to reflect the most recent baseline year and model. Table 3 shows the Existing Citywide Conditions and Project TAZ VMT for the full build-out of the project. The detailed methodology to calculate the Project TAZ VMT is discussed in Appendix B.

Table 3. Project TAZ VMT and Citywide Baseline VMT

Measure	Existing Citywide Conditions (2020) [1]	Project TAZ VMT with Project
VMT Produced	7,172,610	29,805[2]
Number of Residents	140,629	18[3]
Number of Employees	80,350	696[4]
Service Population	220,979	714
VMT Metric (VMT per service population)	32.5	41.7

1. Obtained using the City of Roseville travel forecasting model for the year 2020.
2. Reported VMT is the sum of "VMT From" and "VMT To" from the Project TAZ (Traffic Analysis Zone). The VMT Produced for Project TAZ includes the VMT from residents, employees and trucks.
3. The 2020 land use in the model includes 5 single family and 2 multifamily homes for the Project TAZ. As provided in Table VMT-1, Section 4 Traffic Impact Studies of the City of Roseville's Design Standards, the number of residents per dwelling unit in the Project TAZ is calculated based on the conversion factor of 2.68 for single-family homes and 2.32 for multi-family homes.
4. The number of employees is based on the trip generation for the full build-out of the project.

The VMT per service population with the project is greater than the City's VMT per service population threshold of 24.5 for non-residential projects. Therefore, the proposed project would be considered to have a **significant** VMT impact. Further, as shown in Table 3, The Project TAZ VMT for the full build-out of the project is greater than the Existing Citywide conditions for the base year 2020.

Mitigation

Mitigation for VMT impacts for employment uses would include mitigation measures TRAF-2-1 through TRAF-2-3. The potential effectiveness of mitigation measures for VMT has been estimated using the CAPCOA *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*[20]. It should be noted that the total

[20] *California Air Pollution Control Officers Association (CAPCOA), Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, December, 2021, https://www.airquality.org/ClimateChange/Documents/Final%20Handbook_AB434.pdf*

project VMT includes discretionary VMT (commute VMT from employees) and mandatory VMT (truck trips). Mitigation measures TRAF-2-1 through TRAF-2-3 are identified to reduce the discretionary commute VMT from employees, which represents only a portion of the total project VMT.

Mitigation Measure TRAF-2-1: Based on the City of Roseville's Transportation System Management (TSM) Ordinance, all businesses or common work locations (such as office building/complex, commercial/retail center, industrial building/park) with 50 or more employees are required to have a TSM Plan and designate a Site TSM Coordinator who serves as a liaison between the City of Roseville and employees/businesses at the site. The goals of the TSM Ordinance are to reduce vehicle emissions, vehicle miles traveled and traffic congestion, improve air quality and transportation efficiency. Accordingly, the proposed project shall implement a commute trip reduction program consistent with other trip reduction strategies in the City of Roseville,[21] which would include the alternative transportation options as the following:

- Bicycling and walking,
- Carpooling,
- Flexible Work hours,
- Riding the bus to work,
- Vanpooling.

The CAPCOA Handbook Measure T-4 estimates that a voluntary commute trip reduction program can reduce Greenhouse Gas (GHG) emissions commute VMT by up to 4.0 percent with full participation of all eligible employees.

Mitigation Measure TRAF-2-2: Provide an employee sponsored Vanpool program. The CAPCOA Handbook Measure T-10 estimates that provision of employee-sponsored vanpool can reduce GHG emissions from the commute VMT by up to 20.4 percent. Vanpooling is a flexible form of public transportation that provides groups of 5 to 15 people with a cost-effective and convenient rideshare option for commuting.

Mitigation Measure TRAF-2-3: Contribute to implementation of extending transit network coverage and hours in Roseville, including potential service to the Project area. Implementation of an expanded transit service would require both capital expenditures for support facilities, including construction of transit stops and facilitating extensions of future transit routes. The CAPCOA Handbook Measure T-24 estimates that extending transit network and coverage can reduce GHG emissions from VMT by up to 4.6 percent. Note that these VMT reductions would occur citywide and would not exclusively affect Project trips.

SIGNIFICANCE AFTER MITIGATION

VMT reduction depends on factors such as actual implementation of planned land use development, demographic change, the cost of fuel, infrastructure changes such as addition of bike lanes, and the competitiveness of transit relative to driving, which relates to congestion along vehicular commute routes that are not under the project's jurisdiction, as well as transit provided by parties other than the project or the City of Roseville.

[21] *https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Public%20Works/TSM/TSM%20Handbook%20-%20Section%20IV.pdf*

The feasibility and effectiveness of the mitigation measures for the proposed project is unknown at this time, and even if implemented to the estimated percentages would not obtain the target VMT levels. The project cannot demonstrate definitively that implementation of these policies would achieve VMT reductions to meet the VMT per service population thresholds. Therefore, the VMT impact for the proposed project would remain **significant and unavoidable**.

TRAF-3	The proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **(Finding: Less Than Significant)**

Hazards are typically assessed at the individual project level when an actual design and construction of a circulation facility is proposed. The potential impacts associated with the proposed project would be analyzed and evaluated in detail through the city review process when the design plans become available. The City's Design and Construction Standards[22] provide for coordinated and standardized development of city facilities, including roadways.

To provide access to the project site, Phillip Road would be improved from its current condition along the frontage of the project site and east to the westerly terminus of Blue Oaks Boulevard. The improvements to Phillip Road are expected to reflect the City's Street Geometric Requirements (Table 7-1 of the City of Roseville Design Standards), 48-foot right of way Collector/Industrial Street requirements, with sidewalk constructed along the north side.

The proposed project driveways will be required to follow the City's design standards as they apply to, regulate, and guide the design and preparation of plans, and the construction of streets, highways, alleys, drainage, traffic signals, site access, and related public improvements.

The project will include a public driveway connecting to Phillip Road. Based on Section 5-4 of the City of Roseville's Design Standards, "*the number of driveways serving a parcel or site for land uses other than single family residential or duplex land uses, shall be minimized but not to a point that could cause local congestion within the public right-of-way. For projects requiring a Traffic study, the study shall evaluate the proposed site access for the project. The study shall discuss balancing the number of driveways for the project, so the number of driveways is minimized, while still providing enough access points to minimize congestion and delay.*"

The local transportation analysis for the proposed project includes analysis of the project driveways on Phillip Road in the Cumulative with Project scenario to confirm the geometry is appropriate to serve anticipated volumes.

Section 7-14 of the City of Roseville's Design Standards requires that "*all new driveways for Office/Commercial/Industrial land uses have a minimum throat width of 35 feet. The minimum width may be reduced to 25 feet if the driveway is a secondary access or restricted to right turn movements.*" The City of Roseville will review the design and connection of new driveways and would ensure that the design and construction of new driveways would meet the City's Design Standards and would not interfere with the movement of vehicles along existing roads.

The roadway connections to the project will meet the City's design standards and does not include any unusual geometric designs or hazards. The project is located in an area that is

22 *https://www.roseville.ca.us/government/departments/development_services/engineering_land_development/construction_management_inspection/design_construction_standards*

compatible with its surroundings for its use, bringing larger vehicles away from the urban areas of the City and providing separate access for larger vehicles to access the site. Therefore, potential impacts related to hazards due to a geometric design feature or incompatible uses would be **less than significant**, and no mitigation measures would be required.

TRAF-4	The proposed Project would not result in inadequate emergency access. **(Finding: Less than Significant)**

Emergency response requires a balance of emergency response time and evacuation needs with other community concerns, such as urban design and traffic calming. The proposed project would implement components of the roadway consistent with the City's Design and Construction standards to ensure adequate emergency access is provided. The project does not create any constraints to access or evacuation along the roadway network. Therefore, impacts related to inadequate emergency access would be **less than significant**, and no mitigation measures would be required.

Local Transportation Analysis

The local transportation analysis identifies the effects of the project on traffic operations in terms of vehicle delay and level of service (LOS), queuing issues and signal warrants. Recommendations are provided for locations where traffic operations would be deficient relative to the City of Roseville standards.

ANALYSIS METHODOLOGIES

The traffic operations analyses were conducted based on the methodologies described below.

Traffic Volumes

Traffic volumes for existing conditions were determined using intersection turn movement data collected at the study intersections in October 2024.

The opening year (2028) baseline conditions added the estimated trips generated by Phillip Road Site project to the existing counts.

The cumulative year (2040) baseline traffic volumes were based on projections developed by Fehr & Peers which used the city's 2035 model and added the estimated trips generated by Philip Road Site project in 2028, assuming that the model represents buildout of all the planned developments in the study area, and that those would be completed by that time.

For both the opening year plus project and cumulative year plus project scenarios, project-generated traffic was added to the respective opening year scenario or cumulative year scenario's traffic volumes.

Intersection Delay and Level of Service (LOS)

Level of service (LOS) describes the operating conditions experienced by motorists. LOS is a qualitative measure of the effect of a number of factors, including speed and travel time, traffic interruptions and delay, freedom to maneuver, driving comfort, and convenience. LOS A through LOS F covers the entire range of traffic operations that might occur. Motorists using a facility that operates at a LOS A experience very little delay, while those using a facility that operates at a LOS F will experience long delays.

Table 4 presents the relationship of average delay to level of service for both signalized and unsignalized intersections.

The City of Roseville Design Standard Section 4 - Traffic Impact Studies (2023) contains standards to be used in conducting an intersection LOS analysis. The city requires the latest version of the Transportation Research Board, Highway Capacity Manual (HCM) methodology to evaluate peak hour LOS at both signalized and unsignalized intersections. For signalized intersections or all-way stop-controlled intersections, the HCM procedure calculates a weighted average control delay in seconds per vehicle at a signalized intersection and assigns a level of service designation based upon the delay. For unsignalized two-way stop-controlled intersections, the HCM methodology calculates a weighted average control delay in seconds per vehicle for each controlled intersection leg; the LOS for the worst approach is used as the LOS performance measure.

Study intersections were evaluated for the AM peak hour, occurring between 7-9 AM, and the PM peak hour, occurring between 4-6 PM. Intersection LOS for these peak hours is calculated using the Highway Capacity Manual (HCM) 7th Edition methodologies as implemented by the Synchro traffic analysis software.

Table 4: Level of Service Definitions for Intersections

LOS	Description of Traffic Conditions	Signalized Intersection Average Delay Per Vehicle (Seconds)	Unsignalized Intersection Average Delay Per Vehicle (Seconds)
A	Free flowing. Most vehicles do not have to stop.	≤10.0	≤10.0
B	Minimal delays. Some vehicles have to stop, although waits are not bothersome.	>10.0 and ≤20.0	>10.0 and ≤15.0
C	Acceptable delays. Significant numbers of vehicles have to stop because of steady, high traffic volumes. Still, many pass without stopping.	>20.0 and ≤35.0	>15.0 and ≤25.0
D	Tolerable delays. Many vehicles have to stop. Drivers are aware of heavier traffic. Cars may have to wait through more than one red light. Queues begin to form, often on more than one approach.	>35.0 and ≤55.0	>25.0 and ≤35.0
E	Significant delays. Cars may have to wait through more than one red light. Long queues form, sometimes on several approaches.	>55.0 and ≤80.0	>35.0 and ≤50.0
F	Excessive delays. Intersection is jammed. Many cars have to wait through more than one red light, or more than 60 seconds. Traffic may back up into "up-stream" intersections.	>80.0	>50.0

Source: Transportation Research Board, Highway Capacity Manual 7th Edition (Washington D.C., 2022)

CITY OF ROSEVILLE LOS STANDARDS

Per the City of Roseville Traffic Impact Studies (2016), the peak hour design objective shall be a minimum intersection Level of Service (LOS) "C." A comparison of LOS with and without project conditions shall be provided for all signalized intersections (both existing and future). Intersections where LOS degrades from acceptable to unacceptable, as defined by the City's current LOS policy, must be identified, along with feasible recommended improvements. An "impact" refers to a violation of the City's intersection LOS policy, which requires maintaining a minimum LOS C at 70% or more of all signalized intersections and roadway segments during the PM peak hour, or causing an intersection operating at LOS "C" to degrade to worse than LOS C.

Exceptions to the LOS C standard may be considered if the city determines that the necessary improvements are unacceptable based on established implementation criteria. Additionally, Pedestrian Districts may be exempt from the LOS standard.

Recommended Improvements

Intersection LOS without and with the project are compared for all analysis scenarios to determine operational deficiencies based on the LOS standards and criteria for the city. Where deficiencies were found, recommendations are made for changes to improve the intersection to a non-deficient condition, where improvements are feasible. Peak hour signal warrant analyses are conducted as necessary to assess whether an unsignalized intersection meets the peak hour signal warrant.

PROJECT TRAFFIC

Project-related trip estimates were calculated to assess the project's potential impact on traffic operations for the roadway network.

Trip Generation

For the RRTO facilities, trucks are the primary trip generator and estimated based on the tonnage of materials being processed, including but not limited to collection vehicles, self-haul vehicles, and transfer trucks. The type of collection vehicles and the weights per load values were associated with the amount of tonnage to be processed to estimate likely trip generation, i.e., total daily trips, incoming and outgoing AM and PM peak hour trips. Based on the provided project description, the assumed payload for the refuse/recycling collection trucks is 9 tons and the assumed payload for the transfer/commodity shipment trucks is 20 tons. The annual truck trips for 2028 are 30,000 for refuse or recycling collection trucks and 13,500 for transfer or commodity shipment trucks. The annual truck trips for 2040 are 74,000 for refuse or recycling collection trucks and 33,000 for transfer or commodity shipment trucks. Since trucks are larger and less maneuverable than typical vehicles within the local circulation system, a Passenger Car Equivalent (PCE) factor of 2 has been applied to the project trucks. The resulting number of trips would be used in the local transportation analysis. Additionally, the AM and PM peak hour rates were estimated based on a similar project in San Juan Capistrano, California, assuming AM and PM trips account for 10% of daily trips, respectively. The number of total facility throughout tons and the project annual truck trips are shown in Table 5.

Table 5: Estimated Quantity of Annual Materials Managed at the RRTO and Project Annual Tributary Traffic for Materials Receipt and Removal

Year	Total Facility Throughput Tons	Refuse or Recycling Collection Trucks	Transfer or Commodity Shipment Trucks
2028	270,000	30,000	13,500
2040	660,000	74,000	33,000

Based on the combined RRTO and EU Operations Facility Corporation Yard sizing efforts, the staffing levels, i.e., the number of employees by each construction phase are shown in Table 6. As per the table, the net new employees to be accommodated at the proposed project would

be 58 (in 2028), and 529 (in 2040). The trips generated by the existing 165 employees at the Hilltop Circle Corporation Yard would be added to each of the analysis scenarios to establish total employees using the site.

For estimating the number of trips made by employees for the proposed project, Kittelson used the ITE Trip Generation Manual Land Use Code 710 (General office building) rates, shown in Table 7. Kittelson calculated the employee trip generation estimates for use in the local transportation analysis, they are shown in Table 8.

Table 6: Number of Employees during each phase of construction for combined RRTO and EU Operations Facility Corporation Yard

Functional Use	Existing Conditions	2028	2058
MRF	N/A	28	81
Transfer Station	N/A	10	13
Future Potential Compost Facility	N/A	NA	13
Scale House	N/A	5	8
Business Services and Management	11	33	33
Technical Services	13	30	30
EU Fleet Services	19	37	37
Refuse and Stormwater Utility	61	138	138
Water Utility	61	148	148
Shared Spaces	N/A	N/A	N/A
Vendor Lease Area	N/A	10	30
TOTAL	**165**	**439**	**531**

Table 7: ITE Vehicle Trip Generation Rate for ITE Land Use Code 710: General Office Building for Weekday

			AM Peak Hour			PM Peak Hour		
ITE Land Use Code	Unit	Daily	**In**	**Out**	**Total**	**In**	**Out**	**Total**
710	Employees	3.33	88%	12%	0.49	17%	83%	0.45

The truck trips and employee trips are combined to obtain the total number of daily trips generated by the project. As shown in Table 8, the proposed project is expected to generate 981 daily trips with 133 AM (108 inbound and 25 outbound) peak hour trips and 124 PM (29 inbound and 95 outbound) peak hour trips in the opening year of 2028. At full buildout in 2040, the project is expected to generate 2,898 daily trips with 399 AM (329 inbound and 70 outbound) peak hour trips and 372 PM (83 inbound and 289 outbound) peak hour trips.

Table 8: Overall Vehicle Trip Generation Estimate (Based on ITE Land Use Code 710 for General Office Building)

Land Use	Unit	Size	Week day Daily Rate	PCE	Weekday Daily Vehicle Trips	Weekday AM Peak Hour						Weekday PM Peak Hour					
						Average Rate	In%	Out%	In	Out	Total	Average Rate	In%	Out%	In	Out	Total
2024 Trip Generation[23]																	
General Office Building*	Employees	165	3.33	N/A	549	0.49	88%	12%	71	10	81	0.45	17%	83%	13	62	74
2028Trip Generation[24]																	
General Office Building*	Employees	604	3.33	N/A	2,012	0.49	88%	12%	260	36	296	0.45	17%	83%	46	226	272
RRTO Facility and Corporation Yard**	Truck Trips	119	-	2	238	10%	50%	50%	12	12	24	10%	50%	50%	12	12	24
Total Proposed Project Trips in 2028					***2250***				***272***	***48***	***320***				***58***	***238***	***296***
2058 Trip Generation																	
General Office Building*	Employees	696	3.33	N/A	2,318	0.49	88%	12%	300	41	341	0.45	17%	83%	53	260	313
RRTO Facility and Corporation Yard**	Truck Trips	293	-	2	586	10%	50%	50%	30	29	59	10%	50%	50%	30	29	59
Total Proposed Project Trips in 2058					***2904***				***330***	***70***	***400***				***83***	***289***	***372***

Source: * ITE Trip Generation Manual 11th Edition & Trip Generation Handbook, 3rd Edition

**AM and PM peak hour rates = 10% of daily trips (based on a similar project in San Juan Capistrano, California

[23] Existing employees provided for informational purposes.
[24] The employee estimates for RRTO facility and corporation yard include the existing and the proposed project employee estimates.

Trip Distribution

For the new proposed project trips, Kittelson considered the travel time comparison for travel between the project site using city roadways to state highway system, i.e., SR 65 and interstate 80 (I-80) when developing trip distribution. This was supplemented by information on the expected distribution of the proposed project trips using the City of Roseville base year (2020) travel demand model.

The trip distribution assumptions in the opening year and cumulative year are shown in Figure 7 and Figure 8, respectively, include:

- Approximately 50 percent of trips would use Blue Oaks Boulevard to access SR 65 via the interchange. In the cumulative year, once Placer Parkway is built, 30 percent of trips would shift from Blue Oaks Boulevard to Placer Parkway to access SR 65.
- Approximately 5 percent would take Fiddyment Road to access SR 65.
- Approximately 30 percent would use Westbrook Boulevard to Pleasant Grove Boulevard, to either travel to/from the east on Pleasant Grove Boulevard to access I-80 or to/from the south on Fiddyment Road.
- Approximately 10 percent would use S Brewer Road to travel on Baseline Road to access SR-99 or I-80.
- The remaining 5 percent would remain within the area west of Fiddyment Road and south of Blue Oaks Boulevard.

The trip distribution for trucks generally follows a similar pattern, however, the truck routes being used today for these purposes and proposed project site driveways are considered for determining the truck trip assignment separately.

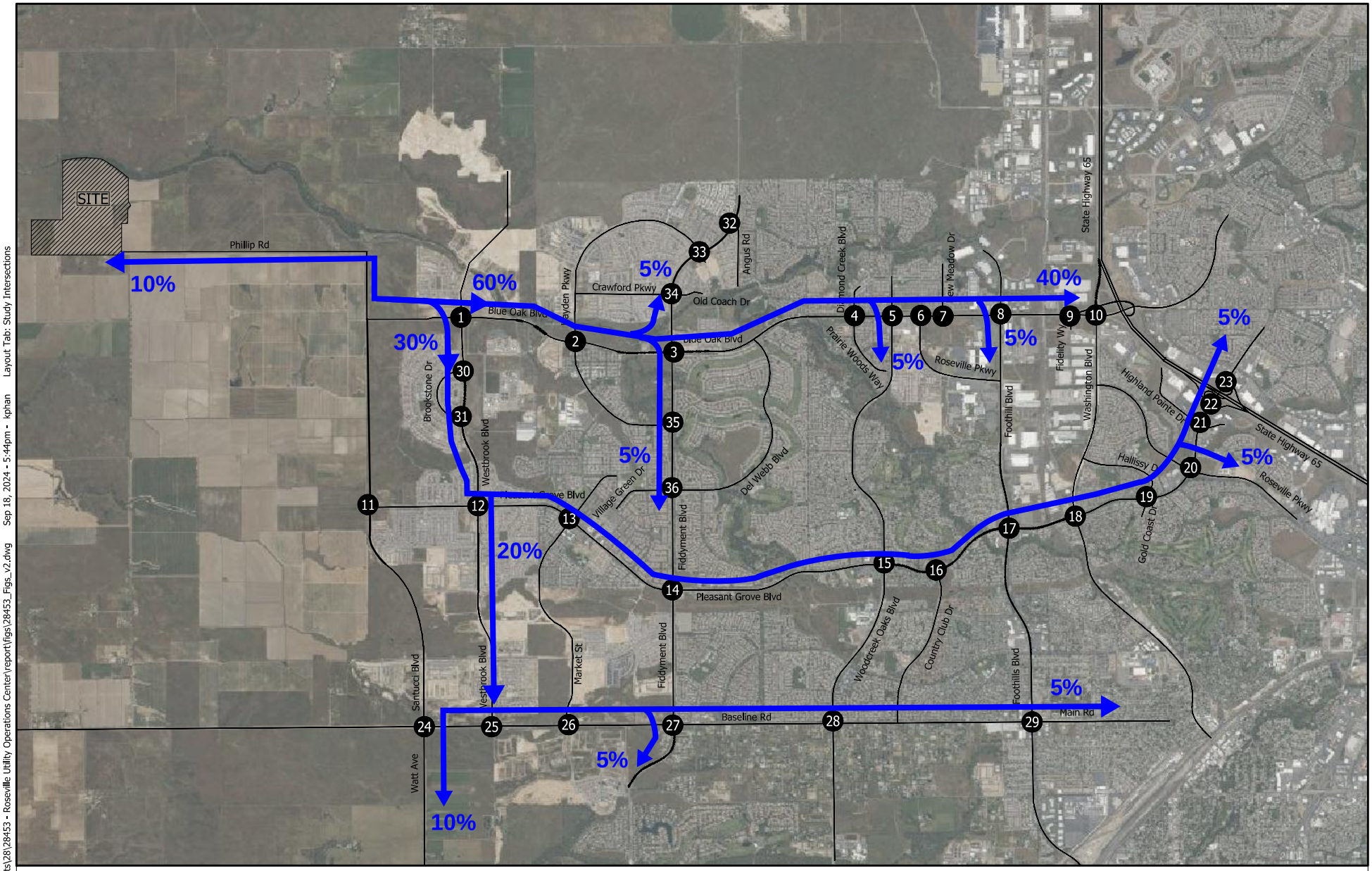
Study Scenarios

The LTA will examine traffic operations at study intersections for the following scenarios in the AM and PM peak hours:

- Existing Conditions
  - Provides an overview of intersection operations as of October 2024, based on the turning movement counts collected at that time.
- Opening Year No Project Conditions (2028)
  - Represents traffic conditions in the year 2028 assuming the Philip Road Site Project is built, but without project-generated traffic.
  - Includes roadway improvements on Blue Oaks Boulevard and Phillip Road implemented after the traffic volumes were collected in October 2024.
- Opening Year Plus Project Conditions (2028)
  - Evaluates how the transportation network will operate in 2028 with the proposed project.
  - Assumes the same lane configurations and traffic control measures as the Opening Year No Project scenario.
- Cumulative Year No Project Conditions (2040)
  - Projects transportation network performance in 2040 based on area buildout, excluding project-generated traffic.

  - Reflects network changes identified in the Roseville Housing Element Synchro files developed by Fehr & Peers, as detailed in the Cumulative Year No Project Traffic Volume section.

- Cumulative Year Plus Project Conditions (2040)
  - Assesses future transportation operations in 2040 with the proposed project in place.
  - Maintains the same lane configurations and traffic control types as the Cumulative No Project scenario.



EXISTING ROADWAY

STATE HIGHWAY

PROJECT SITE LEGEND

STUDY INTERSECTION

TRIP DISTRIBUTION RATE

Opening Year Trip Distribution

Figure 7

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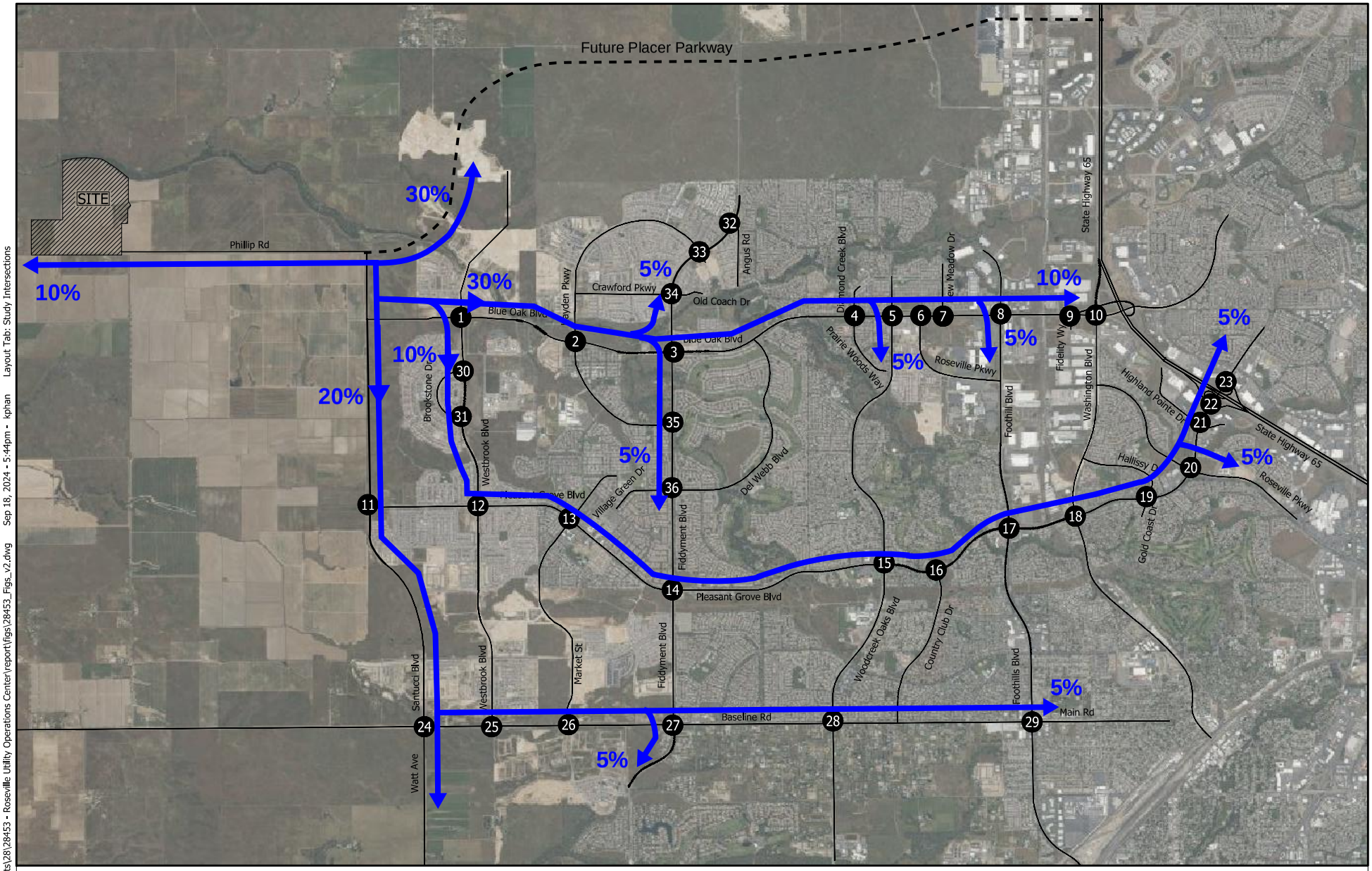

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION
TRIP DISTRIBUTION RATE
FUTURE PLACER PARKWAY

Cumulative Year Trip Distribution

Figure 8

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EXISTING TRAFFIC OPERATIONS

Existing Traffic Volumes

Weekday intersection vehicle turning movement counts were collected during the AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak periods on Thursday, October 24, 2024, at the study intersections. The existing counts for the study intersections in the AM and PM peak hour are shown in Figure 9 and Figure 10, respectively. The intersection turning movement count data are provided in Appendix C. The existing lane configurations and traffic control types are shown in Figure 11.

Existing Intersection Operations

Table 9 summarizes the operational performance of the study intersections during the AM and PM peak hours under existing conditions. Most of the intersections currently operate at LOS C or better during both AM and PM peak hours.

The signalized intersections operating at LOS D or worse in the AM peak hour are:

- Intersection 14: Fiddyment Road & Pleasant Grove Boulevard – LOS D
- Intersection 15: Woodcreek Oaks Boulevard & Pleasant Grove Boulevard – LOS D
- Intersection 17: Foothills Boulevard & Pleasant Grove Boulevard – LOS D
- Intersection 18: Washington Boulevard & Pleasant Grove Boulevard – LOS E
- Intersection 19: Hallissy Drive/Gold Coast Drive & Pleasant Grove Boulevard – LOS D
- Intersection 20: Pleasant Grove Boulevard & Roseville Parkway – LOS E
- Intersection 27: Fiddyment Road & Baseline Road – LOS D
- Intersection 28: Woodcreek Oaks Boulevard/Cook Riolo Road & Baseline Road – LOS D

The signalized intersections operating at LOS D or worse in the PM peak hour are:

- Intersection 17: Foothills Boulevard & Pleasant Grove Boulevard – LOS D
- Intersection 18: Washington Boulevard & Pleasant Grove Boulevard – LOS D
- Intersection 20: Pleasant Grove Boulevard & Roseville Parkway – LOS E
- Intersection 27: Fiddyment Road & Baseline Road – LOS D
- Intersection 29: Foothills Boulevard & Baseline Road/Main Street – LOS D

Additionally, each of the all-way stop-controlled intersections currently operate at LOS C or better. The LOS calculation sheets for existing conditions are shown in Appendix D.

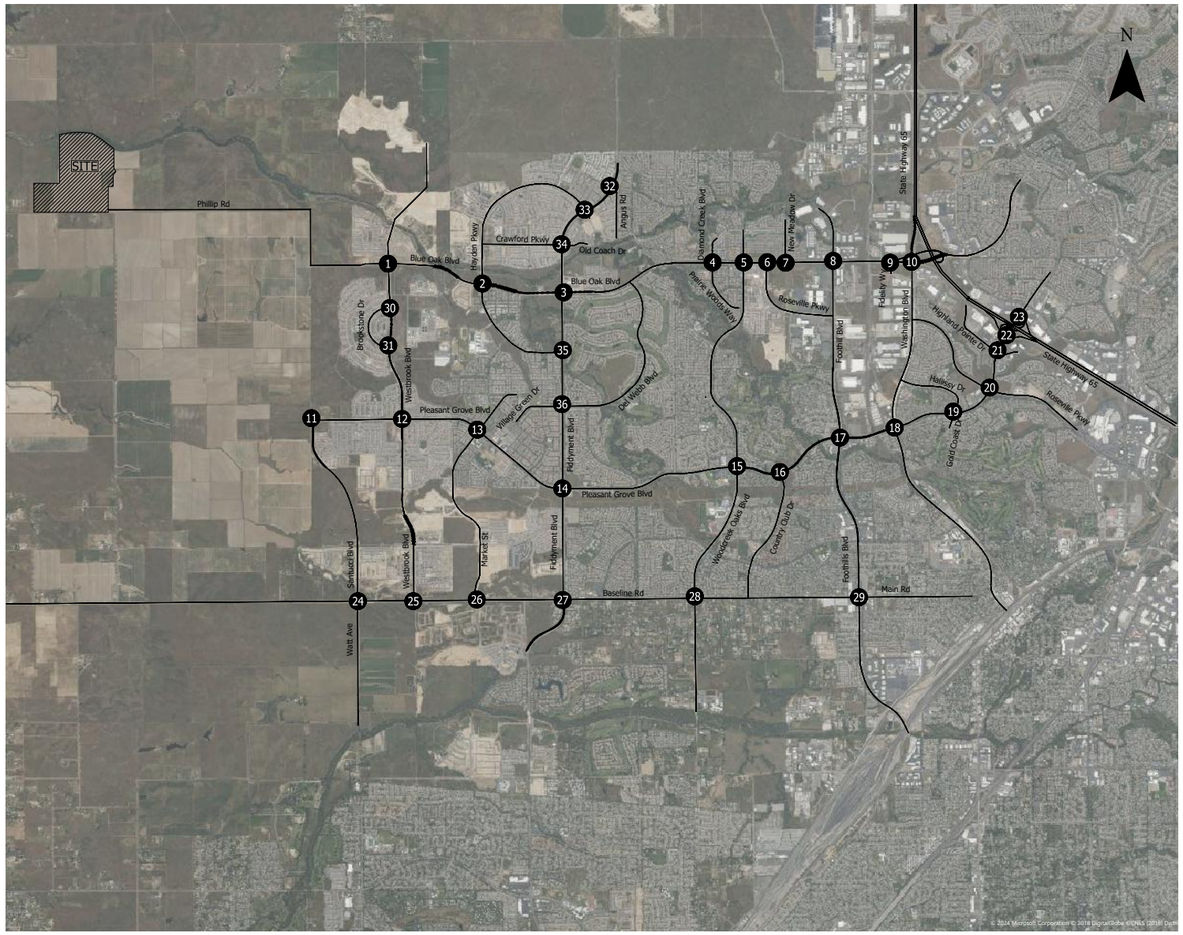
Table 9: Existing Traffic Operations

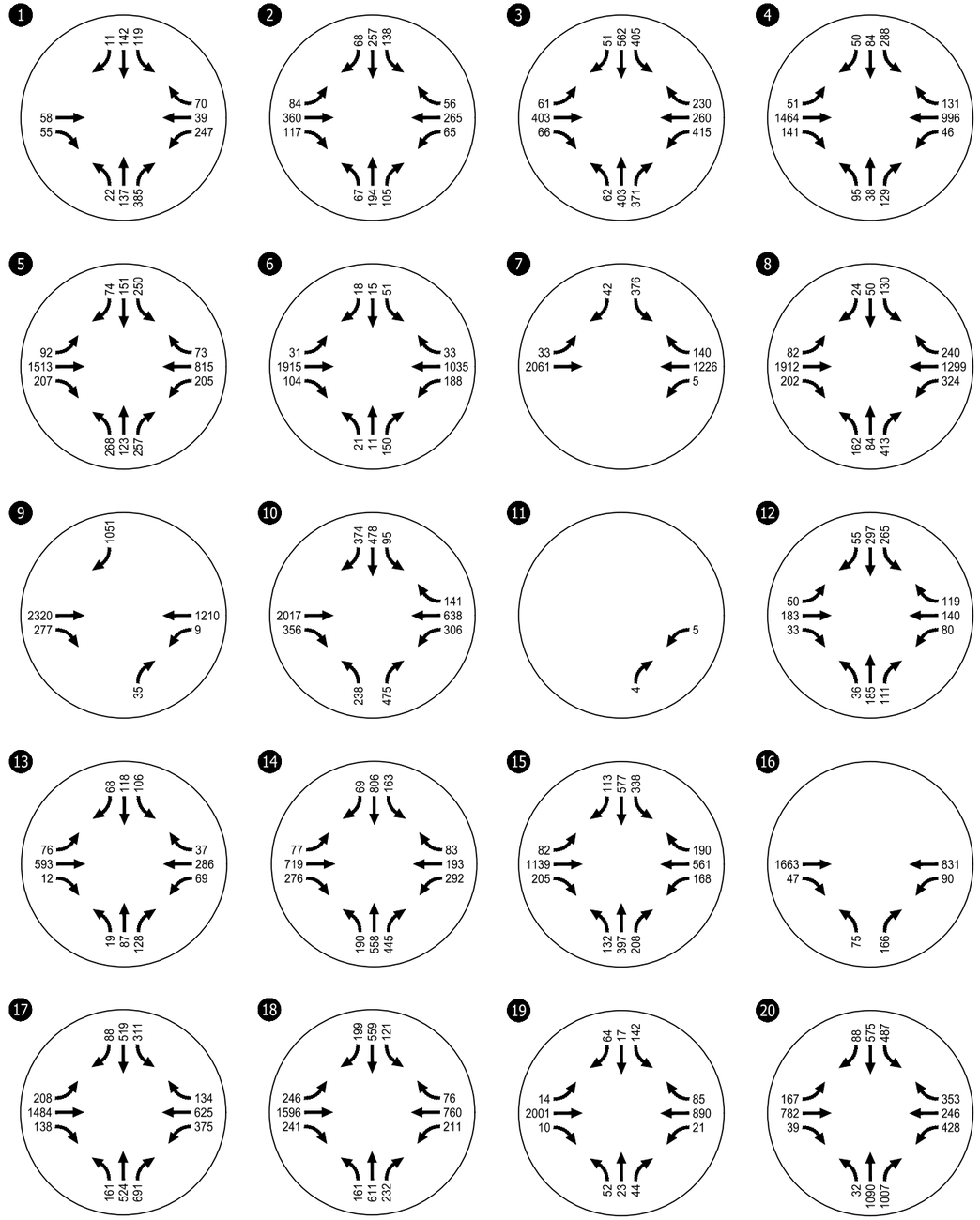
ID	North-South Street	East-West Street	Control Type	Existing AM		Existing PM	
				Delay	LOS	Delay	LOS
1*	Westbrook Blvd	Blue Oaks Blvd	AWSC[1]	0.44	A	0.37	A
2	Hayden Pkwy	Blue Oaks Blvd	Signalized	22.0	C	15.7	B
3	Fiddyment Rd	Blue Oaks Blvd	Signalized	30.1	C	30.7	C
4	Diamond Creek Blvd/Prairie Woods Wy	Blue Oaks Blvd	Signalized	29.5	C	10.2	B
5	Woodcreek Oaks Blvd	Blue Oaks Blvd	Signalized	30.6	C	19.5	B
6	Walgreens Dwy/Roseville Pkwy	Blue Oaks Blvd	Signalized	8.9	A	7.9	A
7	New Meadow Dr	Blue Oaks Blvd	Signalized	9.1	A	7.8	A
8	Foothills Blvd	Blue Oaks Blvd	Signalized	26.8	C	33.4	C
9	Fidelity Wy	Blue Oaks Blvd	Signalized	2.5	A	3.7	A
10	Washington Blvd	Blue Oaks Blvd	Signalized	24.9	C	20.1	C
11	Santucci Blvd	Pleasant Grove Blvd	AWSC[2]	8.0	A	7.6	A
12	Westbrook Blvd	Pleasant Grove Blvd	Signalized	22.6	C	18.1	B
13	Market St	Pleasant Grove Blvd	Signalized	29.3	C	25.2	C
14	Fiddyment Rd	Pleasant Grove Blvd	Signalized	49.7	D	34.0	C
15	Woodcreek Oaks Blvd	Pleasant Grove Blvd	Signalized	54.1	D	34.1	C
16	Country Club Dr	Pleasant Grove Blvd	Signalized	11.0	B	6.6	A
17	Foothills Blvd	Pleasant Grove Blvd	Signalized	42.7	D	47.7	D
18	Washington Blvd	Pleasant Grove Blvd	Signalized	59.9	E	50.5	D
19	Hallissy Dr/Gold Coast Dr	Pleasant Grove Blvd	Signalized	50.1	D	25.7	C
20	Pleasant Grove Blvd	Roseville Pkwy	Signalized	67.7	E	60.8	E
21	Pleasant Grove Blvd	Highland Pointe Dr	Signalized	31.1	C	35.4	D
22	Pleasant Grove Blvd	SR 65 SB Ramps	Signalized	10.9	B	8.9	A
23	Pleasant Grove Blvd	SR 65 NB Ramps	Signalized	13.8	B	14.5	B
24	Santucci Blvd/Watt Ave	Baseline Rd	Signalized	23.3	C	26.6	C
25	Westbrook Blvd	Baseline Rd	Signalized	21.6	C	12.2	B

ID	North-South Street	East-West Street	Control Type	Existing AM		Existing PM	
				Delay	LOS	Delay	LOS
26	Market St/Stargazer Dr	Baseline Rd	Signalized	15.1	B	13.8	B
27	Fiddyment Rd	Baseline Rd	Signalized	35.9	D	37.3	D
28	Woodcreek Oaks Blvd/Cook Riolo Rd	Baseline Rd	Signalized	37.5	D	34.6	C
29	Foothills Blvd	Baseline Rd/Main St	Signalized	32.2	C	38.4	D
30*	Westbrook Blvd	Brookstone Dr (North)	AWSC	20.1	C	9.2	A
31*	Westbrook Blvd	Brookstone Dr (South)	AWSC	14.1	B	9.5	A
32	Fiddyment Rd	Parkland Wy/Angus Rd	Signalized	18.0	B	18.0	B
33	Fiddyment Rd	N Hayden Pkwy	Signalized	23.8	C	15.9	B
34	Fiddyment Rd	Crawford Pkwy/Old Coach Dr	Signalized	34.2	C	16.2	B
35	Fiddyment Rd	Hayden Pkwy	Signalized	11.3	B	10.4	B
36	Fiddyment Rd	Village Green Dr/Del Webb Blvd	Signalized	18.5	B	19.7	B

Notes:
* These intersections were unsignalized when turning movement counts were collected in October 2024 but were signalized in early 2025. As a result, the existing conditions analysis does not reflect the updated signalization; however, the 2028 opening year scenarios will incorporate these changes.
AWSC = All-way stop control. Delay = Average vehicle delay in seconds
[1] The HCM 7th Edition methodology for all-way stop-controlled intersections does not support configurations with more than three lanes per leg; therefore, LOS is reported based on the ICU method.
[2] The HCM 7th Edition methodology for all-way stop-controlled intersections does not support configurations with more than three lanes per leg. However, since some movements have zero volume, lane configurations were modified to allow delay and LOS to be reported.
[3] The study area includes a portion of all signalized intersections citywide.

Source: Kittelson & Associates, Inc., 2025





EXISTING ROADWAY
STATE HIGHWAY

PROJECT SITE LEGEND
STUDY INTERSECTION

Existing AM Peak Hour Volumes
(Intersections 1-20)
Roseville, CA

Figure
9

KITTELSON & ASSOCIATES

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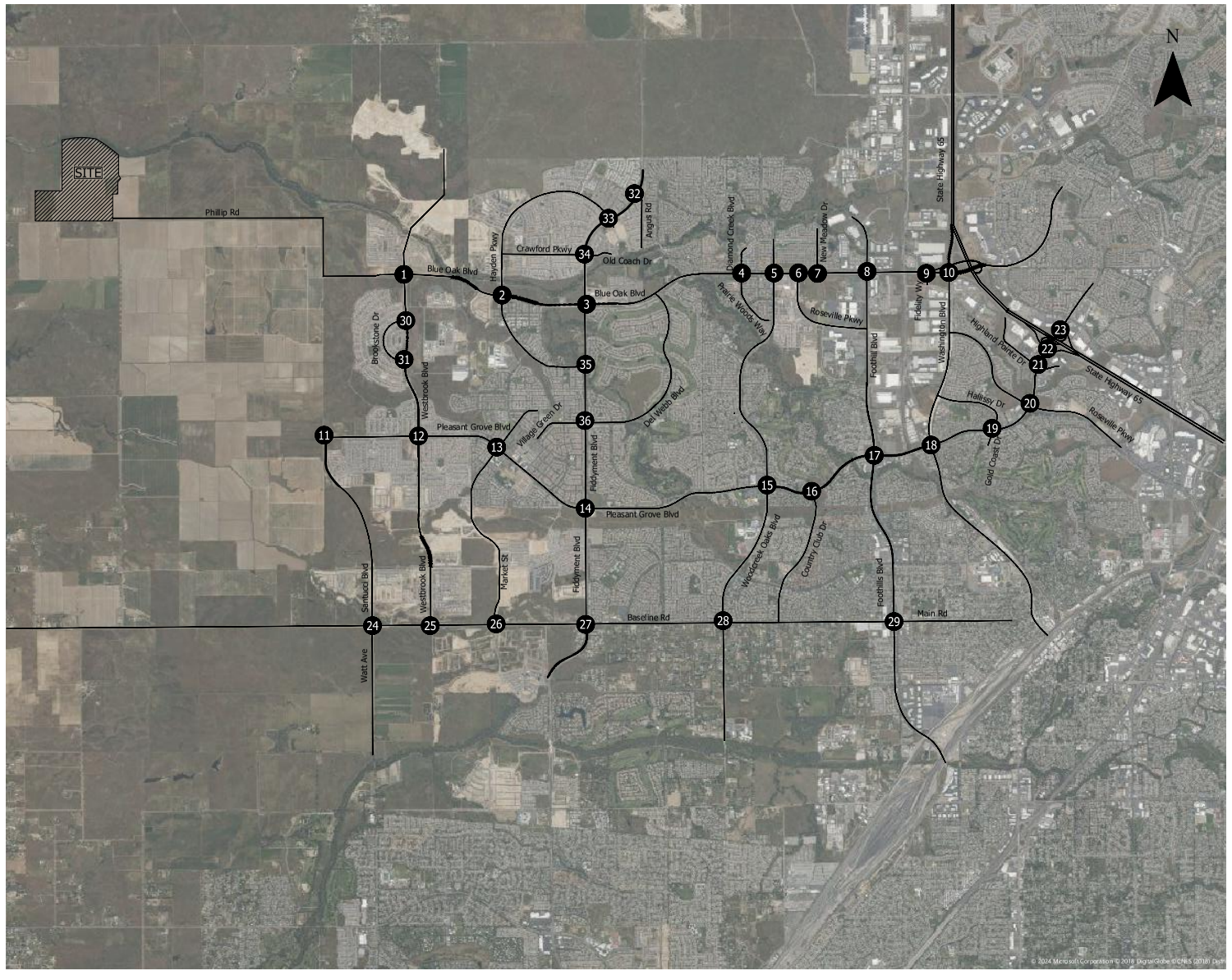

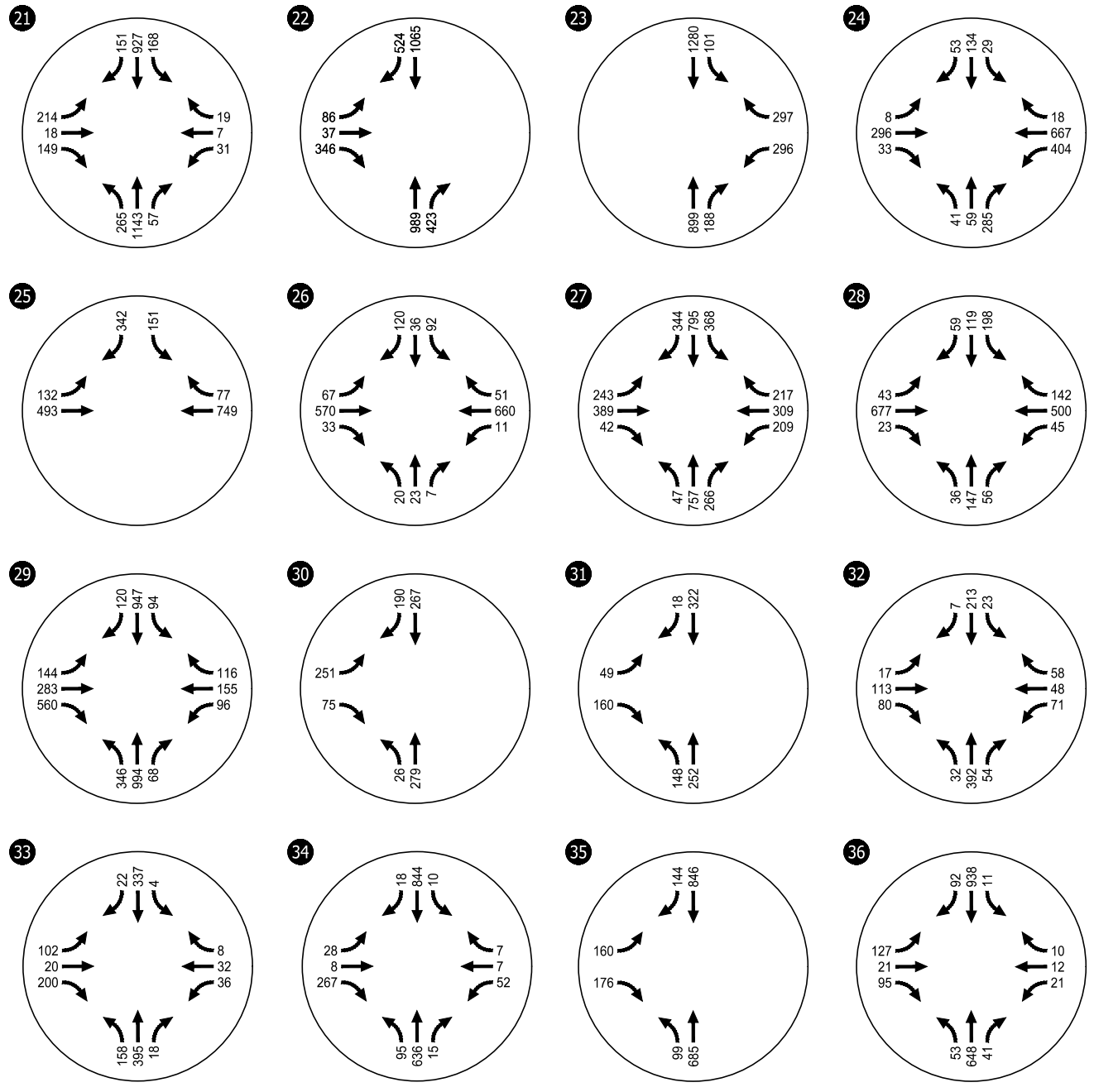

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Existing AM Peak Hour Volumes
(Intersections 21-36)
Roseville, CA

Figure
9

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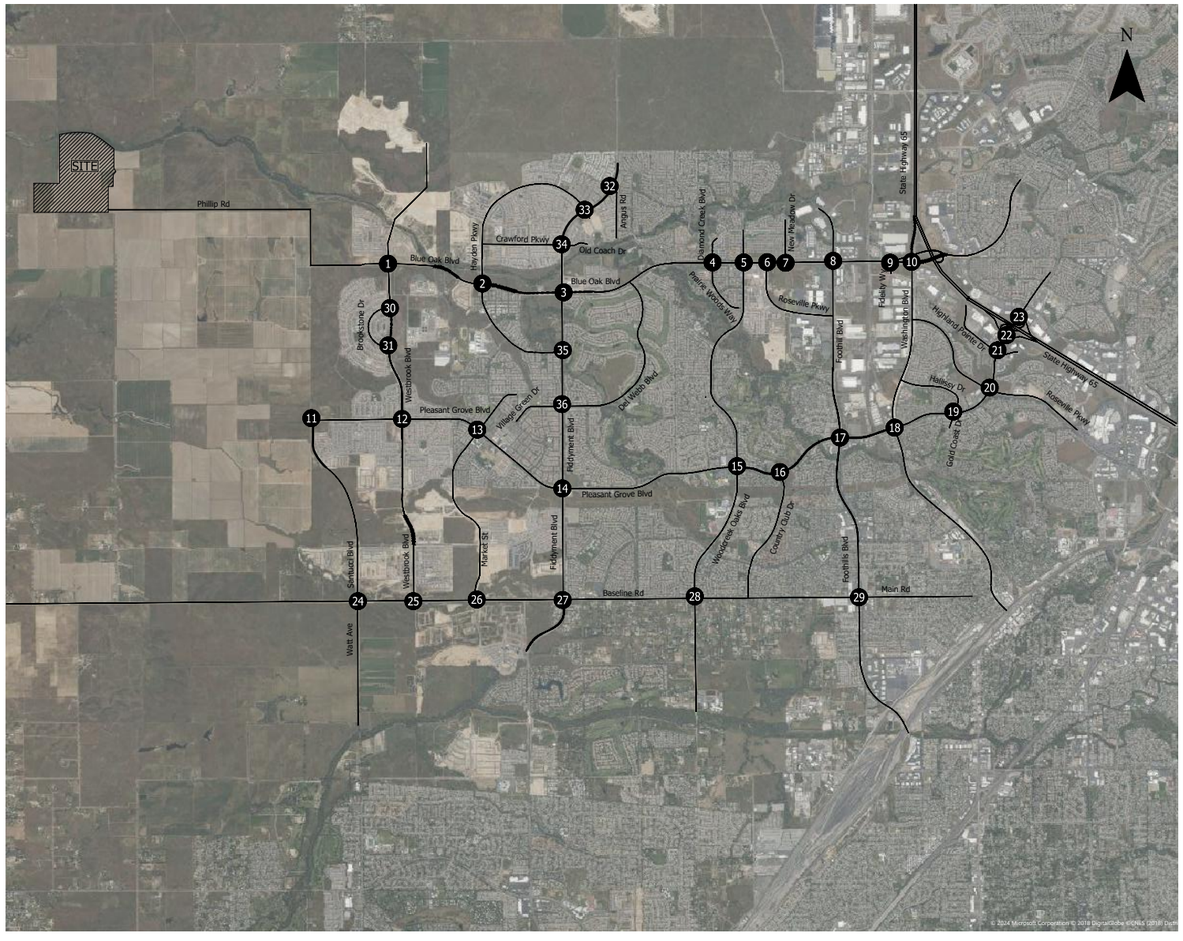

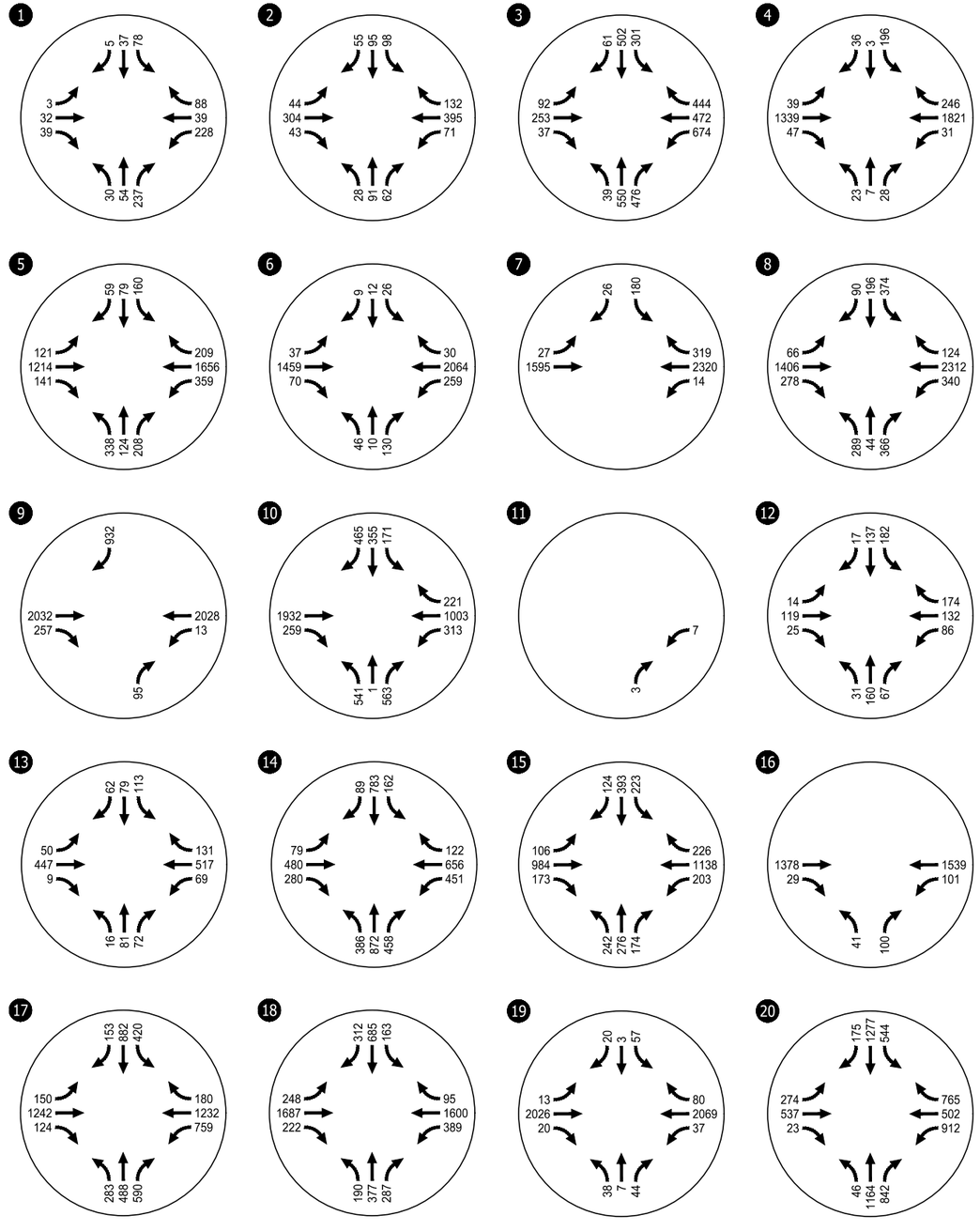

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Existing PM Peak Hour Volumes
(Intersections 1-20)
Roseville, CA

Figure
10

KITTELSON & ASSOCIATES

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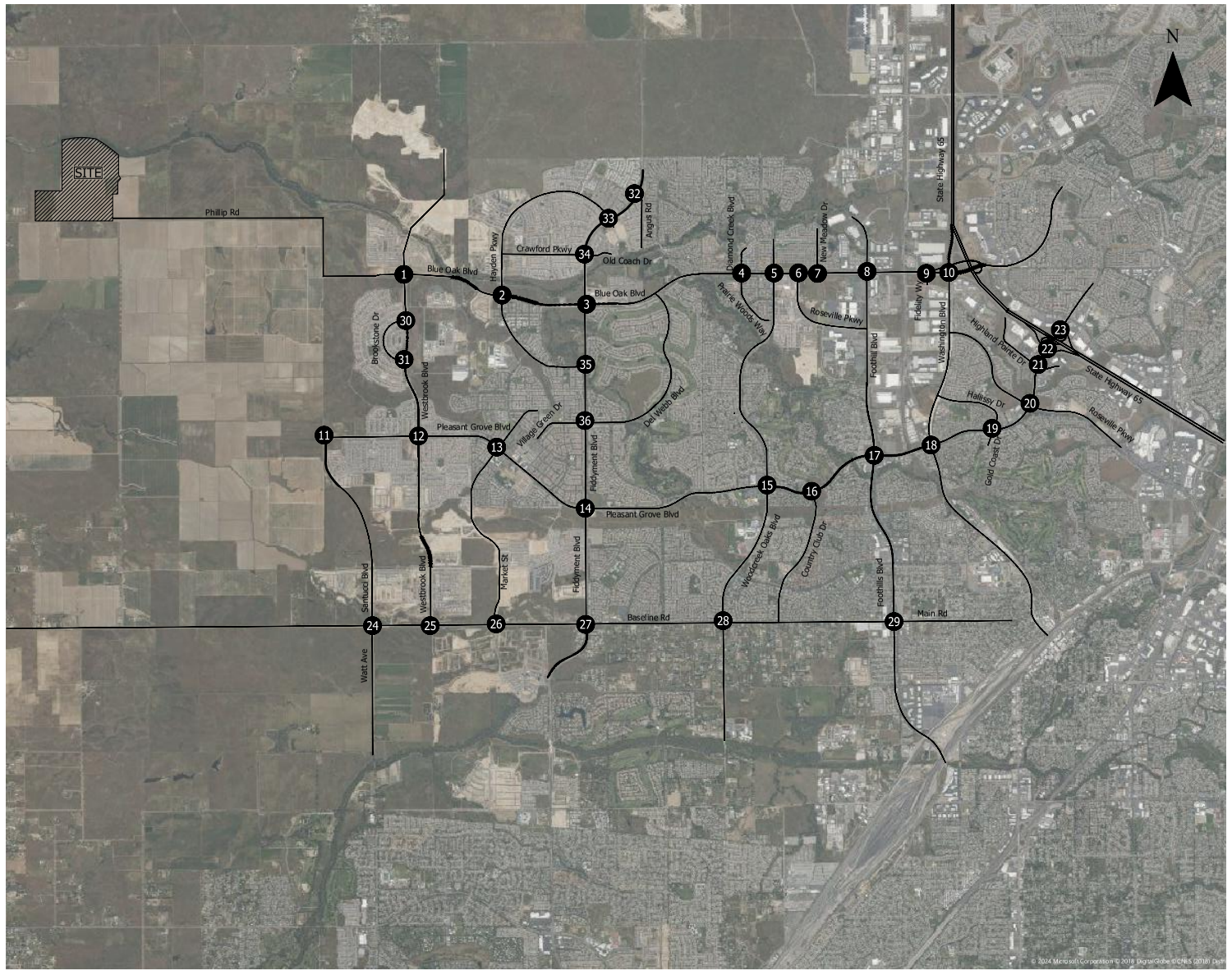

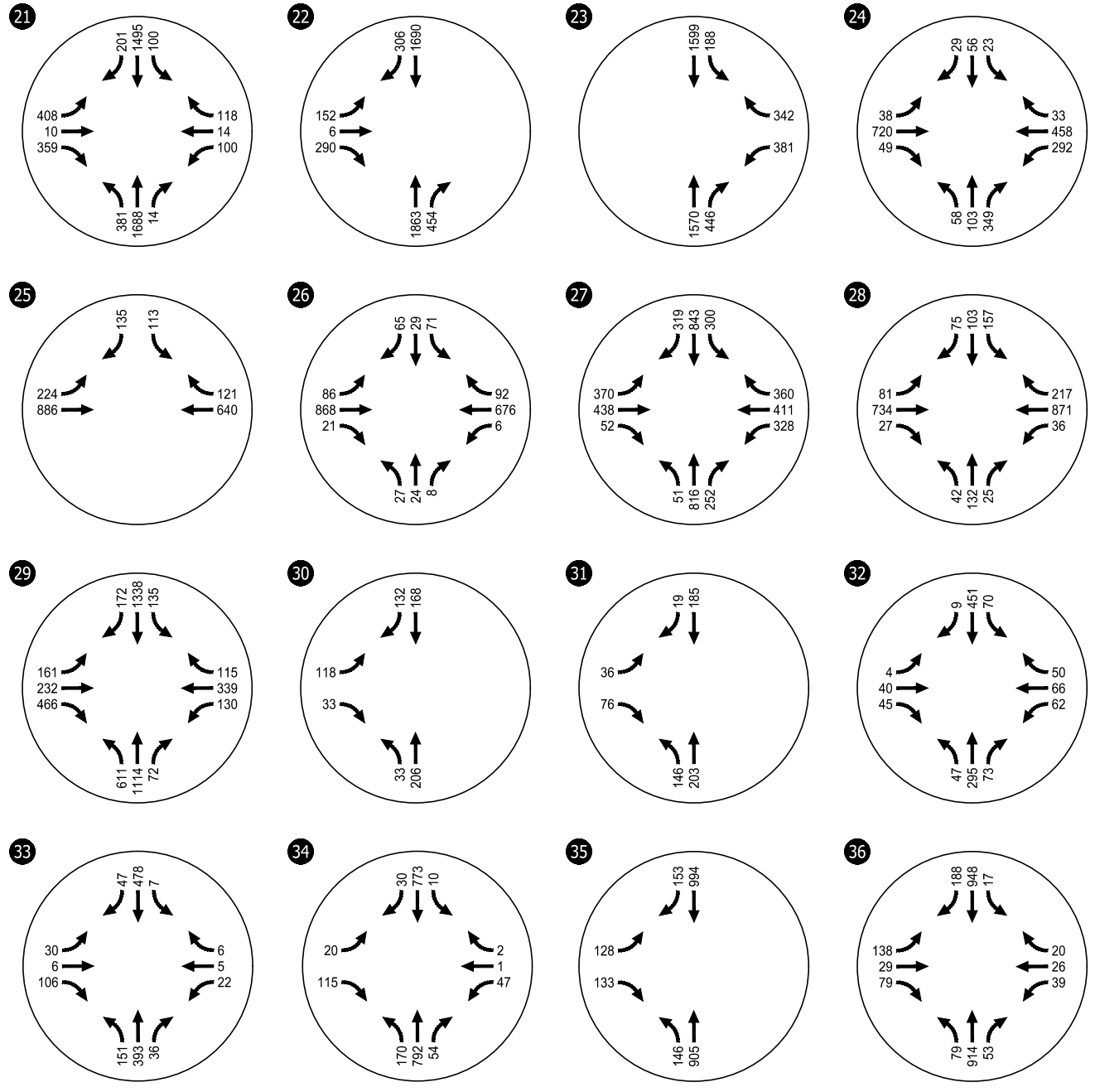

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Existing PM Peak Hour Volumes
(Intersections 21-36)
Roseville, CA

Figure
10

KITTELSON & ASSOCIATES

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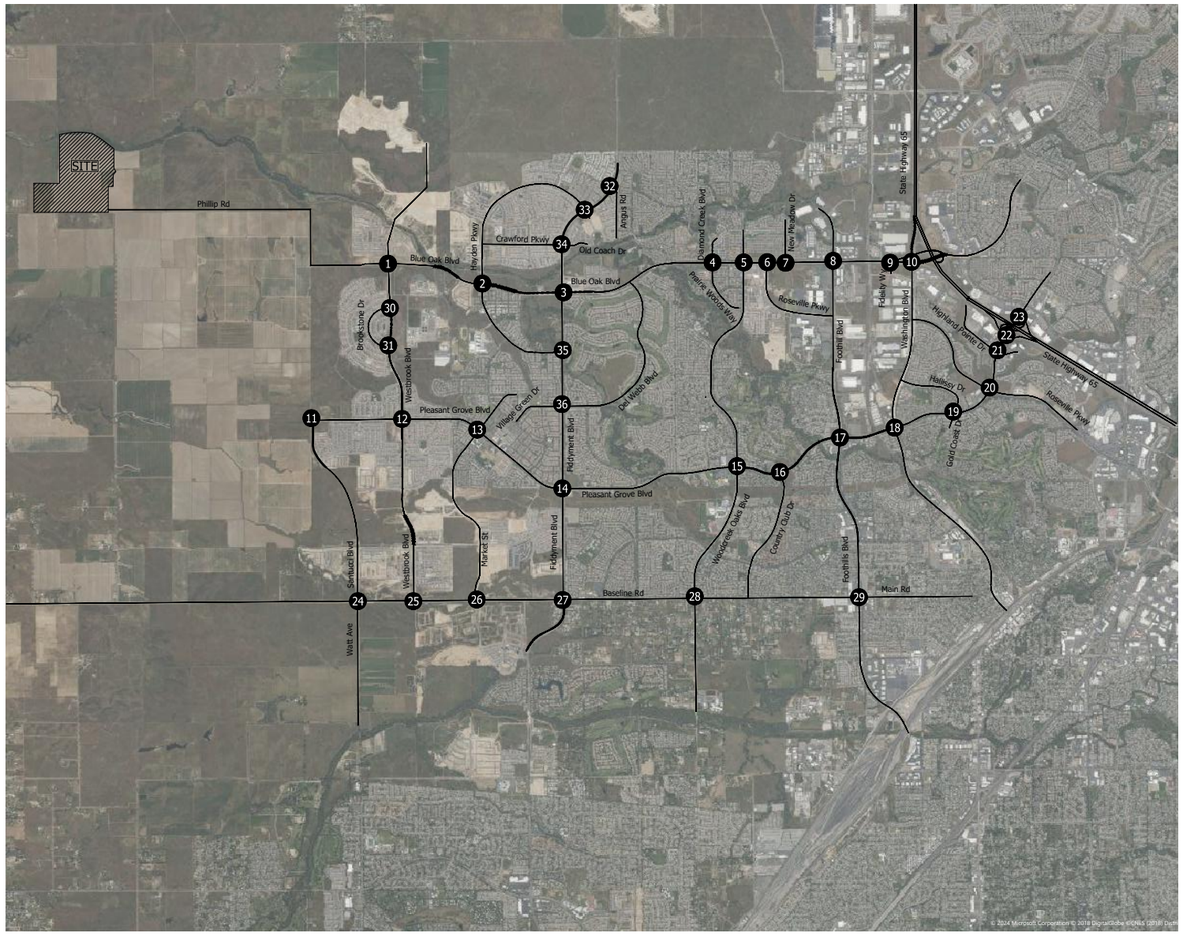

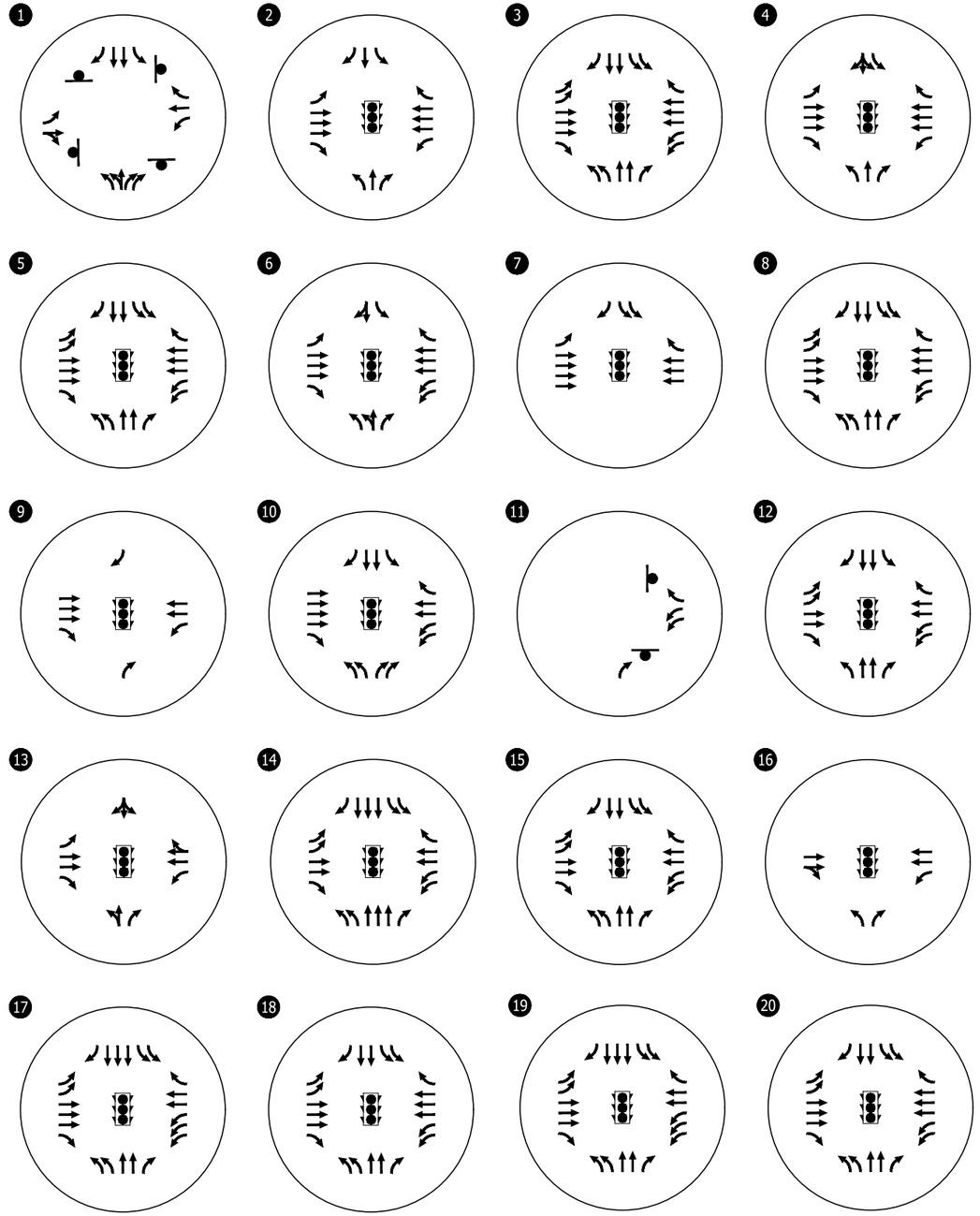

EXISTING ROADWAY
STATE HIGHWAY

PROJECT SITE LEGEND

STUDY INTERSECTION

STOP SIGN

TRAFFIC SIGNAL

Existing Lane Configuration and Traffic Control at Study Intersections
(Intersections 1-20)
Roseville, CA

Figure
11

KITTELSON & ASSOCIATES

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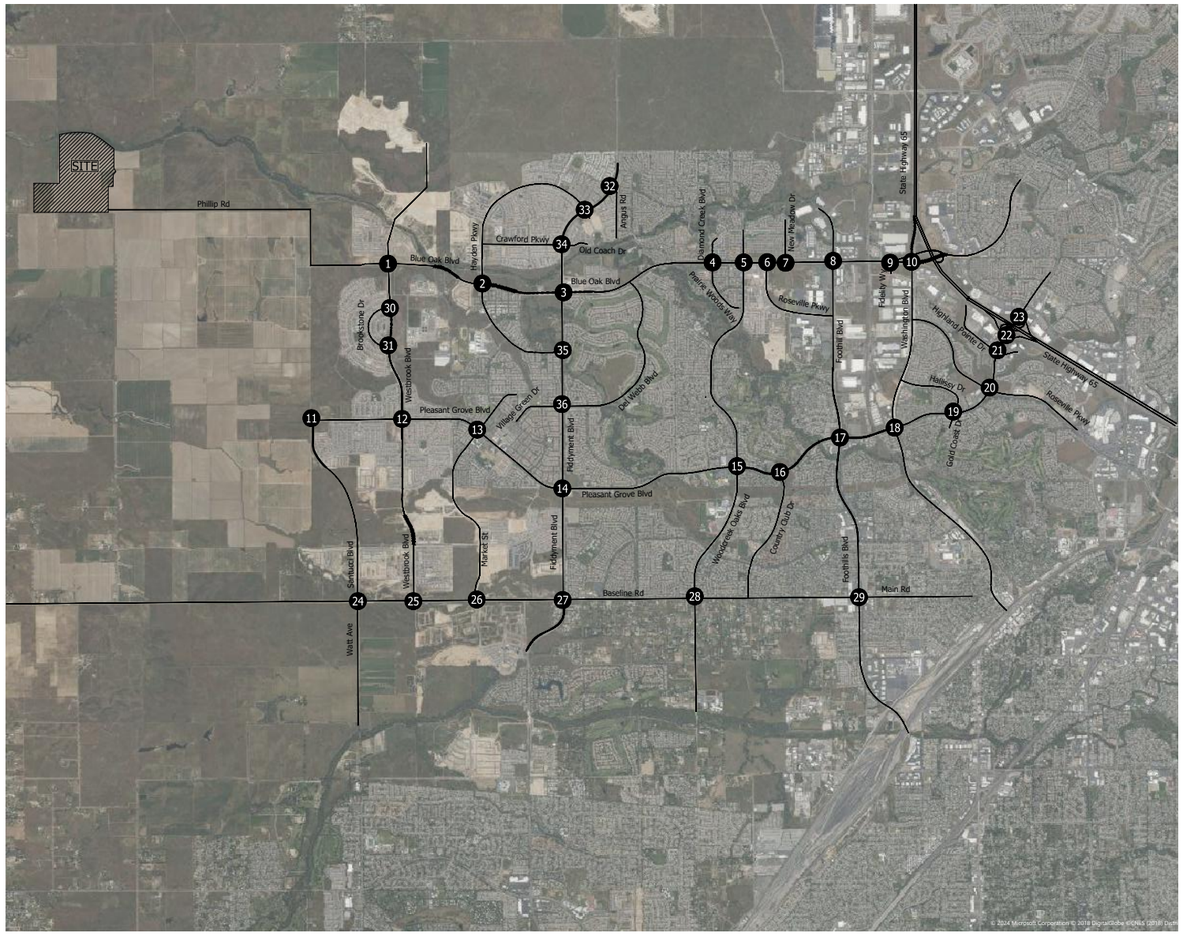

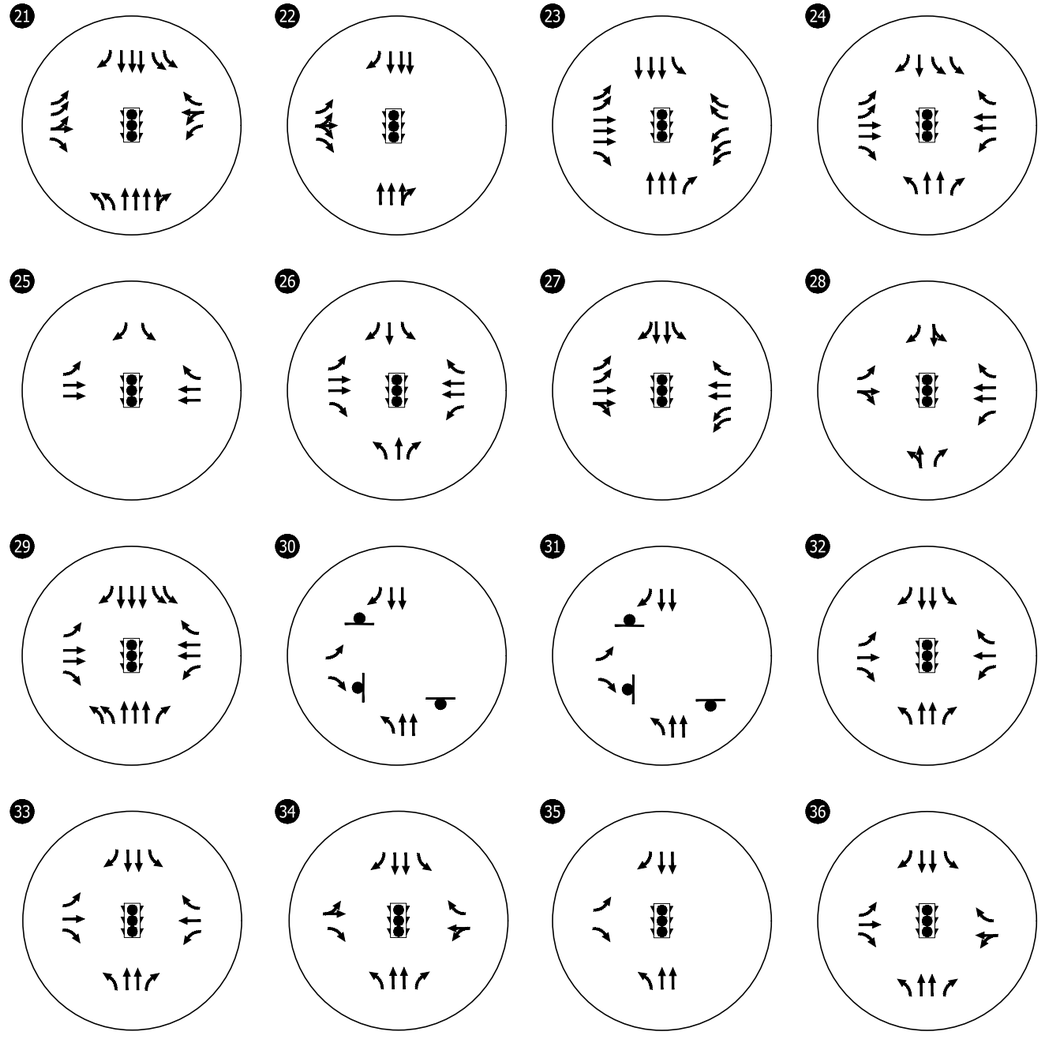

EXISTING ROADWAY
STATE HIGHWAY

PROJECT SITE LEGEND
STUDY INTERSECTION

STOP SIGN
TRAFFIC SIGNAL

Existing Lane Configuration and Traffic Control at Study Intersections
(Intersections 21-36)
Roseville, CA

Figure
11

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OPENING YEAR TRAFFIC OPERATIONS

The opening year is identified as 2028, when Phase 1 of the project will be constructed and operational. Phase 1 will include the initial phase of the RRTO building, consisting of a large multipurpose facility designed to handle all three waste streams (recyclables, municipal solid waste, and organic waste), along with an administration building to support RRTO employee and management needs. Phase 1 will also include the development of an entrance/exit scale plaza, an administration office with employee parking, and the Vendor Lease Area.

Opening Year No Project Traffic Volumes

Based on discussions with the city, the opening year no project scenario assumes existing traffic volumes plus traffic generated by the Phillip Road Site Project, located at 6382 Phillip Road, approximately two miles east of the Roseville EU Operations Center project site. The Phillip Road Site Project is a mixed-use industrial development that includes manufacturing, warehousing, and distribution uses. The site will be internally connected by a bridge spanning Pleasant Grove Creek and the Pleasant Grove Creek Bypass Channel. The project also includes parks, utility extensions, and roadway improvements along Blue Oaks Boulevard and Phillip Road. Off-site roadway connections will be provided via Blue Oaks Boulevard and Benchmark Drive.

Trip generation for the Phillip Road Site Project was estimated using ITE land use trip generation rates, with the detailed land use breakdown and trip generation calculations provided in Appendix E. The trip distribution assumptions are consistent with the draft environmental impact report that Ascent provided in February 2023 related to this project).[25] Project-generated trips were added to existing volumes to establish the opening year no project scenario volumes at each study intersection during the AM and PM peak hours, as shown in Figure 12 and Figure 13, respectively.

This scenario reflects the roadway improvements on Blue Oaks Boulevard and Phillip Road, including the signalization of the intersections along Westbrook Boulevard at Blue Oaks Boulevard and Brookstone Drive, which were implemented after the turning movement counts were collected in October 2024. The lane configurations and traffic control types at the study intersections under opening year conditions are illustrated in Figure 14.

Opening Year No Project Intersection Operations

Table 10 summarizes the operational performance of the study intersections during the AM and PM peak hours under opening year no project conditions. With the planned lane configurations and traffic volumes for the opening year, 9 of the 36 signalized intersections are projected to operate at LOS D or worse during the AM peak hour, and 8 are projected to operate at LOS D or worse during the PM peak hour.

The signalized intersections operating at LOS D or worse in the AM peak hour are:

- Intersection 12: Westbrook Boulevard & Pleasant Grove Boulevard – LOS D (from LOS C in the existing conditions)
- Intersection 14: Fiddyment Road & Pleasant Grove Boulevard – LOS D (same as existing conditions)

[25] Draft Environmental Impact Report for the Panattoni Project by Ascent, February 2023.

- Intersection 15: Woodcreek Oaks Boulevard & Pleasant Grove Boulevard – LOS E (from LOS D in the existing conditions)
- Intersection 17: Foothill Boulevard & Pleasant Grove Boulevard – LOS D (same as existing conditions)
- Intersection 18: Washington Boulevard & Pleasant Grove Boulevard – LOS E (same as existing conditions)
- Intersection 19: Hallissy Drive/Gold Coast Drive & Pleasant Grove Boulevard – LOS D (same as existing conditions)
- Intersection 20: Pleasant Grove Boulevard & Roseville Parkway – LOS E (same as existing conditions)
- Intersection 27: Fiddyment Road & Baseline Road – LOS D (same as existing conditions)
- Intersection 28: Woodcreek Oaks Boulevard/Cook Riolo Road & Baseline Road – LOS D (same as existing conditions)

The signalized intersections operating at LOS D or worse in the PM peak hour are:

- Intersection 8: Foothills Boulevard & Pleasant Grove Boulevard – LOS D (from LOS C in the existing conditions)
- Intersection 10: Foothills Boulevard & Pleasant Grove Boulevard – LOS D (from LOS C in the existing conditions)
- Intersection 14: Foothills Boulevard & Pleasant Grove Boulevard – LOS D (same as existing conditions)
- Intersection 17: Foothills Boulevard & Pleasant Grove Boulevard – LOS D (same as existing conditions)
- Intersection 18: Washington Boulevard & Pleasant Grove Boulevard – LOS D (same as existing conditions)
- Intersection 20: Pleasant Grove Boulevard & Roseville Parkway – LOS E (same as existing conditions)
- Intersection 27: Fiddyment Road & Baseline Road – LOS D (same as existing conditions)
- Intersection 29: Foothills Boulevard & Baseline Road/Main Street – LOS D (same as existing conditions)

The LOS calculation sheets for opening year no project conditions are shown in Appendix F.

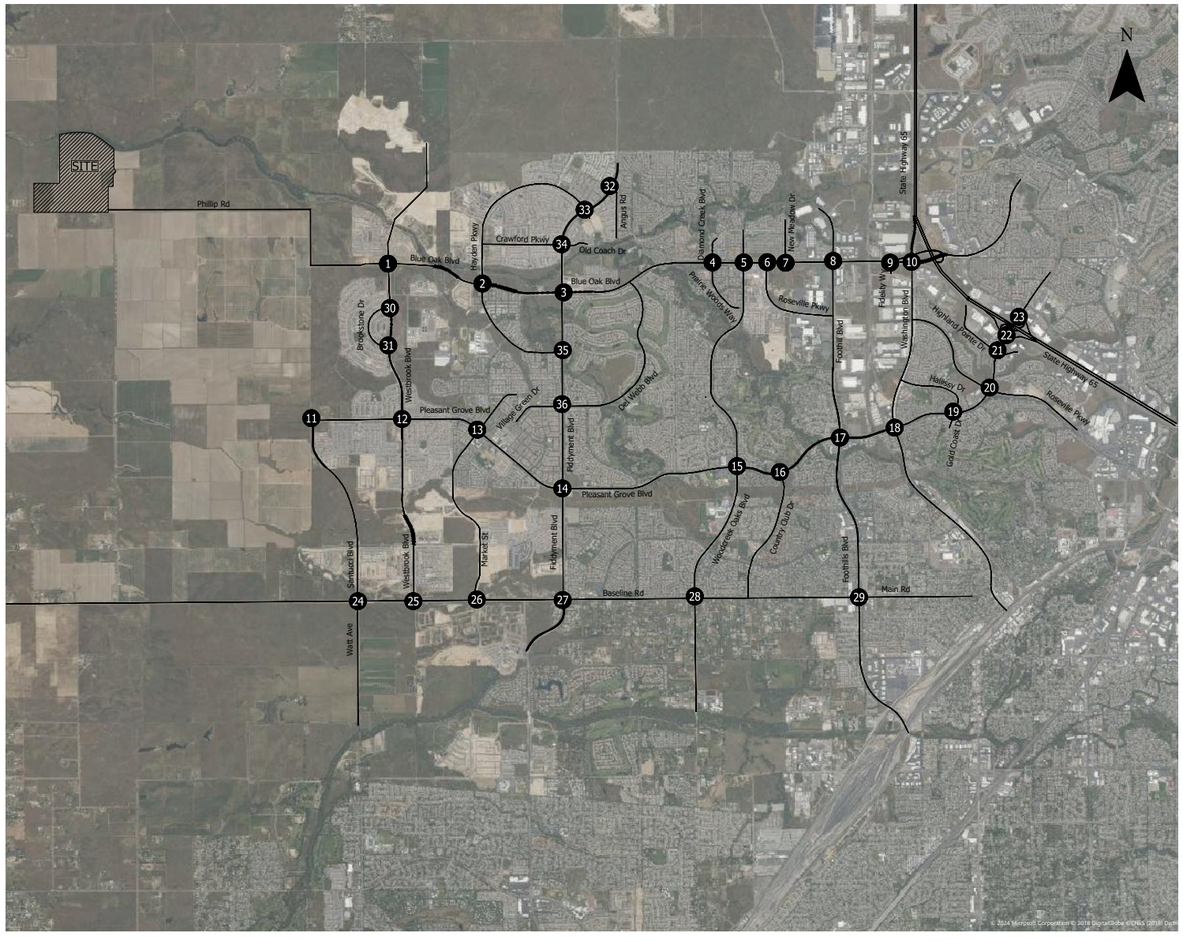
Table 10: Opening Year No Project Traffic Operations

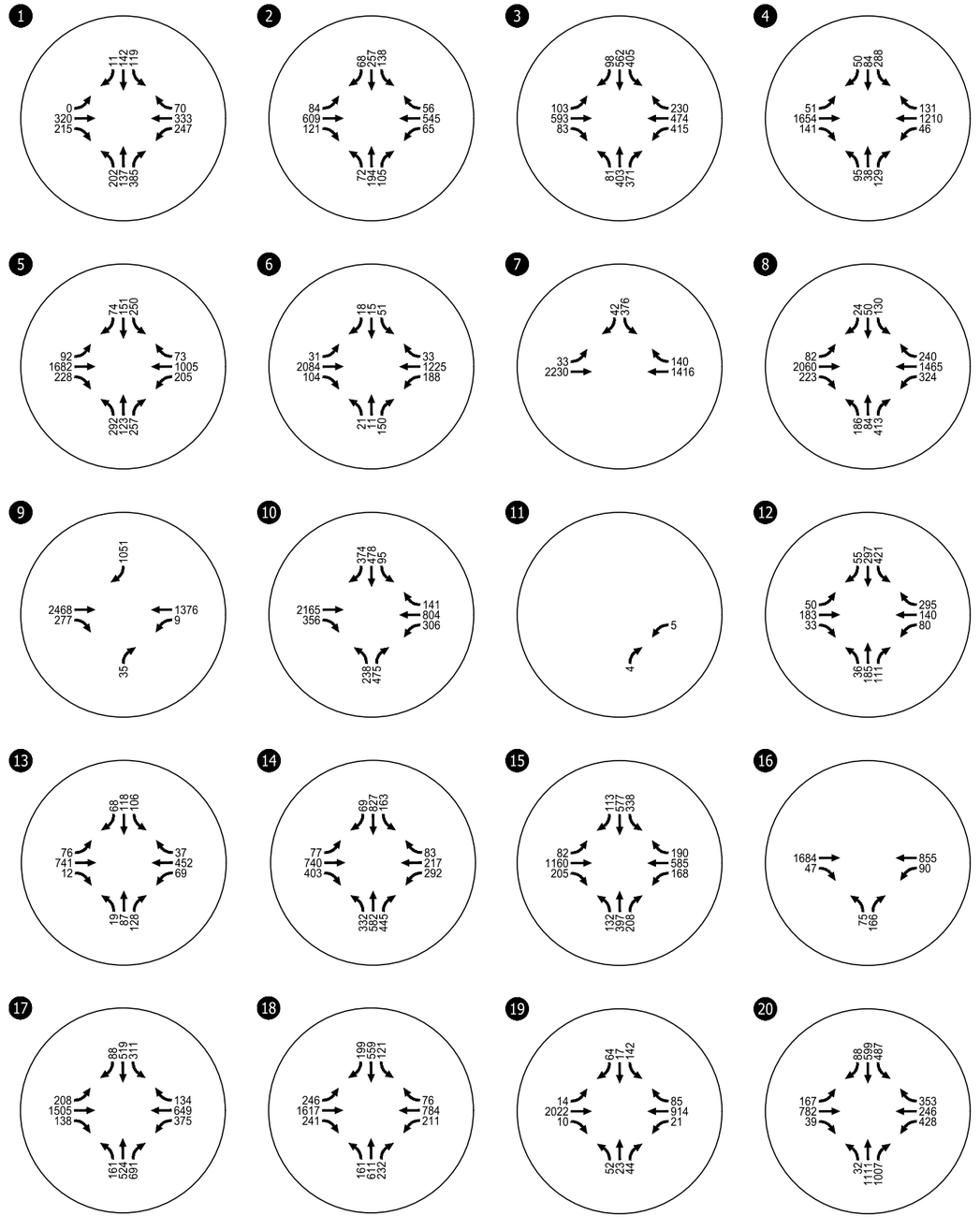
ID	Intersection	Existing Control Type	Existing AM		Existing PM		Opening Year Proposed Control Type	Opening Year No Project AM		Opening Year No Project PM	
			Delay	LOS	Delay	LOS		Delay	LOS	Delay	LOS
1	Westbrook Blvd & Blue Oaks Blvd	AWSC[1]	0.44	A	0.37	A	Signalized	32.6	C	22.5	C
2	Hayden Pkwy & Blue Oaks Blvd	Signalized	22.0	C	15.7	B	Signalized	20.4	C	14.7	B
3	Fiddyment Rd & Blue Oaks Blvd	Signalized	30.1	C	30.7	C	Signalized	32.7	C	32.1	C
4	Diamond Creek Blvd/Prairie Woods Wy & Blue Oaks Blvd	Signalized	29.5	C	10.2	B	Signalized	30.3	C	10.4	B
5	Woodcreek Oaks Blvd & Blue Oaks Blvd	Signalized	30.6	C	19.5	B	Signalized	22.9	C	18.0	B
6	Walgreens Dwy/Roseville Pkwy & Blue Oaks Blvd	Signalized	8.9	A	7.9	A	Signalized	8.2	A	7.4	A
7	New Meadow Dr & Blue Oaks Blvd	Signalized	9.1	A	7.8	A	Signalized	8.9	A	8.0	A
8	Foothills Blvd & Blue Oaks Blvd	Signalized	26.8	C	33.4	C	Signalized	27.5	C	36.4	D
9	Fidelity Wy & Blue Oaks Blvd	Signalized	2.5	A	3.7	A	Signalized	2.6	A	3.8	A
10	Washington Blvd & Blue Oaks Blvd	Signalized	24.9	C	20.1	C	Signalized	24.2	C	40.9	D
11	Santucci Blvd & Pleasant Grove Blvd	AWSC[2]	8.0	A	7.6	A	Signalized	7.8	A	12.2	B
12	Westbrook Blvd & Pleasant Grove Blvd	Signalized	22.6	C	18.1	B	Signalized	52.9	D	30.1	C
13	Market St & Pleasant Grove Blvd	Signalized	29.3	C	25.2	C	Signalized	32.1	C	26.6	C
14	Fiddyment Rd & Pleasant Grove Blvd	Signalized	49.9	D	34.0	C	Signalized	52.4	D	48.2	D
15	Woodcreek Oaks Blvd & Pleasant Grove Blvd	Signalized	54.1	D	34.1	C	Signalized	56.5	E	30.9	C
16	Country Club Dr & Pleasant Grove Blvd	Signalized	11.0	B	6.6	A	Signalized	11.0	B	6.7	A

ID	Intersection	Existing Control Type	Existing AM		Existing PM		Opening Year Proposed Control Type	Opening Year No Project AM		Opening Year No Project PM	
			Delay	LOS	Delay	LOS		Delay	LOS	Delay	LOS
17	Foothill Blvd & Pleasant Grove Blvd	Signalized	42.7	D	47.7	D	Signalized	42.8	D	48.0	D
18	Washington Blvd & Pleasant Grove Blvd	Signalized	59.9	E	50.5	D	Signalized	61.7	E	52.0	D
19	Hallissy Dr/Gold Coast Dr & Pleasant Grove Blvd	Signalized	50.1	D	25.7	C	Signalized	52.3	D	26.5	C
20	Pleasant Grove Blvd & Roseville Pkwy	Signalized	67.7	E	60.8	E	Signalized	68.1	E	58.2	E
21	Pleasant Grove Blvd & Highland Pointe Dr	Signalized	26.7	C	28.1	C	Signalized	26.5	C	28.2	C
22	Pleasant Grove Blvd & SR 65 SB Ramps	Signalized	8.2	A	5.9	A	Signalized	8.1	A	5.9	A
23	Pleasant Grove Blvd & SR 65 NB Ramps	Signalized	13.8	B	14.5	B	Signalized	13.6	B	14.4	B
24	Santucci Blvd/Watt Ave & Baseline Rd	Signalized	23.3	C	26.6	C	Signalized	23.3	C	26.6	C
25	Westbrook Blvd & Baseline Rd	Signalized	21.6	C	12.2	B	Signalized	21.6	C	12.2	B
26	Market St/Stargazer Dr & Baseline Rd	Signalized	15.1	B	13.8	B	Signalized	15.1	B	13.8	B
27	Fiddyment Rd & Baseline Rd	Signalized	35.9	D	37.3	D	Signalized	45.9	D	48.6	D
28	Woodcreek Oaks Blvd/Cook Riolo Rd & Baseline Rd	Signalized	37.5	D	34.6	C	Signalized	37.5	D	34.3	C
29	Foothills Blvd & Baseline Rd/Main St	Signalized	32.2	C	38.4	D	Signalized	32.2	C	38.4	D
30	Westbrook Blvd & Brookstone Dr (North)	AWSC	20.1	C	9.2	A	Signalized	10.4	B	7.2	A
31	Westbrook Blvd & Brookstone Dr (South)	AWSC	14.1	B	9.5	A	Signalized	11.4	B	8.3	A

ID	Intersection	Existing Control Type	Existing AM		Existing PM		Opening Year Proposed Control Type	Opening Year No Project AM		Opening Year No Project PM	
			Delay	LOS	Delay	LOS		Delay	LOS	Delay	LOS
32	Fiddyment Rd & Parkland Wy/Angus Rd	Signalized	18.0	B	18.0	B	Signalized	18.0	B	18.1	B
33	Fiddyment Rd & N Hayden Pkwy	Signalized	23.8	C	15.9	B	Signalized	26.6	C	17.3	B
34	Fiddyment Rd & Crawford Pkwy/Old Coach Dr	Signalized	34.2	C	16.2	B	Signalized	33.0	C	16.3	B
35	Fiddyment Rd & Hayden Pkwy	Signalized	11.3	B	10.4	B	Signalized	11.5	B	10.7	B
36	Fiddyment Rd & Village Green Dr/Del Webb Blvd	Signalized	18.5	B	19.7	B	Signalized	18.7	B	19.8	B

AWSC = All-way stop control. Delay = Average vehicle delay in seconds
[1] The HCM 7th Edition methodology for all-way stop-controlled intersections does not support configurations with more than three lanes per leg; therefore, LOS is reported based on the ICU method.
[2] The HCM 7th Edition methodology for all-way stop-controlled intersections does not support configurations with more than three lanes per leg. However, since some movements have zero volume, lane configurations were modified to allow delay and LOS to be reported.
[3] The study area includes a portion of all signalized intersections citywide.
Source: Kittelson & Associates, Inc., 2025





EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Opening Year No Project AM Peak Hour Volumes
(Intersections 1-20)
Roseville, CA

Figure
12

KITTELSON & ASSOCIATES

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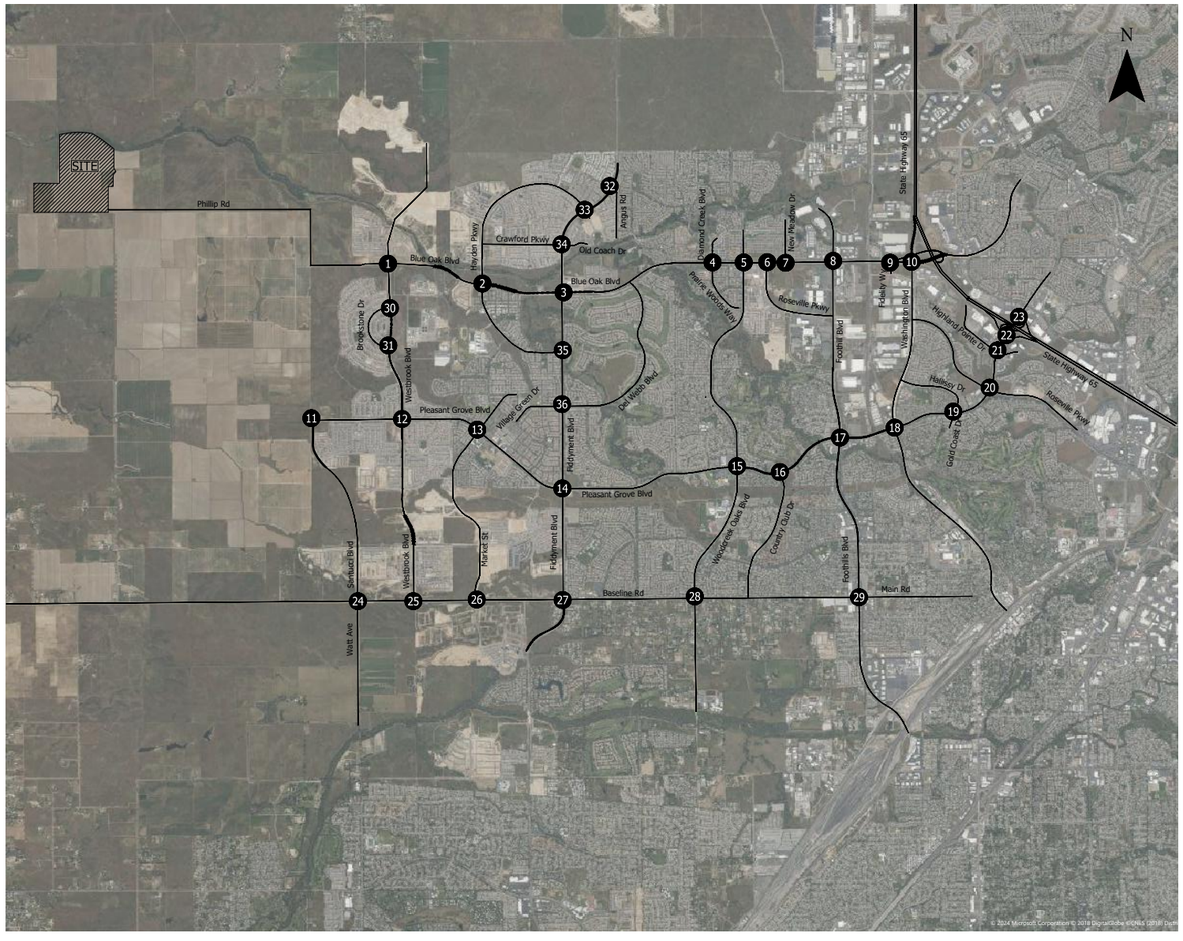

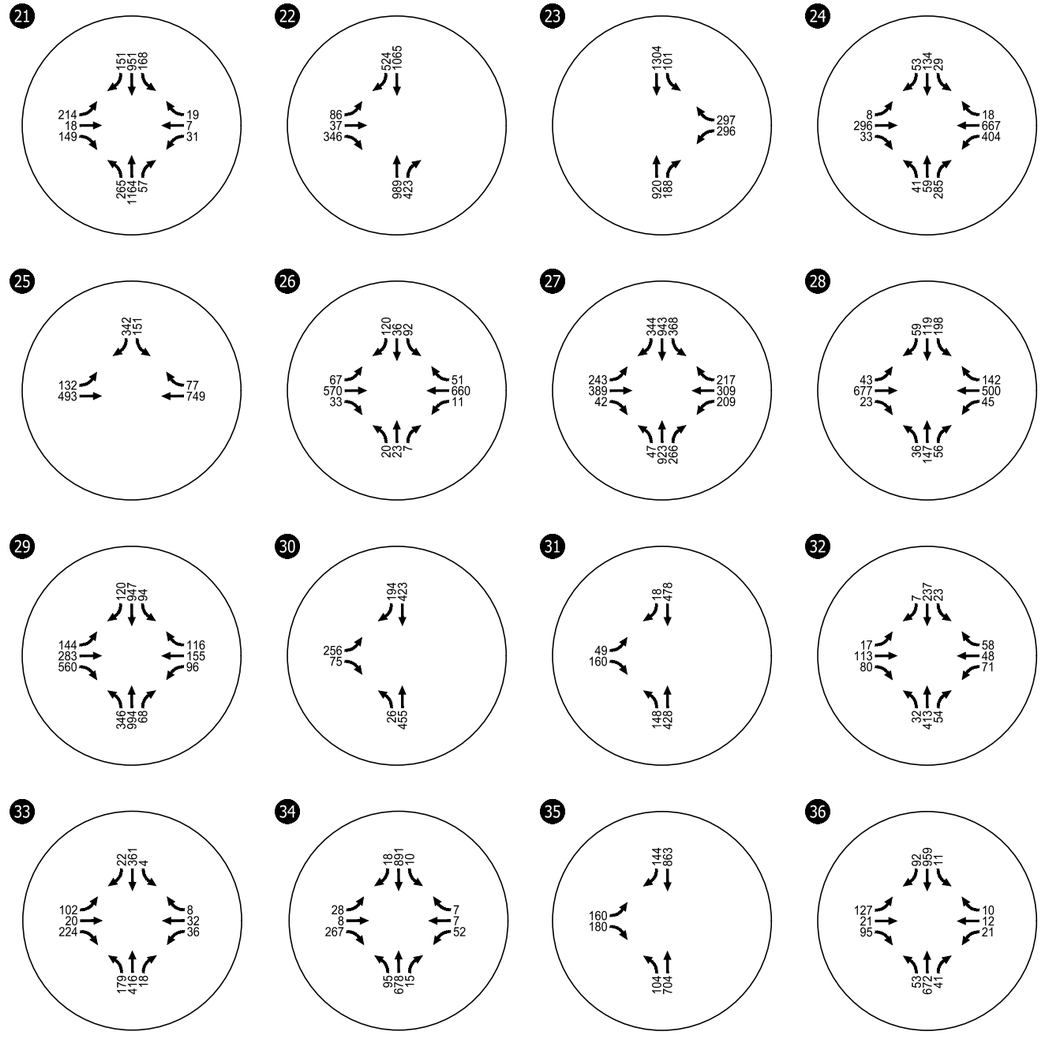

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Opening Year No Project AM Peak Hour Volumes
(Intersections 21-36)
Roseville, CA

Figure
12

KITTELSON & ASSOCIATES

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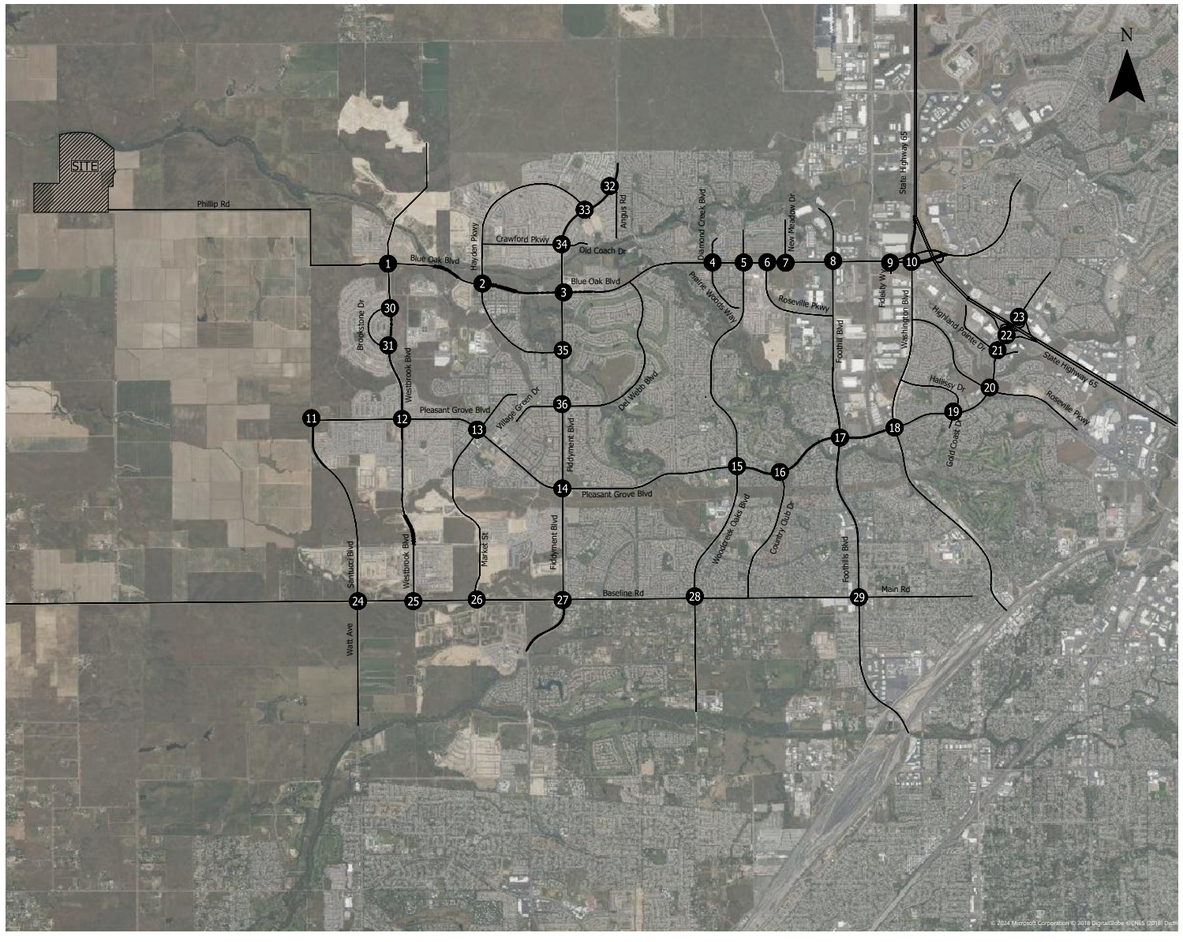

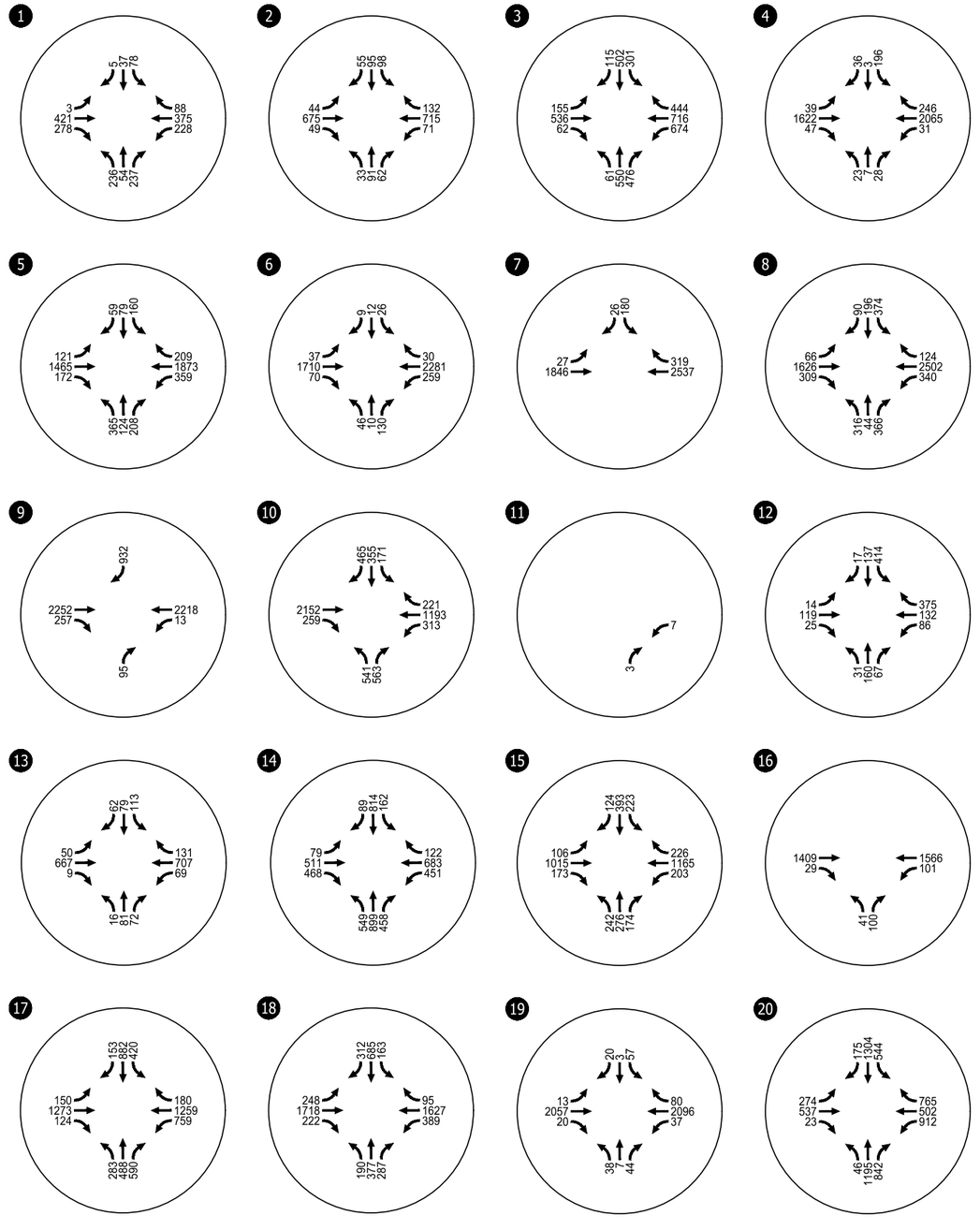

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Opening Year No Project PM Peak Hour Volumes
(Intersections 1-20)
Roseville, CA

Figure
13

KITTELSON & ASSOCIATES

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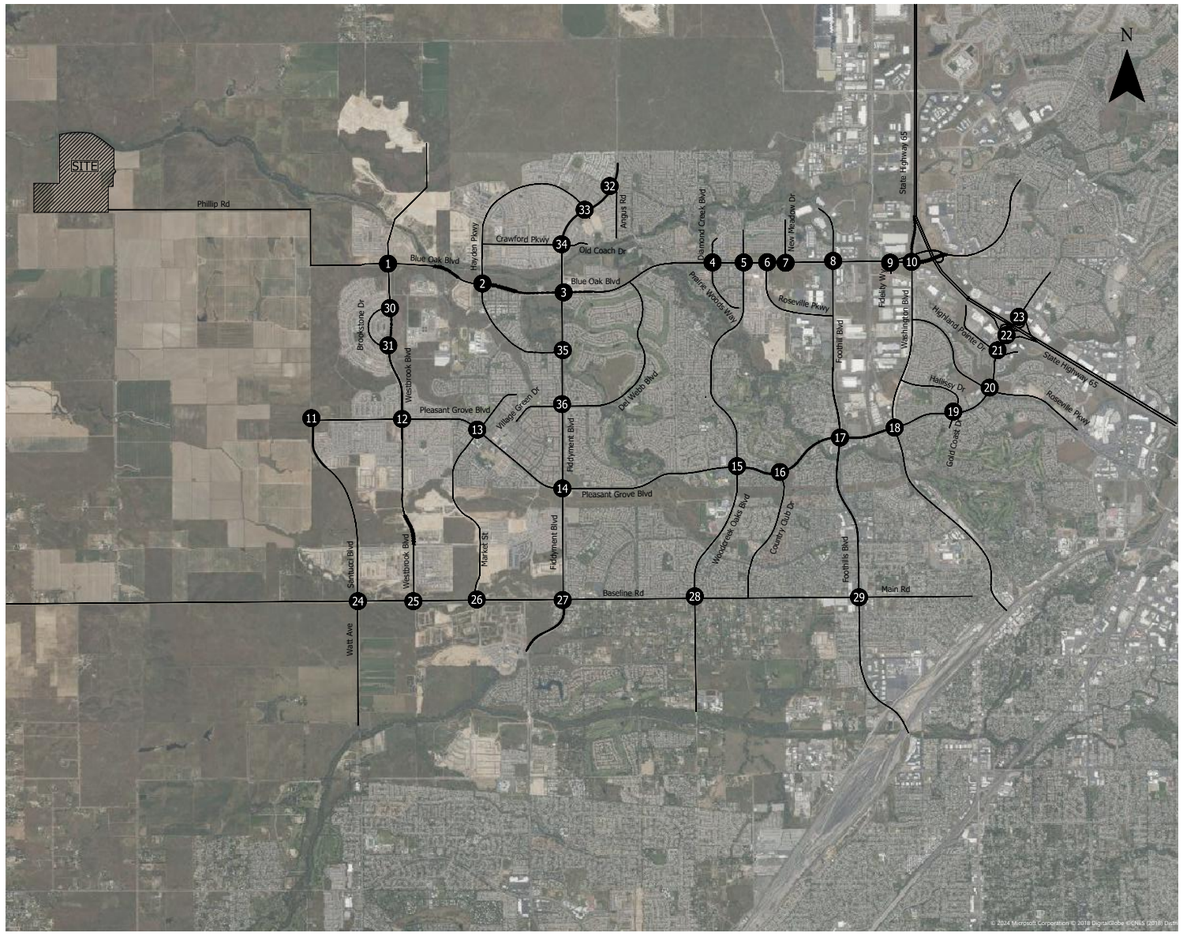

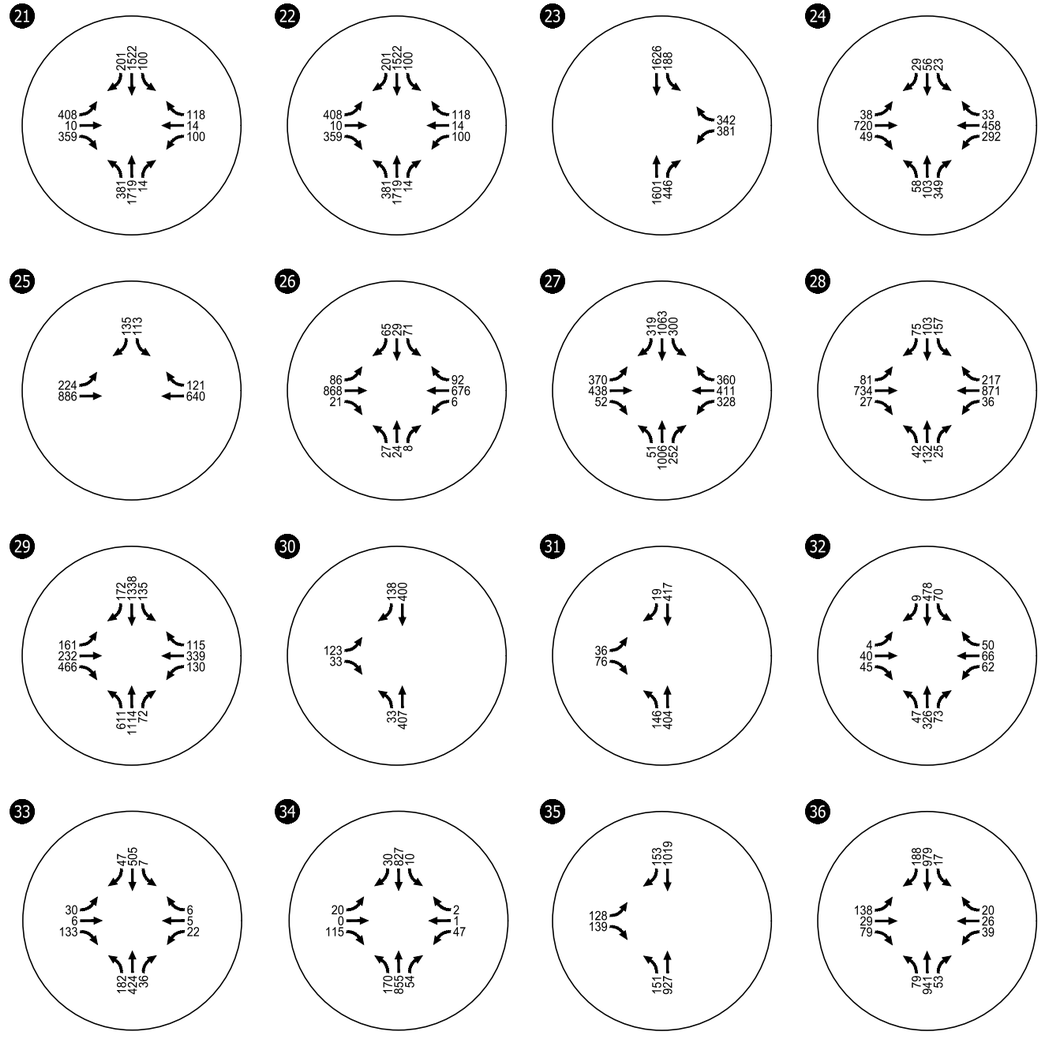

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Opening Year No Project PM Peak Hour Volumes
(Intersections 21-36)
Roseville, CA

Figure
13

KITTELSON & ASSOCIATES

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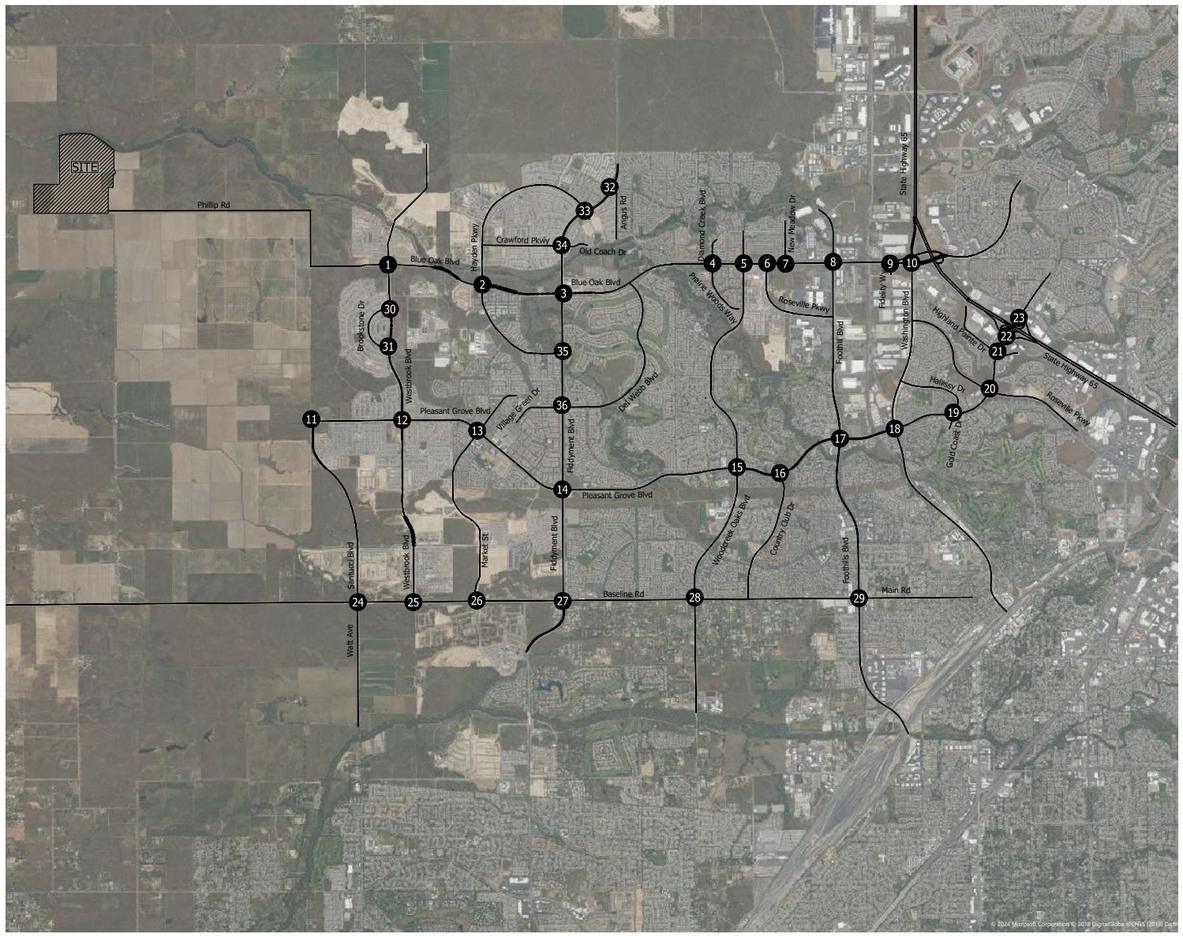

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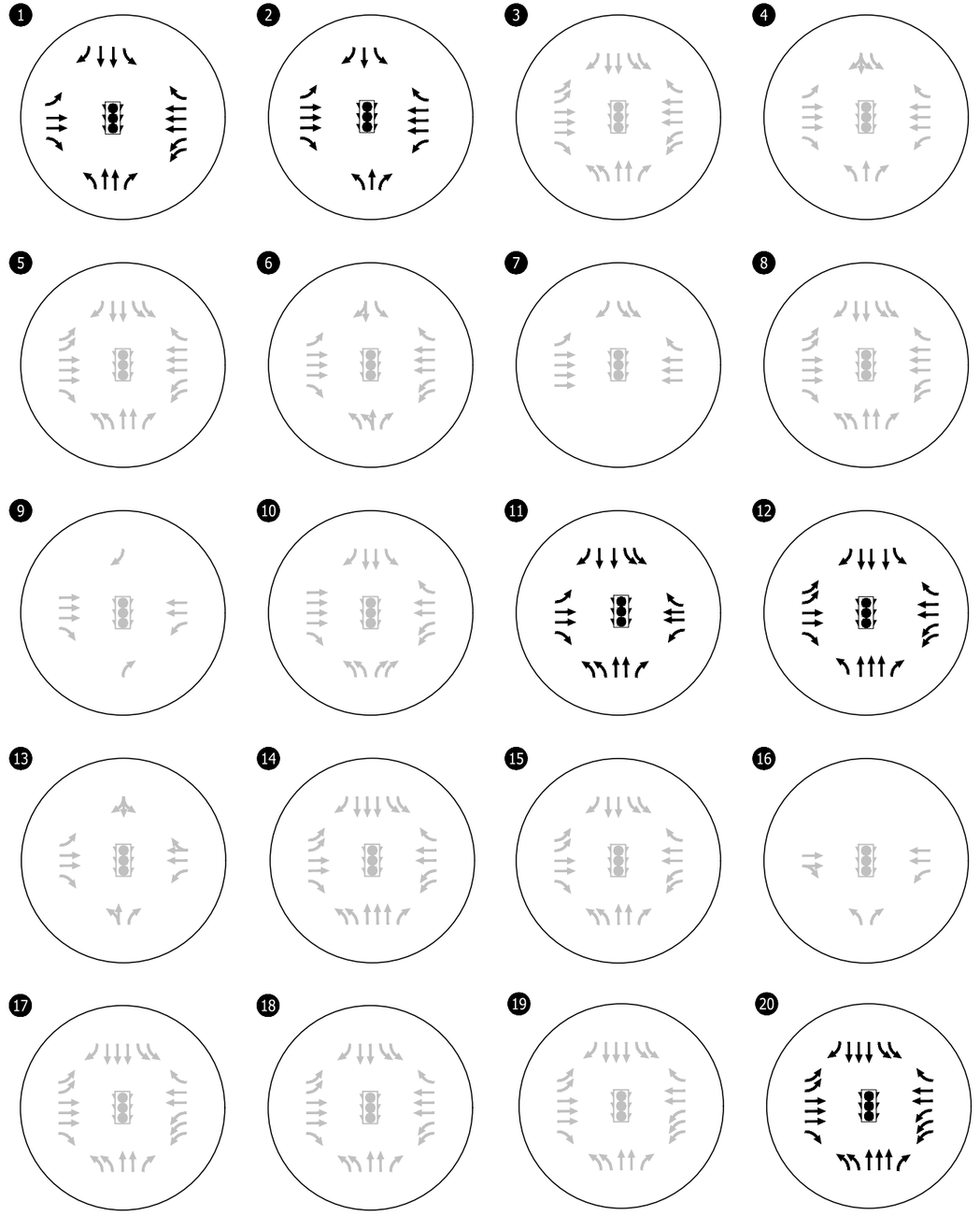

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION
STOP SIGN
TRAFFIC SIGNAL

Opening Year Lane Configuration and Traffic Control at Study Intersections
(Intersections 1-20)
Roseville, CA

Figure
14

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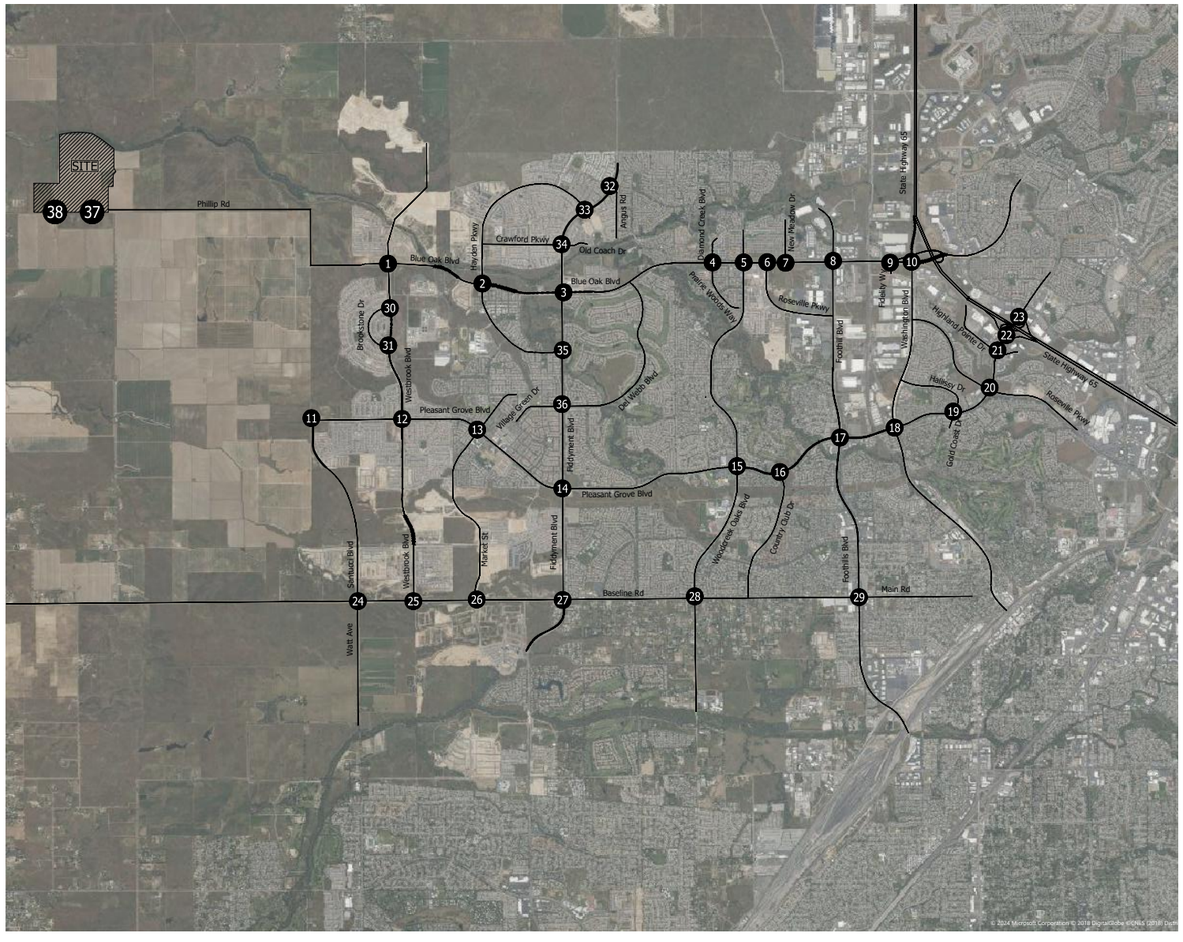
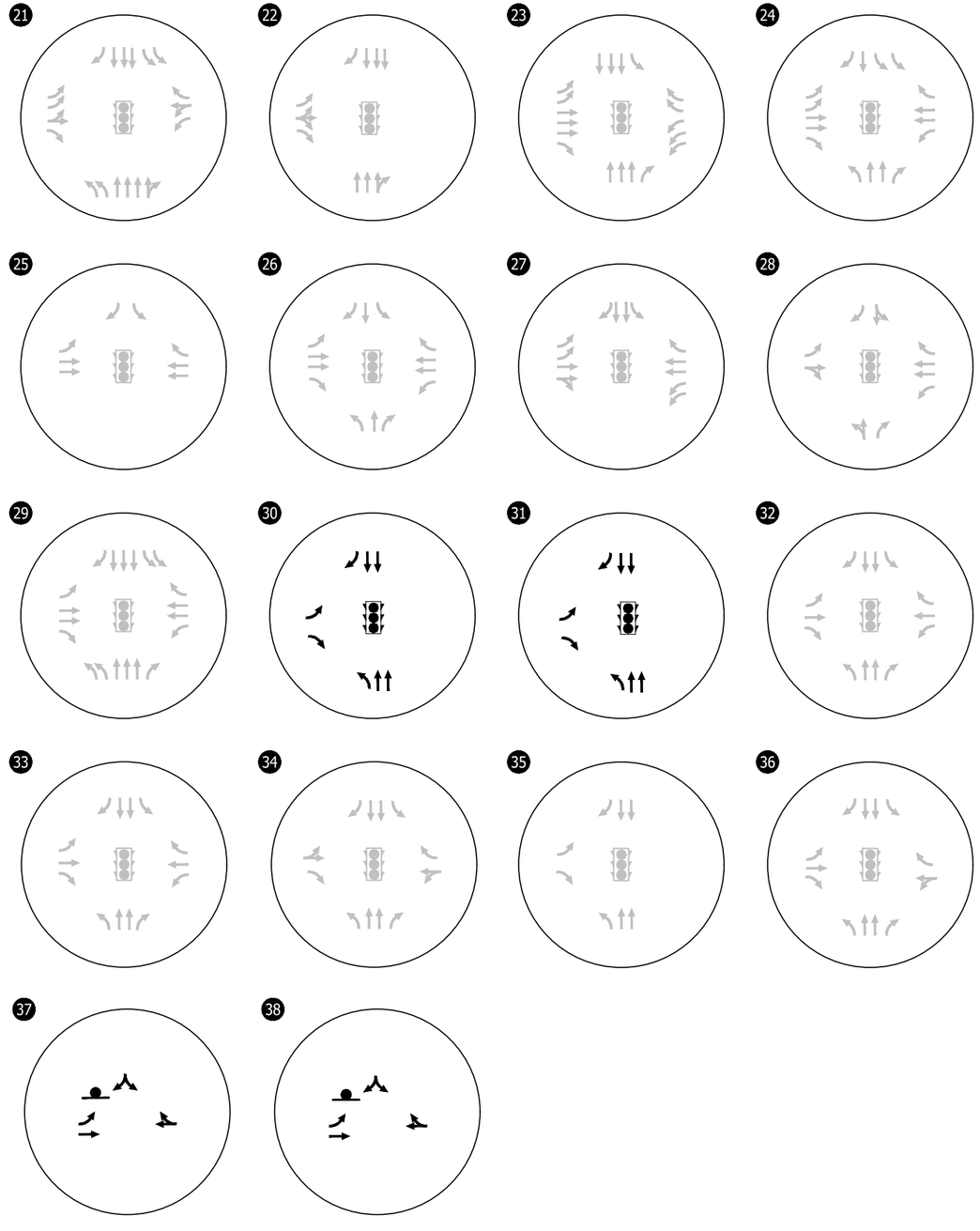
KITTELSON & ASSOCIATES





EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION
STOP SIGN
TRAFFIC SIGNAL

Opening Year Lane Configuration and Traffic Control at Study Intersections (Intersections 21-38)
Roseville, CA

Figure 14

KITTELSON & ASSOCIATES

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Opening Year Plus Project Traffic Volumes

The opening year plus project conditions combine the opening year no project volumes with the project-generated volumes, which are estimated based on the trip generation and trip distribution assumptions for Phase 1 described in the sections above.

The opening year plus project traffic operations are evaluated for AM and PM peak hours. This scenario assumes the opening year no project intersection lane configurations and traffic control types. The opening year plus project volumes for the study intersections in the AM and PM peak hour are shown in Figure 15 and Figure 16, respectively. The lane configurations and traffic control types under opening year plus project conditions are the same as those under the no project scenario, shown in Figure 14.

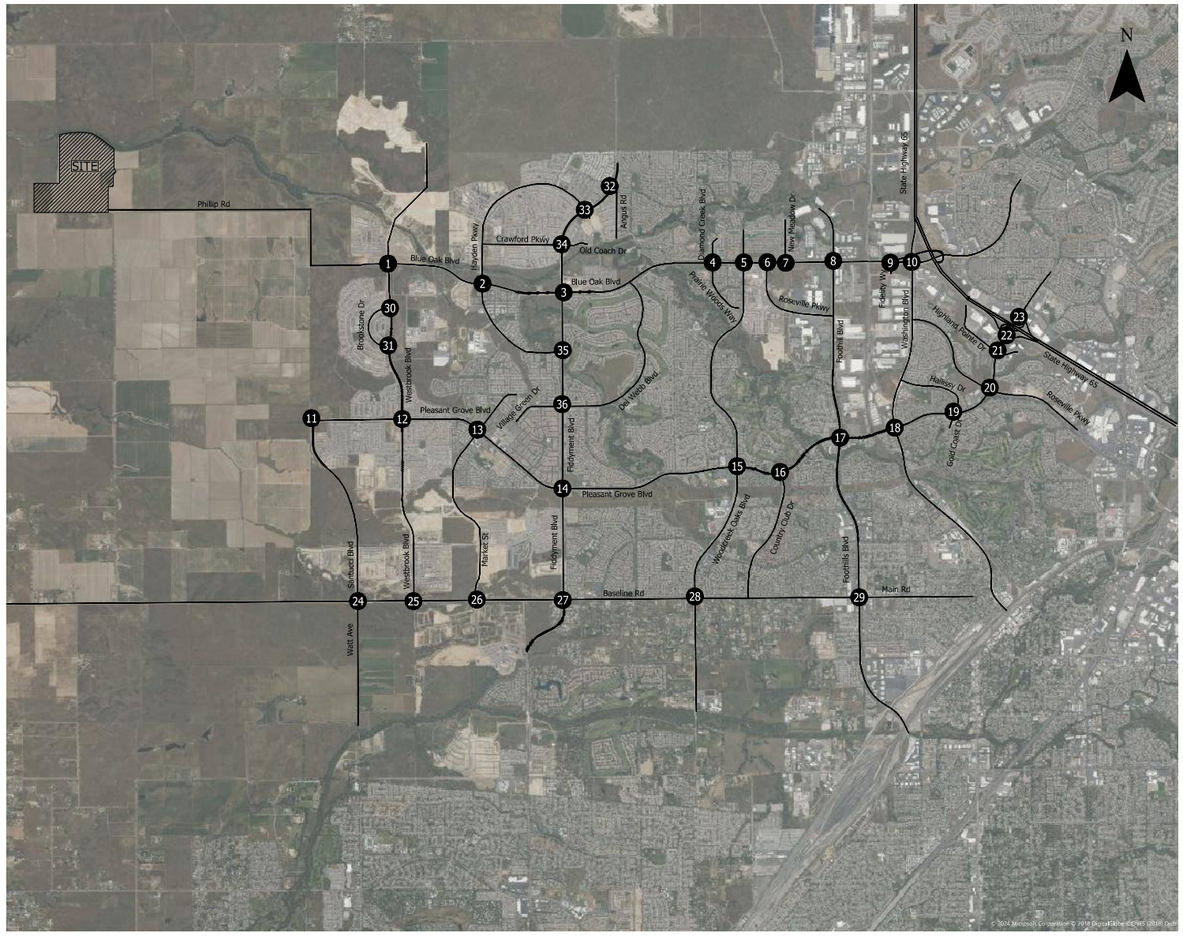
Opening Year Plus Project Intersection Operations

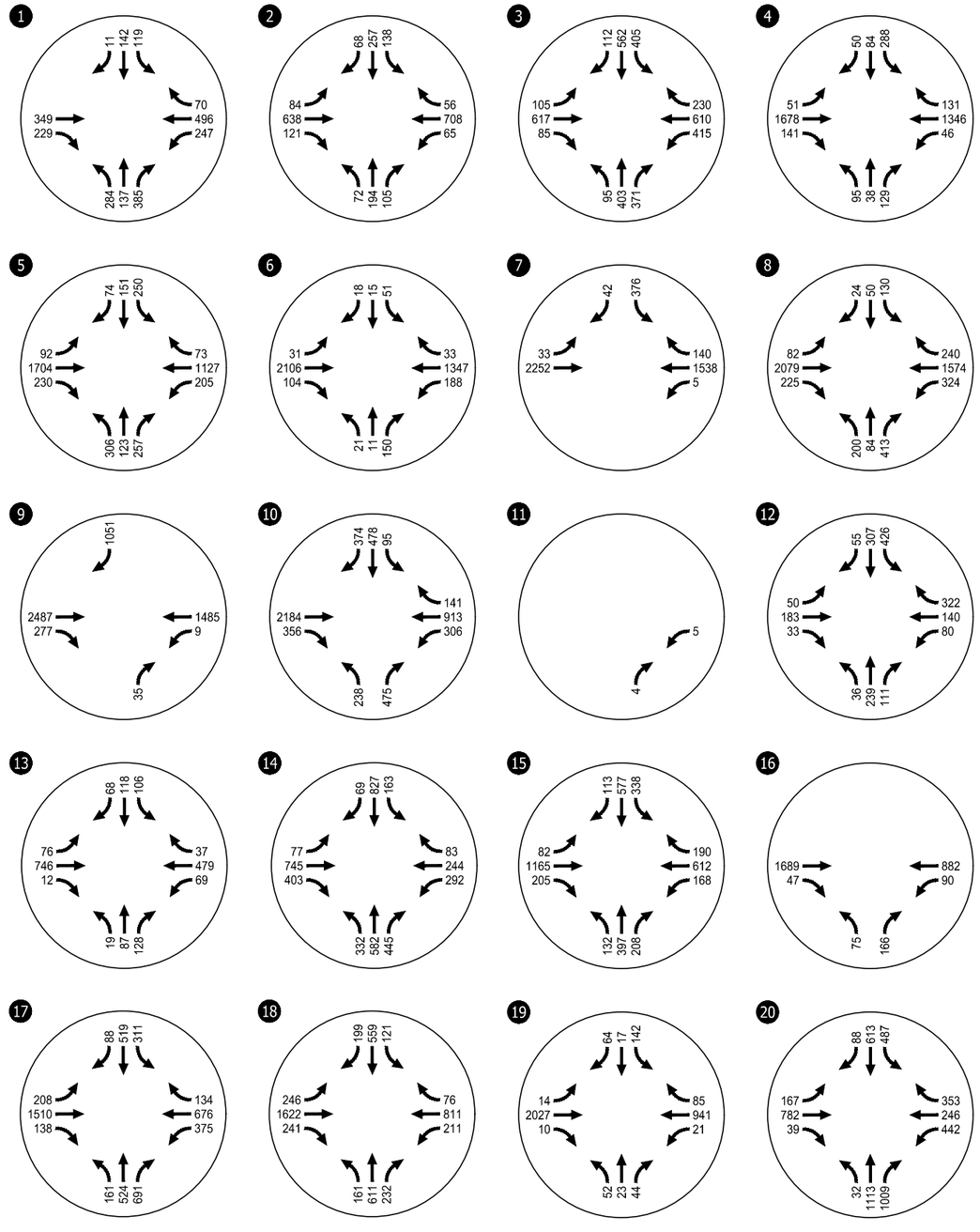
Table 11 summarizes the operational performance of the study intersections during the AM and PM peak hours under opening year plus project conditions. Most of the intersections would continue to operate at LOS C or better during both AM and PM peak hours.

All intersections are expected to maintain the same level of service (LOS) as under the no project scenario, with two exceptions:

- Intersection 3 (Fiddyment Road & Blue Oaks Boulevard) is projected to degrade from LOS C to LOS D during the PM peak hour.
- Intersection 12 (Westbrook Boulevard & Pleasant Grove Boulevard) is also expected to degrade from LOS C to LOS D during the PM peak hour.

Improvements to address the impacts caused by project traffic are discussed in the Improvement Recommendations section. The LOS calculation sheets for opening year plus project conditions are provided in Appendix G.





EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Opening Year Plus Project AM Peak Hour Volumes
(Intersections 1-20)
Roseville, CA

Figure
15

KITTELSON & ASSOCIATES

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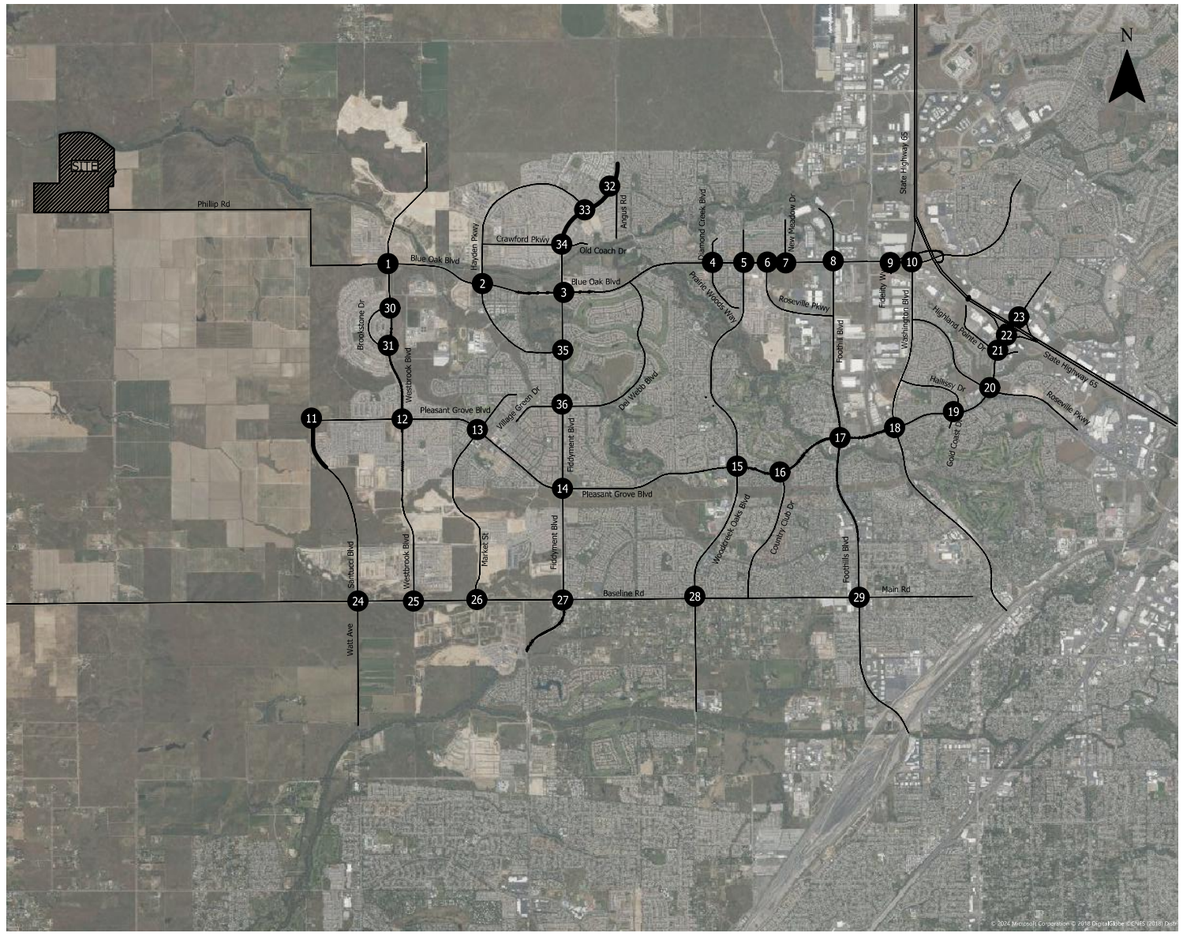

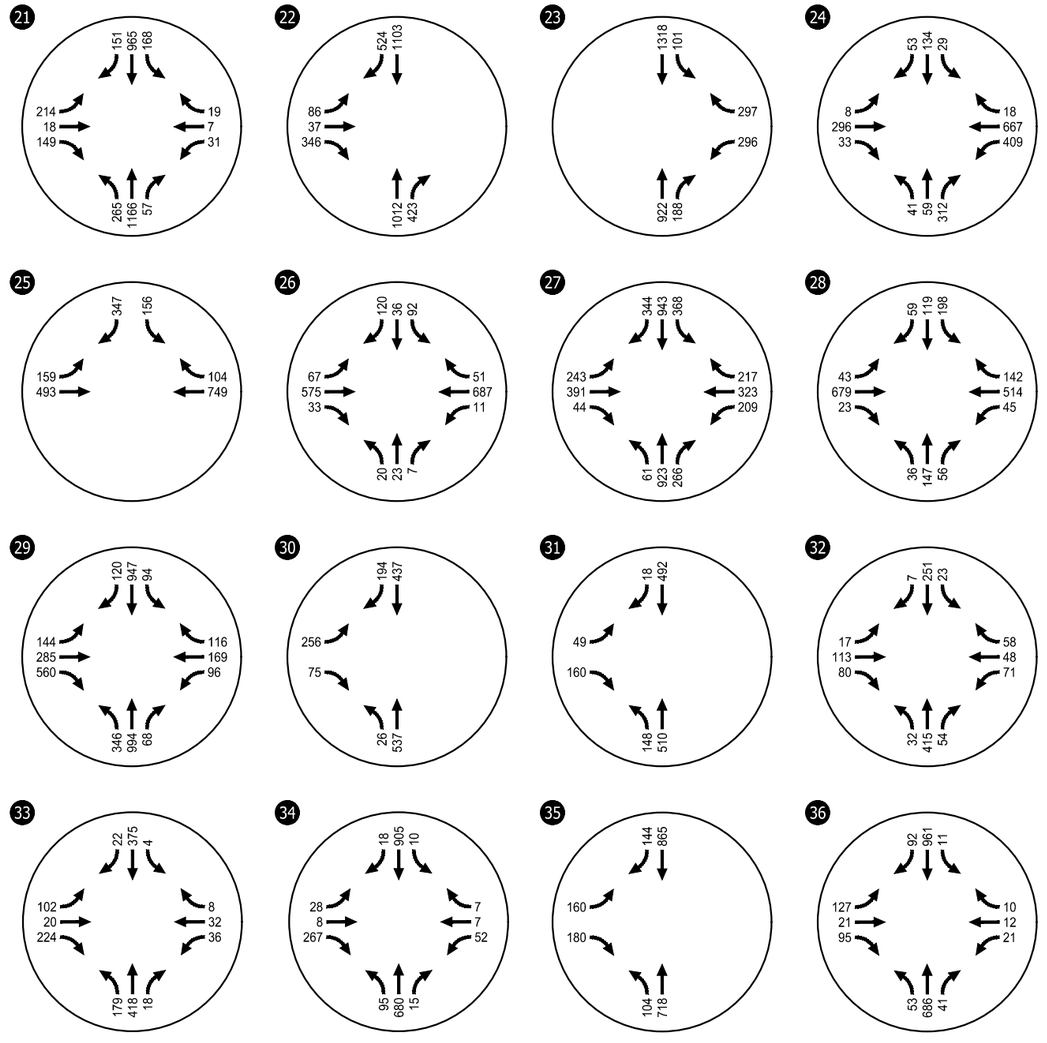

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Opening Year Plus Project AM Peak Hour Volumes
(Intersections 21-36)
Roseville, CA

Figure
15

KITTELSON & ASSOCIATES

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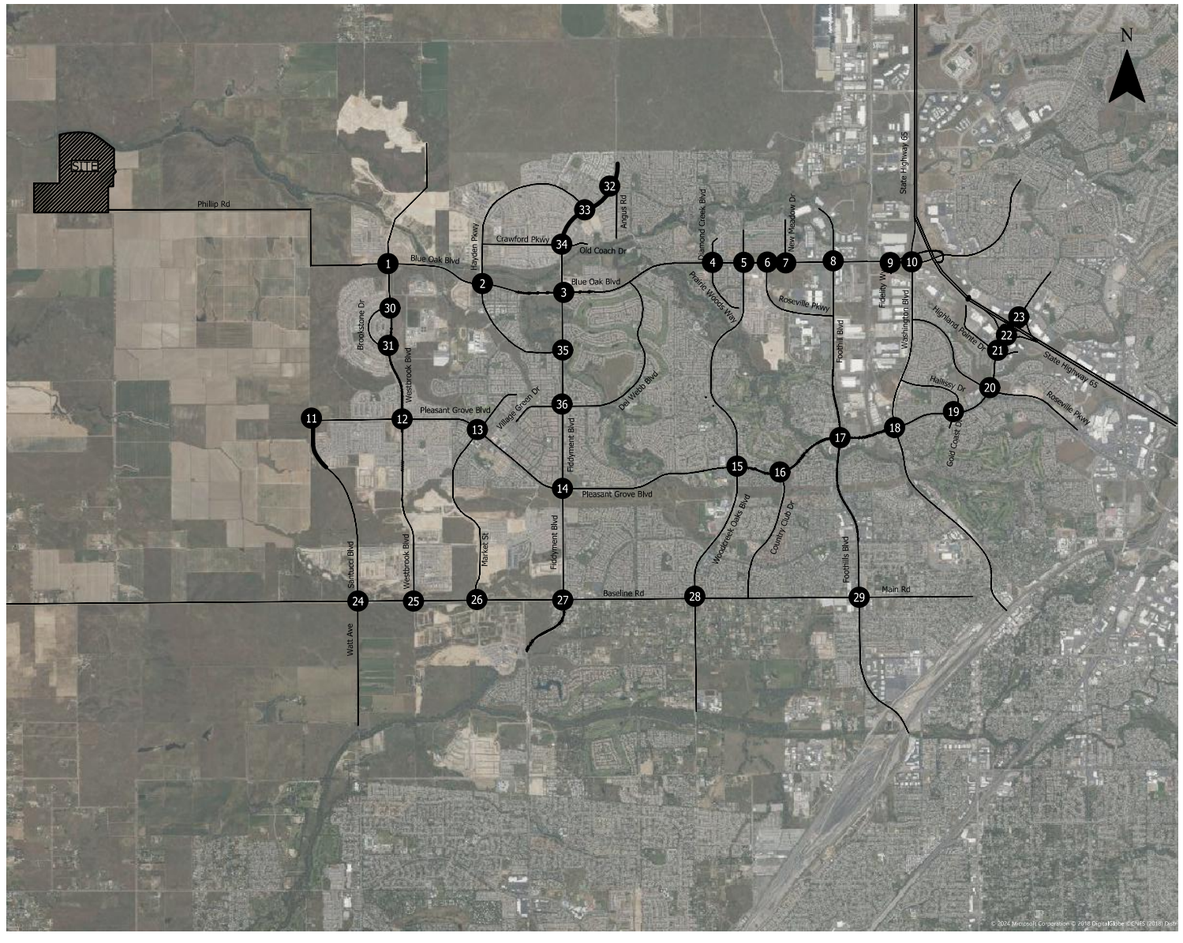

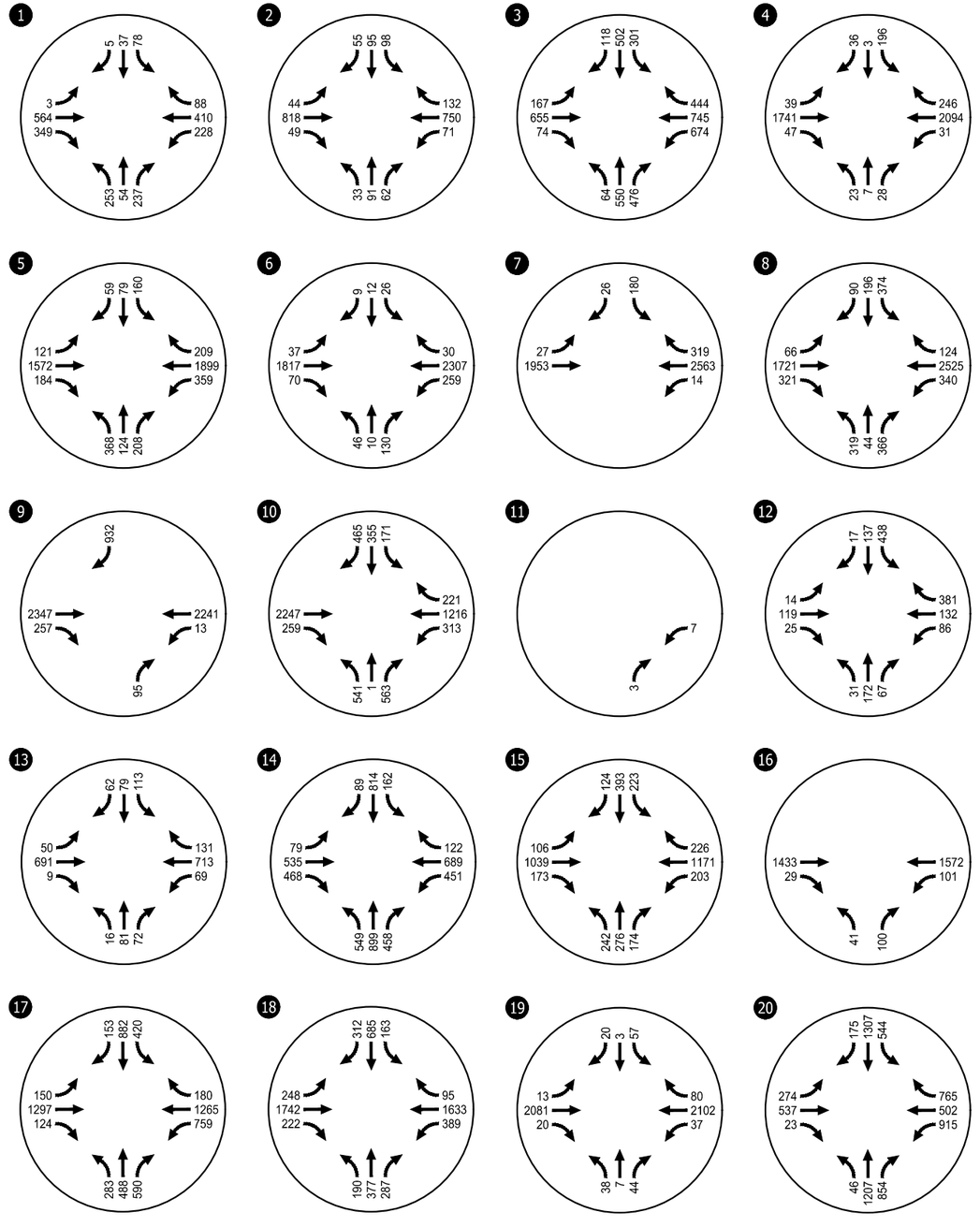

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Opening Year Plus Project PM Peak Hour Volumes
(Intersections 1-20)
Roseville, CA

Figure
16

KITTELSON & ASSOCIATES

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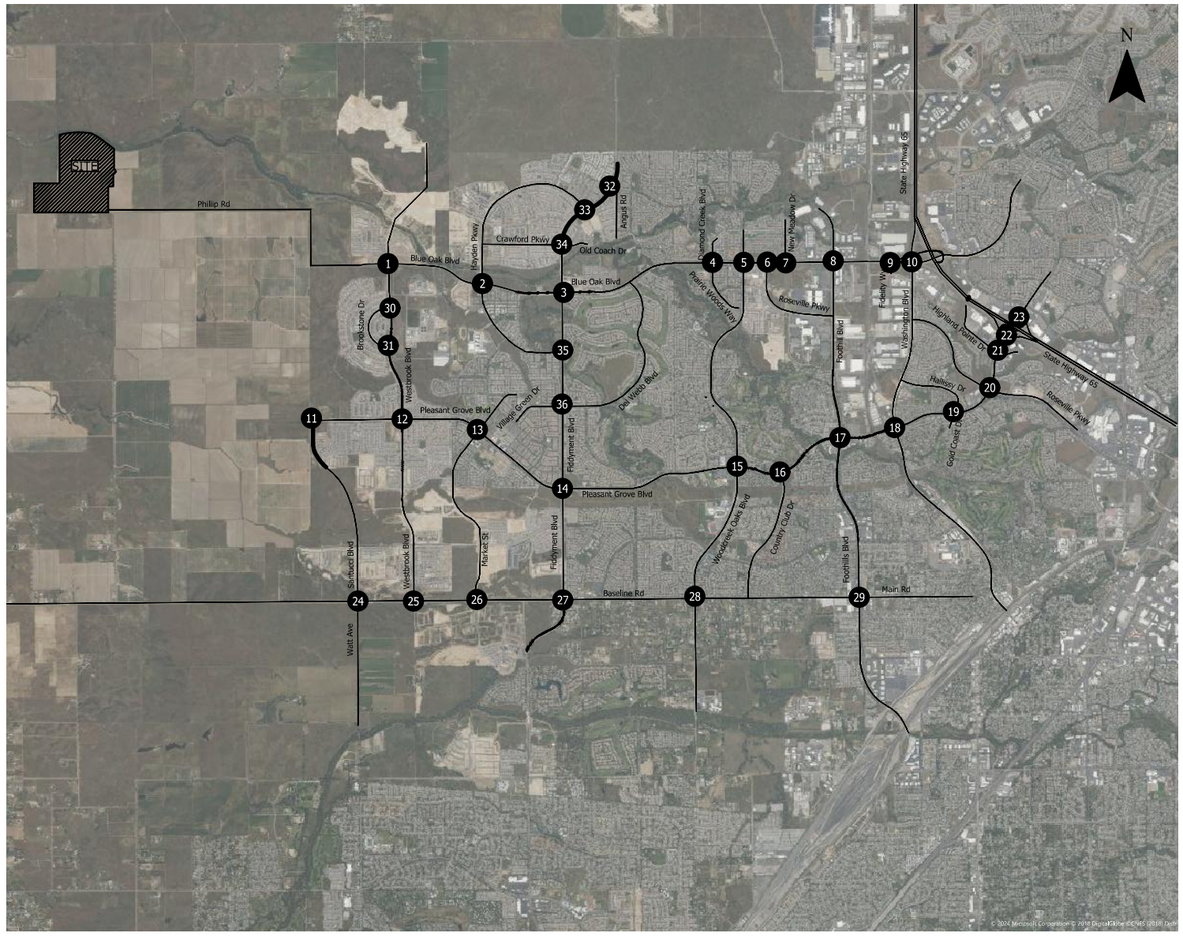

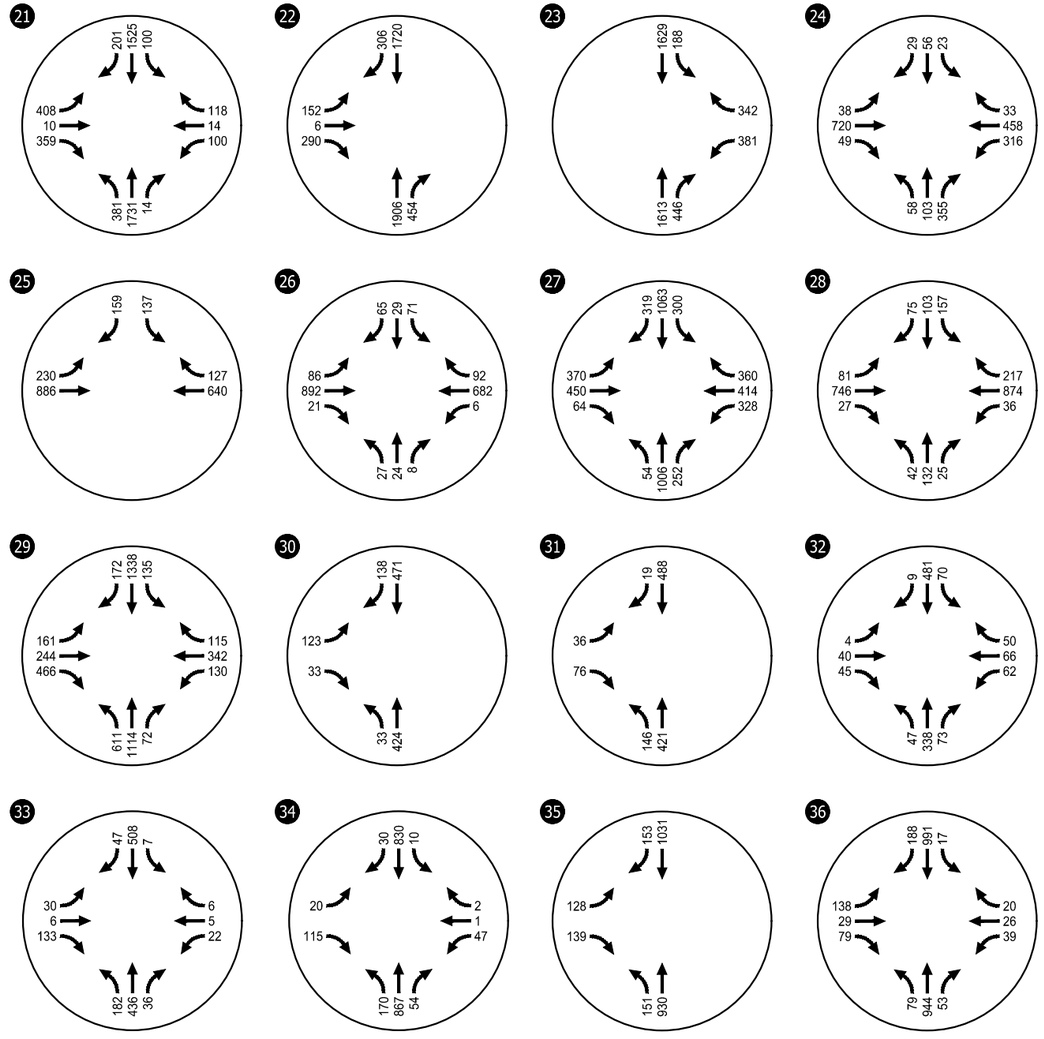

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Opening Year Plus Project PM Peak Hour Volumes
(Intersections 21-36)
Roseville, CA

Figure
16

KITTELSON & ASSOCIATES

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Table 11: Opening Year Plus Project Traffic Operations

ID	Intersection	Proposed Control Type	Opening Year No Project AM		Opening Year No Project PM		Opening Year Plus Project AM		Opening Year Plus Project PM	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Westbrook Blvd & Blue Oaks Blvd	Signalized	32.6	C	22.5	C	33.5	C	27.2	C
2	Hayden Pkwy & Blue Oaks Blvd	Signalized	20.4	C	14.7	B	21.5	C	16.2	B
3	Fiddyment Rd & Blue Oaks Blvd	Signalized	32.7	C	32.1	C	33.0	C	38.9	D
4	Diamond Creek Blvd/Prairie Woods Wy & Blue Oaks Blvd	Signalized	30.3	C	10.4	B	30.2	C	13.9	B
5	Woodcreek Oaks Blvd & Blue Oaks Blvd	Signalized	22.9	C	18.0	B	23.2	C	18.2	B
6	Walgreens Dwy/Roseville Pkwy & Blue Oaks Blvd	Signalized	8.2	A	7.4	A	8.0	A	7.2	A
7	New Meadow Dr & Blue Oaks Blvd	Signalized	8.9	A	8.0	A	9.0	A	8.6	A
8	Foothills Blvd & Blue Oaks Blvd	Signalized	27.5	C	36.4	D	27.7	C	41.5	D
9	Fidelity Wy & Blue Oaks Blvd	Signalized	2.6	A	3.8	A	2.5	A	4.1	A
10	Washington Blvd & Blue Oaks Blvd	Signalized	24.2	C	40.9	D	23.8	C	45.1	D
11	Santucci Blvd & Pleasant Grove Blvd	AWSC[2]	7.8	A	12.2	B	19.7	B	19.3	B
12	Westbrook Blvd & Pleasant Grove Blvd	Signalized	52.9	D	30.1	C	53.3	D	39.5	D
13	Market St & Pleasant Grove Blvd	Signalized	32.1	C	26.6	C	32.2	C	29.7	C
14	Fiddyment Rd & Pleasant Grove Blvd	Signalized	52.4	D	48.2	D	52.4	D	49.3	D

ID	Intersection	Proposed Control Type	Opening Year No Project AM		Opening Year No Project PM		Opening Year Plus Project AM		Opening Year Plus Project PM	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
15	Woodcreek Oaks Blvd & Pleasant Grove Blvd	Signalized	56.5	E	30.9	C	56.6	E	33.4	C
16	Country Club Dr & Pleasant Grove Blvd	Signalized	11.0	B	6.7	A	11.0	B	7.0	A
17	Foothills Blvd & Pleasant Grove Blvd	Signalized	42.8	D	48.0	D	42.7	D	53.6	D
18	Washington Blvd & Pleasant Grove Blvd	Signalized	61.7	E	52.0	D	62.0	E	54.8	D
19	Hallissy Dr/Gold Coast Dr & Pleasant Grove Blvd	Signalized	52.3	D	26.5	C	52.6	D	29.6	C
20	Pleasant Grove Blvd & Roseville Pkwy	Signalized	68.1	E	58.2	E	68.0	E	60.8	E
21	Pleasant Grove Blvd & Highland Pointe Dr	Signalized	26.5	C	28.2	C	26.4	C	29.1	C
22	Pleasant Grove Blvd & SR 65 SB Ramps	Signalized	8.1	A	5.9	A	8.1	A	6.0	A
23	Pleasant Grove Blvd & SR 65 NB Ramps	Signalized	13.6	B	14.4	B	13.6	B	14.8	B
24	Santucci Blvd/Watt Ave & Baseline Rd	Signalized	23.3	C	26.6	C	23.5	C	29.2	C
25	Westbrook Blvd & Baseline Rd	Signalized	21.6	C	12.2	B	23.5	C	13.9	B
26	Market St/Stargazer Dr & Baseline Rd	Signalized	15.1	B	13.8	B	15.2	B	14.5	B
27	Fiddyment Rd & Baseline Rd	Signalized	45.9	D	48.6	D	46.4	D	51.9	D
28	Woodcreek Oaks Blvd/Cook	Signalized	37.5	D	34.3	C	37.6	D	34.6	C

ID	Intersection	Proposed Control Type	Opening Year No Project AM		Opening Year No Project PM		Opening Year Plus Project AM		Opening Year Plus Project PM	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
	Riolo Rd & Baseline Rd									
29	Foothills Blvd & Baseline Rd/Main St	Signalized	32.2	C	38.4	D	32.4	C	39.2	D
30	Westbrook Blvd & Brookstone Dr (North)	Signalized	10.4	B	7.2	A	10.3	B	7.7	A
31	Westbrook Blvd & Brookstone Dr (South)	Signalized	11.4	B	8.3	A	11.2	B	9.1	A
32	Fiddyment Rd & Parkland Wy/Angus Rd	Signalized	18.0	B	18.1	B	18.0	B	19.0	B
33	Fiddyment Rd & N Hayden Pkwy	Signalized	26.6	C	17.3	B	26.9	C	21.9	C
34	Fiddyment Rd & Crawford Pkwy/Old Coach Dr	Signalized	33.0	C	16.3	B	33.7	C	21.3	C
35	Fiddyment Rd & Hayden Pkwy	Signalized	11.5	B	10.7	B	11.5	B	11.4	B
36	Fiddyment Rd & Village Green Dr/Del Webb Blvd	Signalized	18.7	B	19.8	B	18.7	B	21.6	C
37	Phillip Road & Passenger Vehicle Driveway	TWSC[1]	-	-	-	-	16.3	C	22.9	C
38	Phillip Road & Truck Driveway	TWSC[1]	-	-	-	-	15.6	C	17.9	C

Notes:
AWSC = All-way stop control. TWSC = Two-way stop control. Delay = Average vehicle delay in seconds
Bold = Deficient (causing an intersection operating at LOS C to operate at worse than LOS C)
[1]The reported delay reflects the worst-performing approach at the two-way stop controlled intersection
[2]The study area includes a portion of all signalized intersections citywide.
Source: Kittelson & Associates, Inc., 2025

IMPROVEMENT RECOMMENDATIONS

Recommendations for lane modifications and traffic control changes are provided to address operational deficiencies under opening year plus project conditions. Table 12 lists the recommended improvements for opening year traffic associated with the development of Phase 1 of the Roseville EU Operations Center Project. Table 13 shows the traffic operational changes with and without the recommended improvements.

For the intersection of Fiddyment Road and Blue Oaks Boulevard, an overlap phase to provide northbound right-turn movements with a green arrow during westbound left-turns was analyzed and found to improve operations to LOS C for the PM peak. However, this would restrict westbound U-turns which currently are desired to maintain circulation for the larger roadway network. Therefore, no improvements are recommended, and this location would degrade to LOS D during the PM peak hour.

The synchro operational result reports for opening year plus project conditions with improvements are shown in Appendix H.

Table 12: Recommended Improvements

ID	Intersection	Lane Changes	Traffic Control Change
3	Fiddyment Rd & Blue Oaks Blvd	None	None
12	Westbrook Blvd & Pleasant Grove Blvd	Add an additional southbound left turn lane	None

Table 13: Intersection Operations with Recommended Improvements – Opening Year Plus Project

ID	Intersection	Peak Hour	Opening Year Plus Project		Recommended Improvements	Opening Year Plus Project With Improvement	
			Delay	LOS		Delay	LOS
12	Westbrook Blvd & Pleasant Grove Blvd	AM	53.3	D	Add an additional southbound left turn lane	38.0	D
		PM	39.5	D		27.0	C

Table 14: 95th percentile queues Results with Recommended Improvements – Opening Year Plus Project

#	Intersection	Cumulative Plus Project Scenario	Eastbound		Westbound		Northbound		Southbound	
			L	R	L	R	L	R	L	R
12	Westbrook Blvd & Pleasant Grove Blvd	Planned Storage	240	250	240	250	240	250	240	250
		AM	52	0	75	28	80	35	**286**	6
		PM	21	0	79	24	74	0	**294**	0

The results are as follows:

- As shown in Table 13, the recommended roadway improvements would provide acceptable operations (LOS C or better) at the intersection of Westbrook Boulevard and Pleasant Grove Boulevard in the PM peak hour but it doesn't change the LOS in the AM peak hour.
- As shown in Table 14, the 95th percentile queue analysis indicates that all queues can be accommodated within the planned storage lengths, with the exception of the southbound left-turn movements at Westbrook Boulevard and Pleasant Grove Boulevard. These queues are expected to be contained within the taper lengths and are not anticipated to interfere with through traffic.

CUMULATIVE YEAR TRAFFIC OPERATIONS

Cumulative conditions refer to the full buildout of the project and the surrounding area, anticipated by the year 2040. To represent cumulative conditions with the project, the full trip generation associated with the Roseville EU Operations Center Project was added to the cumulative no project volumes.

Cumulative No Project Traffic Volumes

Cumulative no project traffic volumes were obtained from the Roseville Housing Element Synchro files developed by Fehr & Peers. These volumes were based on the City's 2035 travel demand model, which assumes the Phillip Road Site Project is not developed. The trips generated by the Phillip Road Site Project were then added to these volumes. The resulting cumulative volumes for the study intersections during the AM and PM peak hours are shown in Figure 17 and Figure 18, respectively.

Cumulative no project traffic operations were evaluated for both the AM and PM peak hours. This scenario uses the intersection lane configurations and traffic control types identified in the Roseville Housing Element Synchro files and changes compared to existing conditions are attached in Appendix I. The proposed lane configurations and traffic control types are illustrated in Figure 19.

Cumulative No Project Intersection Operations

Table 17 summarizes the operations of the study intersections during the AM and PM peak hours under Cumulative No Project conditions. With the proposed lane configurations and traffic volumes, all intersections are expected to be signalized, with 19 intersections projected to operate at LOS D or worse during the AM peak hour and the PM peak hour.

The signalized intersections operating at LOS D or worse in the AM peak hour are:

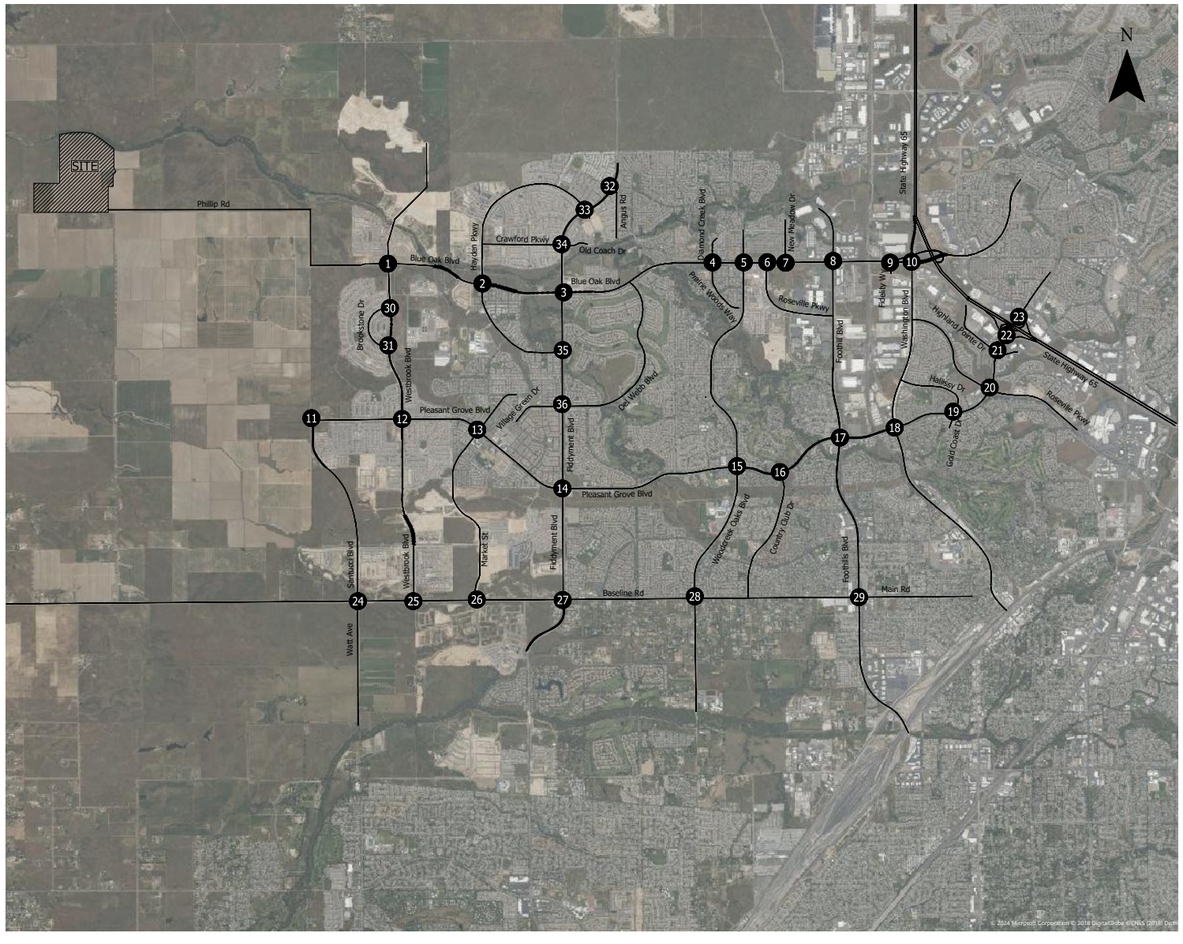
- Intersection 1: Westbrook Boulevard & Blue Oaks Boulevard – LOS D
- Intersection 3: Fiddyment Road and Blue Oaks Boulevard – LOS E
- Intersection 4: Diamond Creek Boulevard/Prairie Woods Way & Blue Oaks Boulevard – LOS D
- Intersection 5: Woodcreek Oaks Boulevard & Blue Oaks Boulevard – LOS D
- Intersection 8: Foothills Boulevard & Blue Oaks Boulevard – LOS F
- Intersection 10: Washington Boulevard & Blue Oaks Boulevard – LOS F
- Intersection 12: Westbrook Boulevard & Pleasant Grove Boulevard – LOS E
- Intersection 13: Market Street & Pleasant Grove Boulevard – LOS D
- Intersection 14: Fiddyment Road & Pleasant Grove Boulevard – LOS F
- Intersection 15: Woodcreek Oaks Boulevard & Pleasant Grove Boulevard – LOS E
- Intersection 17: Foothills Boulevard & Pleasant Grove Boulevard – LOS E
- Intersection 18: Washington Boulevard & Pleasant Grove Boulevard – LOS D
- Intersection 19: Hallissy Drive/Gold Coast Drive & Pleasant Grove Boulevard – LOS D
- Intersection 20: Pleasant Grove Boulevard & Roseville Parkway – LOS F
- Intersection 24: Santucci Boulevard/Watt Avenue & Baseline Road – LOS D
- Intersection 25: Westbrook Boulevard & Baseline Road – LOS E
- Intersection 27: Fiddyment Road & Baseline Road – LOS E

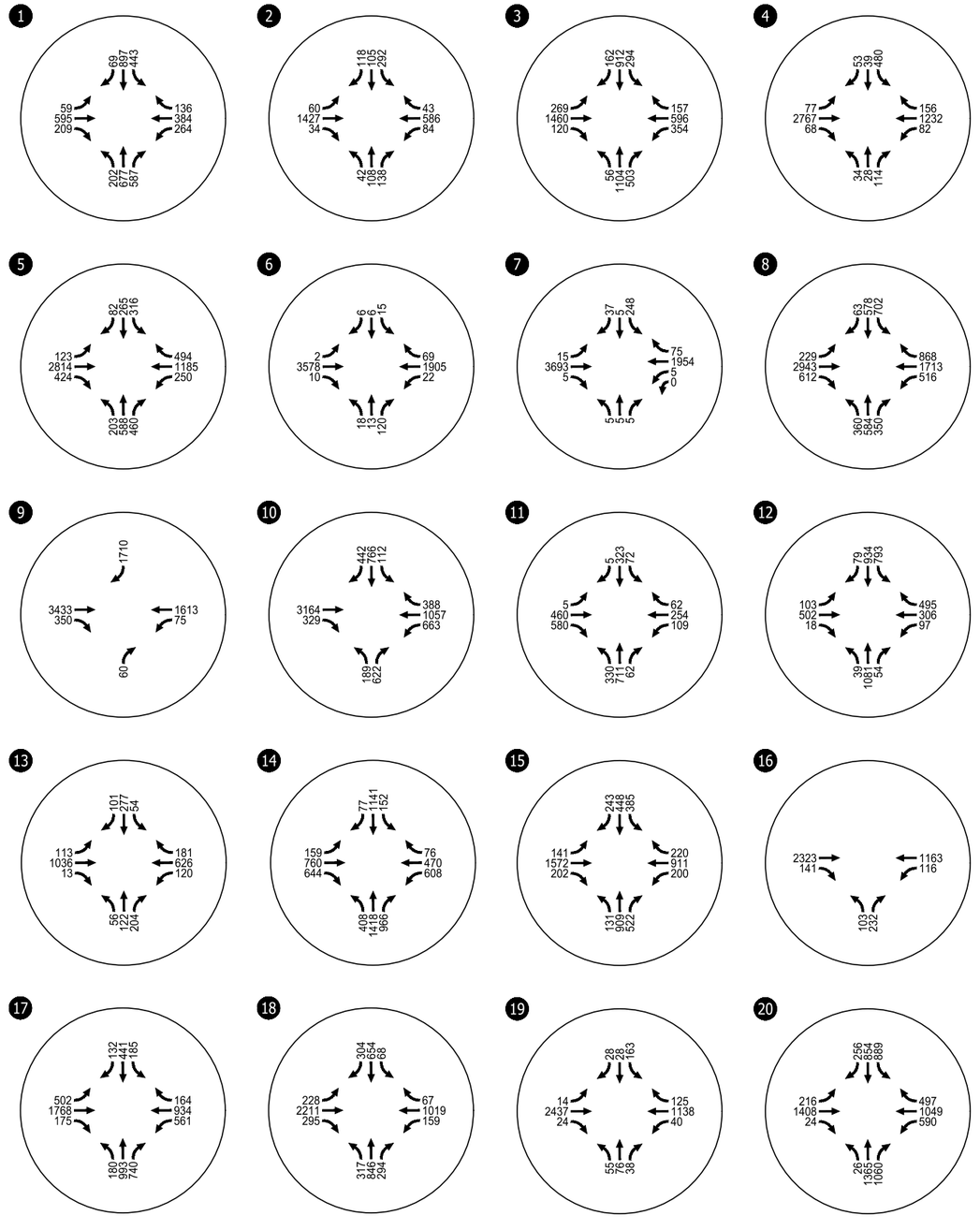
- Intersection 28: Woodcreek Oaks Boulevard/Cook Riolo Road & Baseline Road – LOS F
- Intersection 29: Foothills Boulevard & Baseline Road/Main Street – LOS E

The signalized intersections operating at LOS D or worse in the PM peak hour are:

- Intersection 1: Westbrook Boulevard & Blue Oaks Boulevard – LOS F
- Intersection 3: Fiddyment Road and Blue Oaks Boulevard – LOS F
- Intersection 4: Diamond Creek Boulevard/Prairie Woods Way & Blue Oaks Boulevard – LOS F
- Intersection 5: Woodcreek Oaks Boulevard & Blue Oaks Boulevard – LOS F
- Intersection 8: Foothills Boulevard & Blue Oaks Boulevard – LOS F
- Intersection 10: Washington Boulevard & Blue Oaks Boulevard – LOS D
- Intersection 13: Market Street & Pleasant Grove Boulevard – LOS D
- Intersection 14: Fiddyment Road & Pleasant Grove Boulevard – LOS F
- Intersection 15: Woodcreek Oaks Boulevard & Pleasant Grove Boulevard – LOS D
- Intersection 17: Foothills Boulevard & Pleasant Grove Boulevard – LOS E
- Intersection 18: Washington Boulevard & Pleasant Grove Boulevard – LOS E
- Intersection 19: Hallissy Drive/Gold Coast Drive & Pleasant Grove Boulevard – LOS D
- Intersection 20: Pleasant Grove Boulevard & Roseville Parkway – LOS F
- Intersection 21: Pleasant Grove Boulevard & Highland Pointe Drive – LOS E
- Intersection 24: Santucci Boulevard/Watt Avenue & Baseline Road – LOS E
- Intersection 25: Westbrook Boulevard & Baseline Road – LOS D
- Intersection 27: Fiddyment Road & Baseline Road – LOS E
- Intersection 28: Woodcreek Oaks Boulevard/Cook Riolo Road & Baseline Road – LOS F
- Intersection 29: Foothills Boulevard & Baseline Road/Main Street – LOS E

The LOS calculation sheets for cumulative no project conditions are shown in Appendix J.





EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Cumulative No Project AM Peak Hour Volumes
(Intersections 1-20)
Roseville, CA

Figure
17

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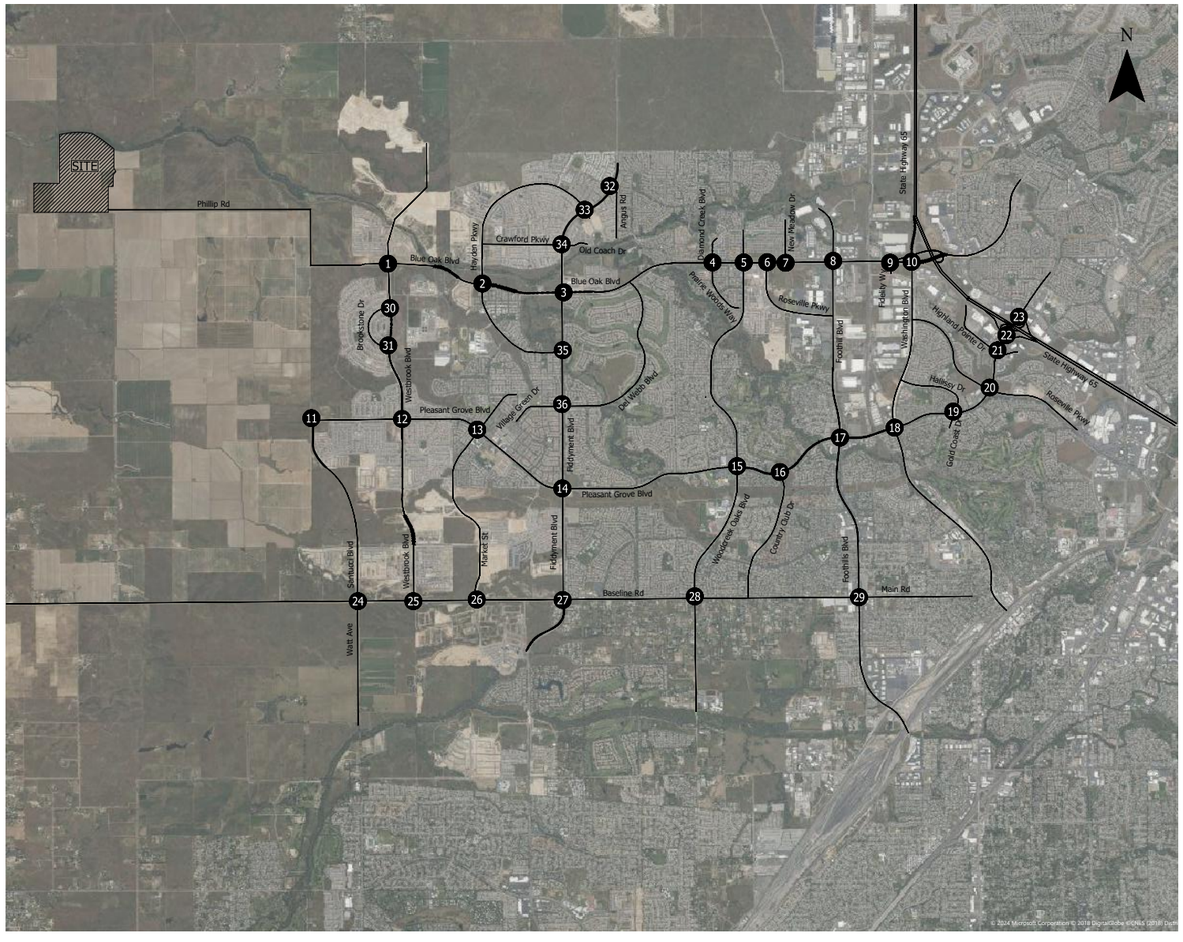

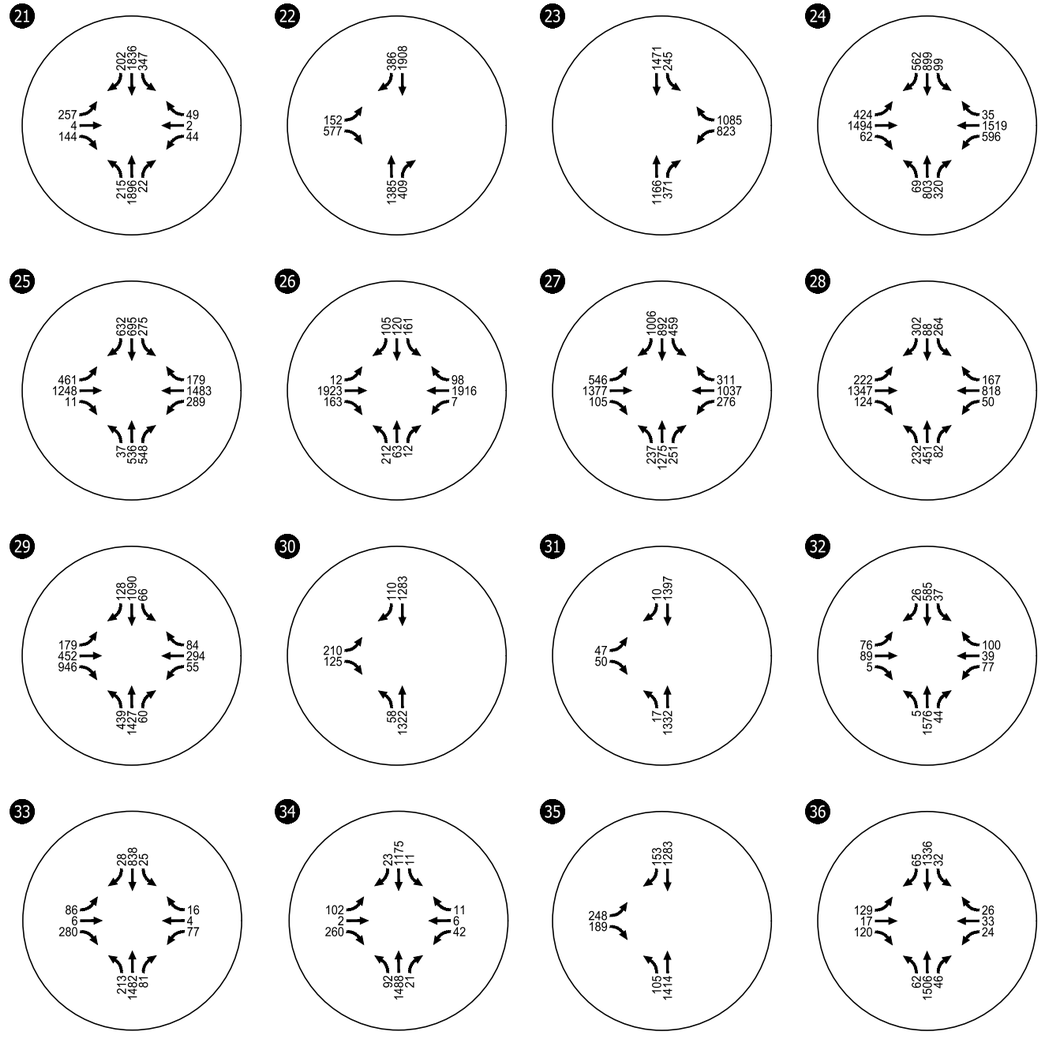

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Cumulative No Project AM Peak Hour Volumes
(Intersections 21-36)
Roseville, CA

Figure
17

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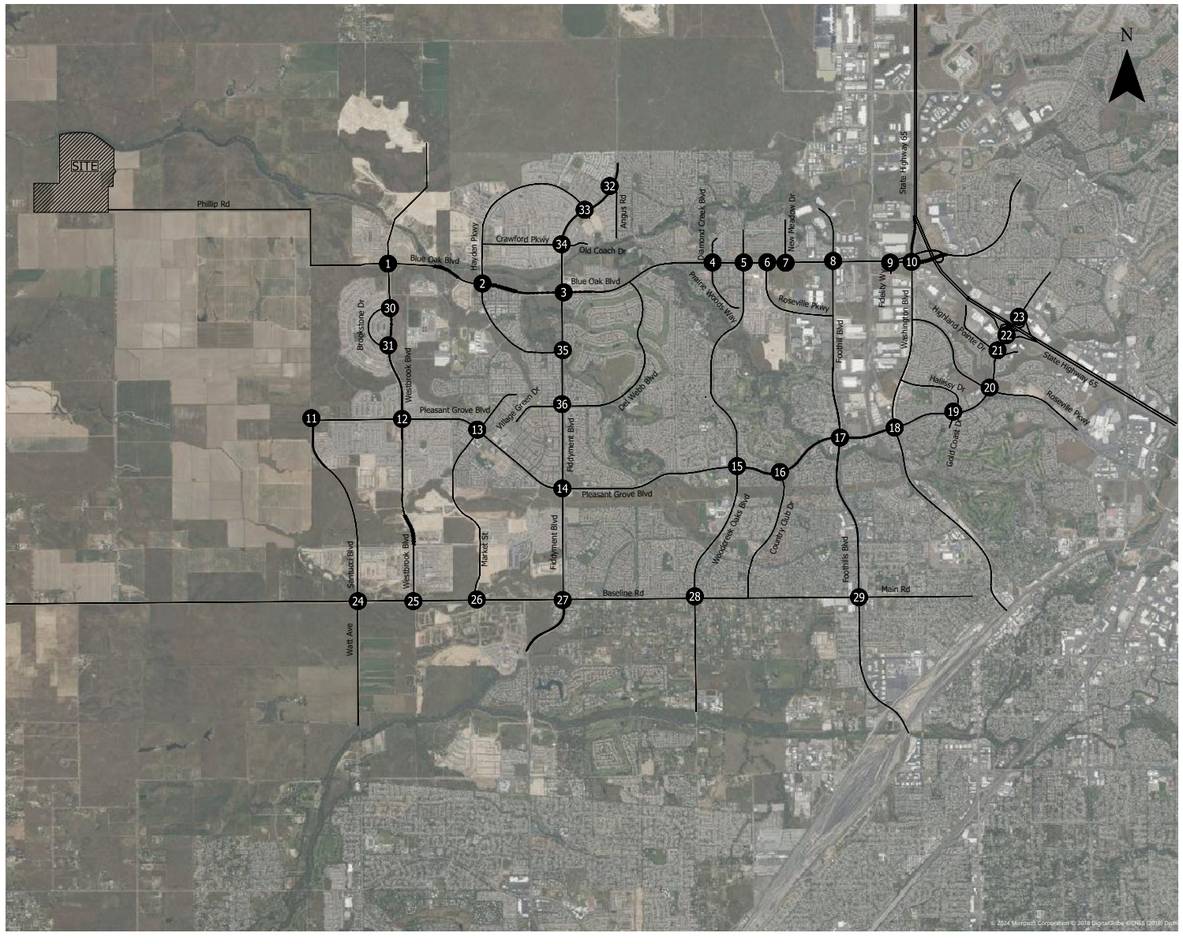

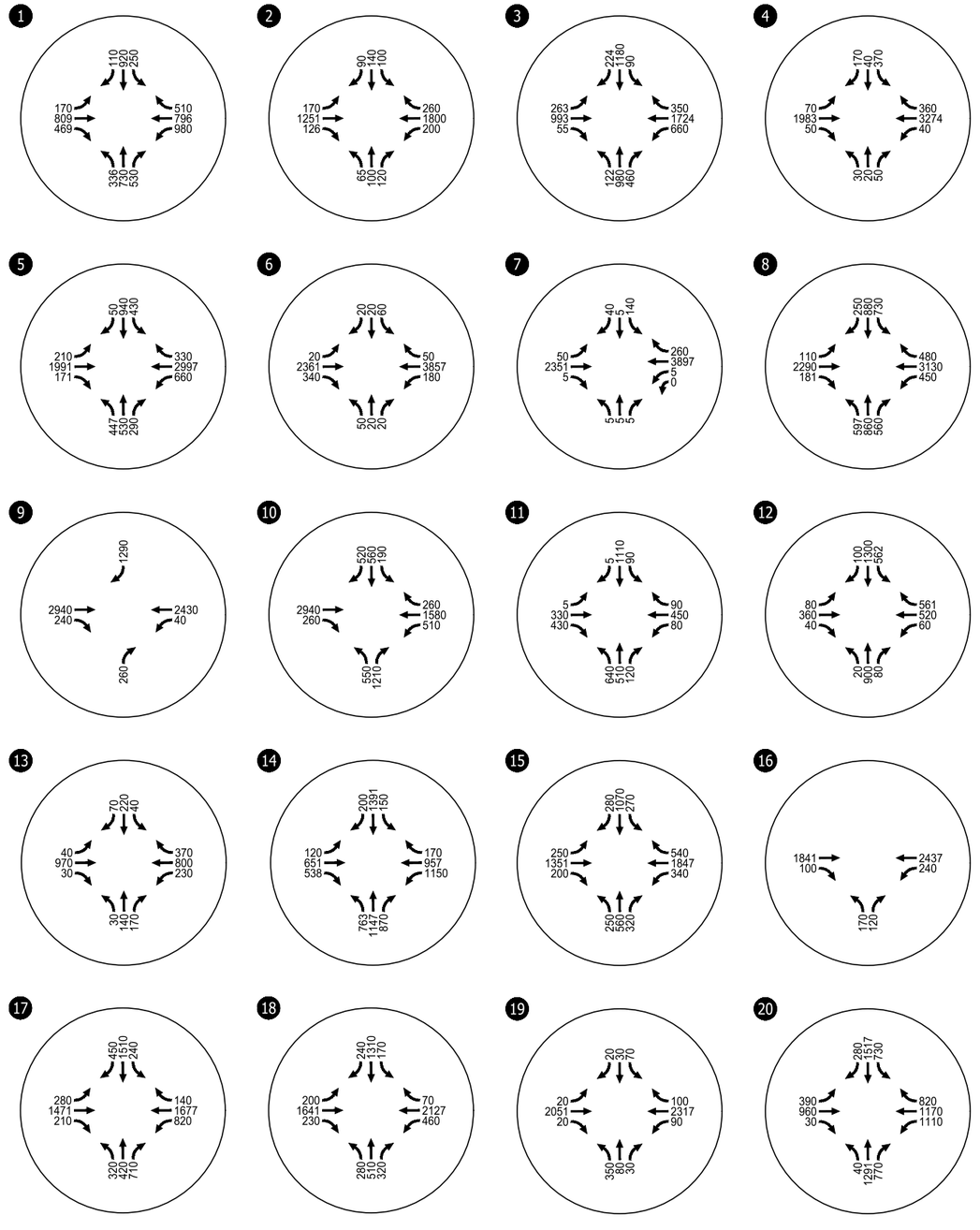

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Cumulative No Project PM Peak Hour Volumes
(Intersections 1-20)
Roseville, CA

Figure
18

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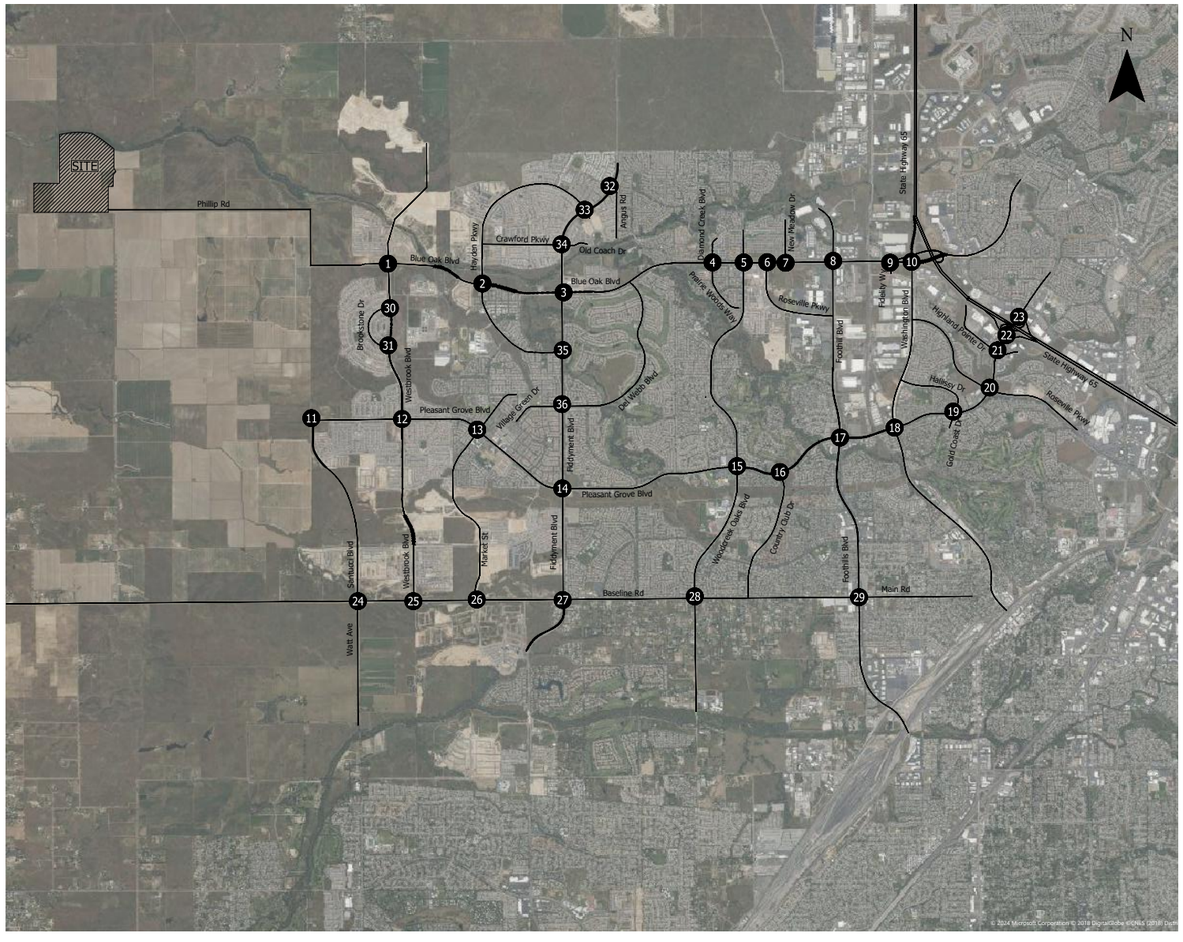

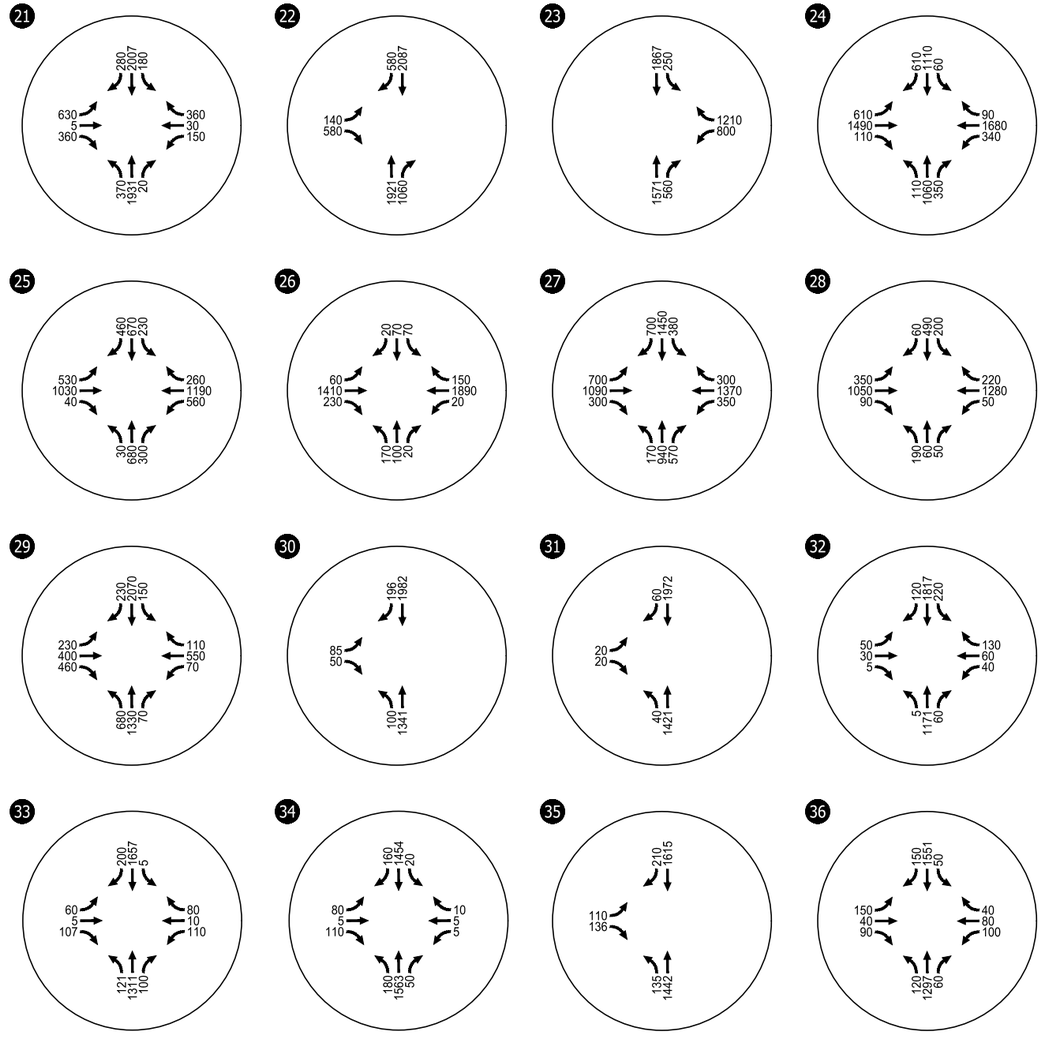

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Cumulative No Project PM Peak Hour Volumes
(Intersections 21-36)
Roseville, CA

Figure
18

KITTELSON & ASSOCIATES

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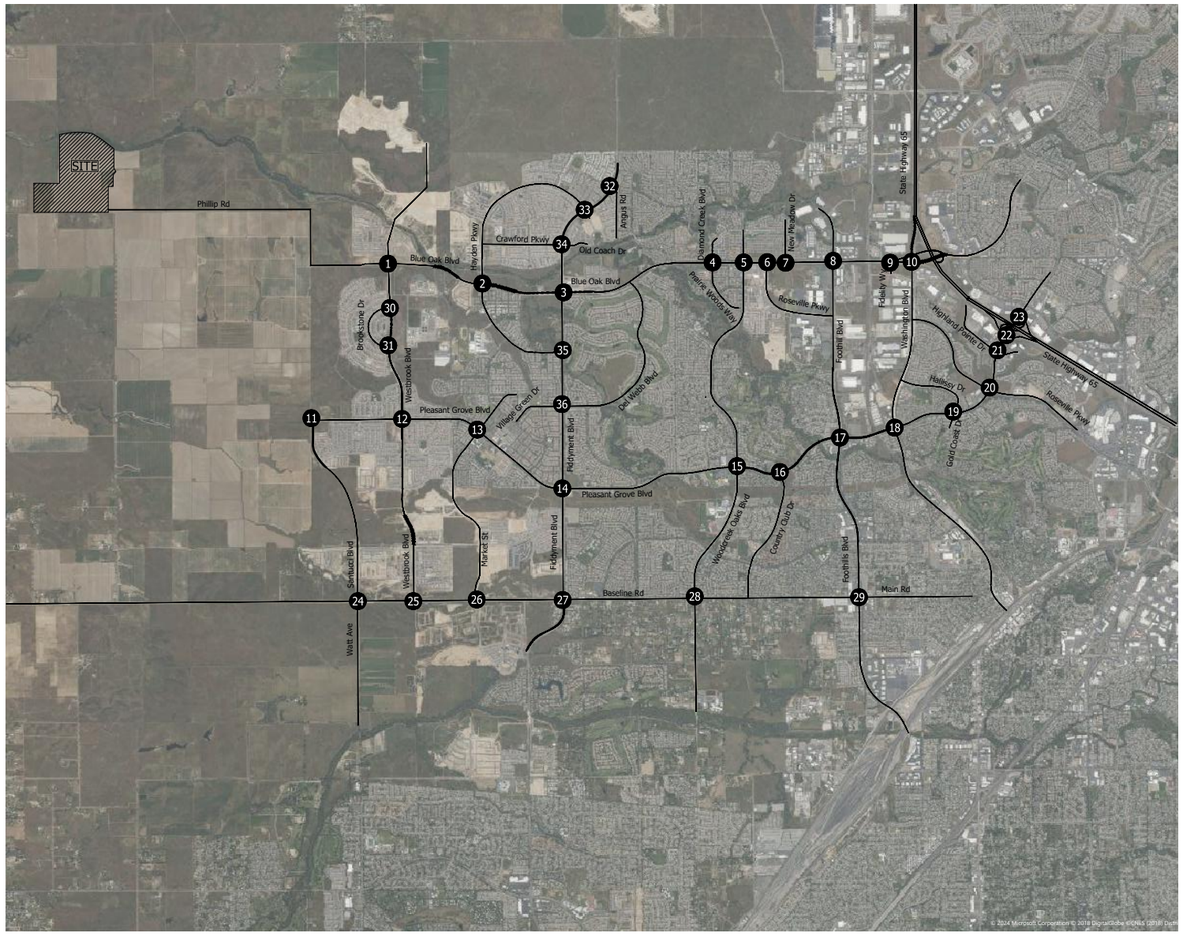

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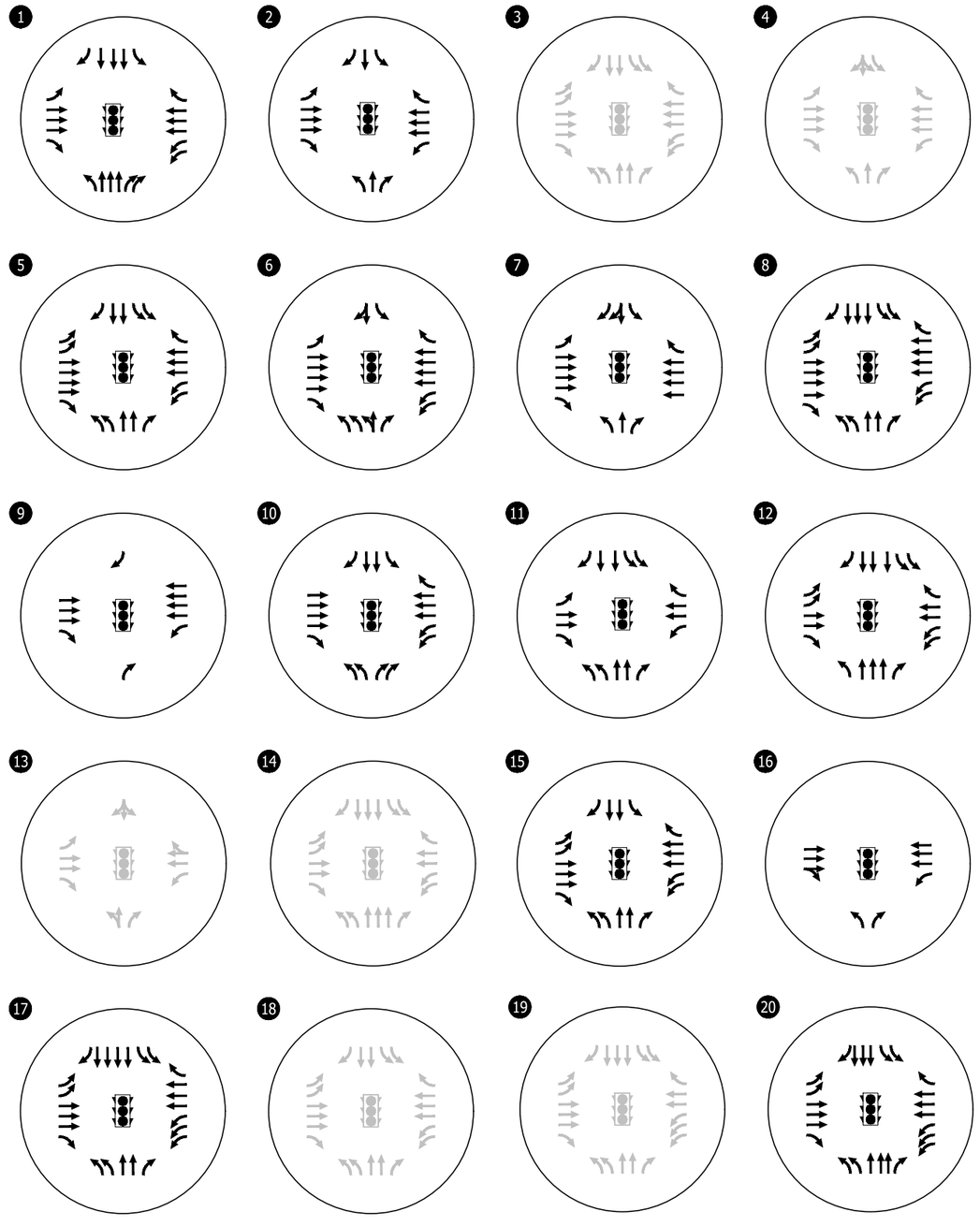

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION
STOP SIGN
TRAFFIC SIGNAL

Cumulative Year Lane Configuration and Traffic Control at Study Intersections
(Intersections 1-20)
Roseville, CA

Figure
19

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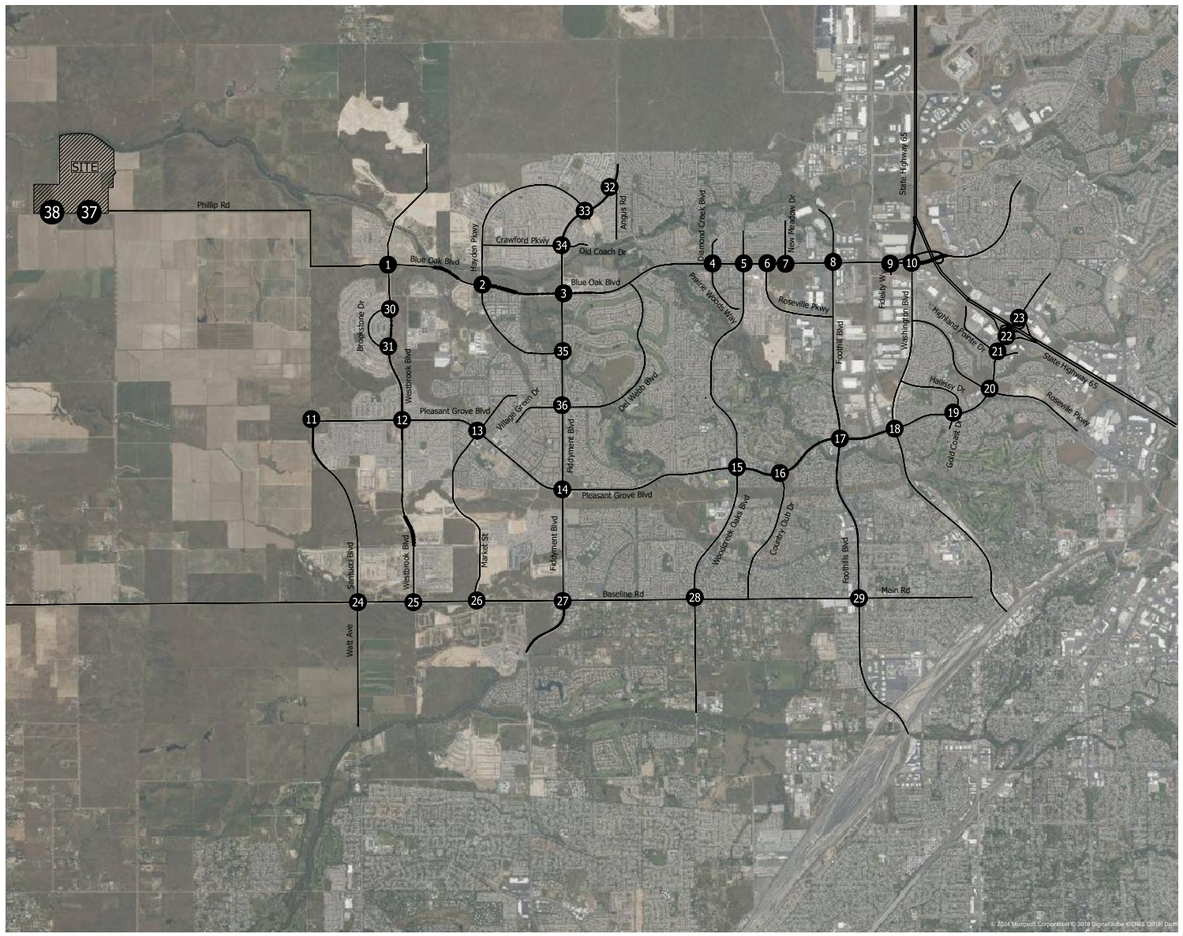

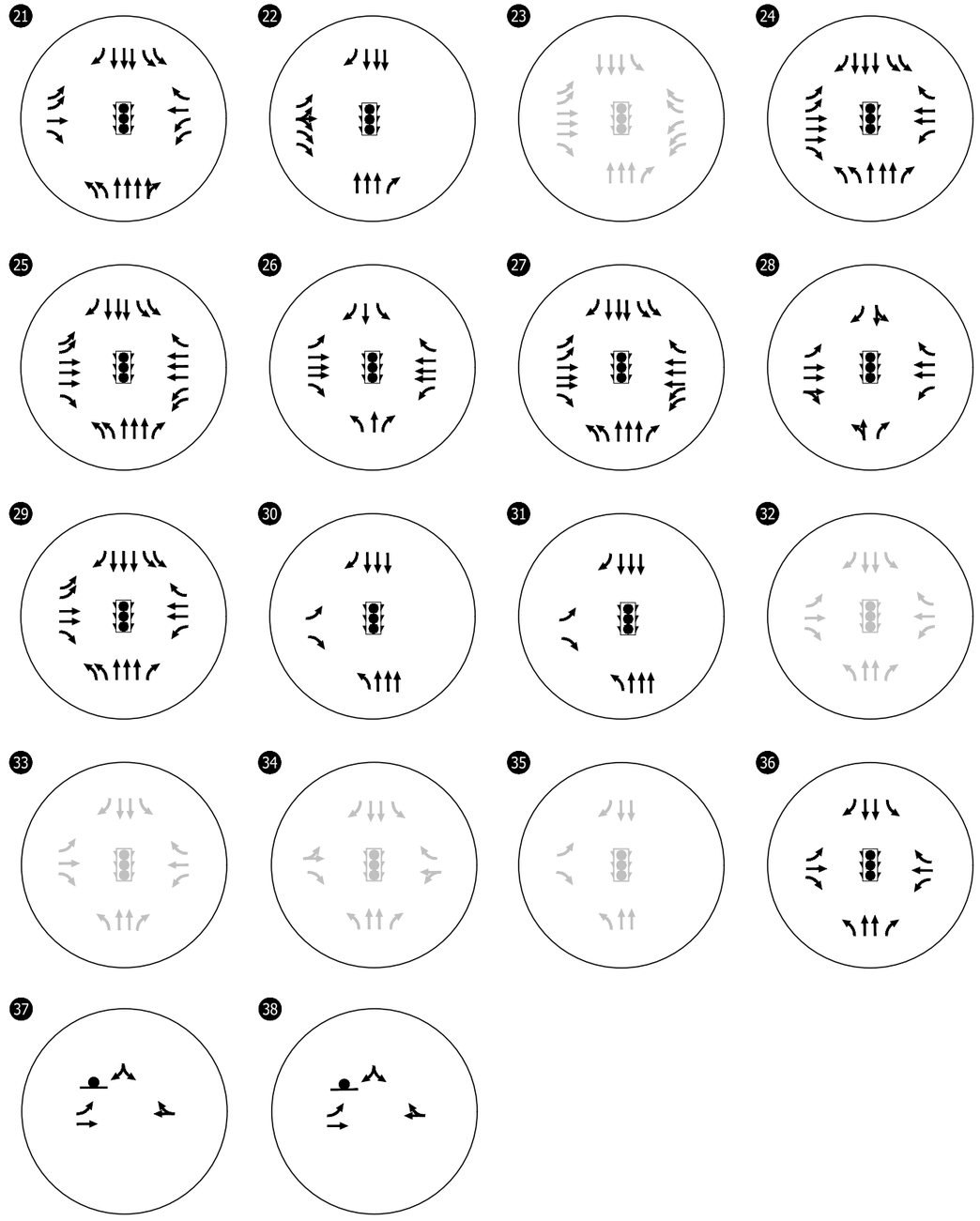

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION
STOP SIGN
TRAFFIC SIGNAL

Cumulative Year Lane Configuration and Traffic Control at Study Intersections
(Intersections 21-38)
Roseville, CA

Figure
19

KITTELSON & ASSOCIATES

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Table 15: Cumulative No Project Traffic Operations

ID	North-South Street	East-West Street	Control Type	Cumulative No Project AM		Cumulative No Project PM	
				Delay	LOS	Delay	LOS
1	Westbrook Blvd	Blue Oaks Blvd	Signalized	37.9	D	86.5	F
2	Hayden Pkwy	Blue Oaks Blvd	Signalized	27.8	C	30.5	C
3	Fiddyment Rd	Blue Oaks Blvd	Signalized	67.5	E	82.6	F
4	Diamond Creek Blvd/Prairie Woods Wy	Blue Oaks Blvd	Signalized	49.9	D	99.6	F
5	Woodcreek Oaks Blvd	Blue Oaks Blvd	Signalized	48.6	D	130.2	F
6	Walgreens Dwy/Roseville Pkwy	Blue Oaks Blvd	Signalized	3.0	A	8.9	A
7	New Meadow Dr	Blue Oaks Blvd	Signalized	8.1	A	15.3	B
8	Foothills Blvd	Blue Oaks Blvd	Signalized	127.9	F	157.4	F
9	Fidelity Wy	Blue Oaks Blvd	Signalized	29.3	C	12.6	B
10	Washington Blvd	Blue Oaks Blvd	Signalized	88.6	F	48.7	D
11	Santucci Blvd	Pleasant Grove Blvd	Signalized	23.3	C	33.0	C
12	Westbrook Blvd	Pleasant Grove Blvd	Signalized	74.0	E	31.3	C
13	Market St	Pleasant Grove Blvd	Signalized	44.6	D	43.7	D
14	Fiddyment Rd	Pleasant Grove Blvd	Signalized	130.5	F	104.2	F
15	Woodcreek Oaks Blvd	Pleasant Grove Blvd	Signalized	58.4	E	50.3	D
16	Country Club Dr	Pleasant Grove Blvd	Signalized	22.3	C	24.2	C
17	Foothills Blvd	Pleasant Grove Blvd	Signalized	59.1	E	70.8	E
18	Washington Blvd	Pleasant Grove Blvd	Signalized	52.2	D	70.5	E
19	Hallissy Dr/Gold Coast Dr	Pleasant Grove Blvd	Signalized	46.8	D	46.3	D
20	Pleasant Grove Blvd	Roseville Pkwy	Signalized	100.7	F	99.5	F
21	Pleasant Grove Blvd	Highland Pointe Dr	Signalized	30.3	C	70.8	E
22	Pleasant Grove Blvd	SR 65 SB Ramps	Signalized	10.7	B	15.0	B
23	Pleasant Grove Blvd	SR 65 NB Ramps	Signalized	33.2	C	33.4	C
24	Santucci Blvd/Watt Ave	Baseline Rd	Signalized	49.3	D	64.0	E
25	Westbrook Blvd	Baseline Rd	Signalized	58.4	E	40.0	D

ID	North-South Street	East-West Street	Control Type	Cumulative No Project AM		Cumulative No Project PM	
				Delay	LOS	Delay	LOS
26	Market St/Stargazer Dr	Baseline Rd	Signalized	21.7	C	19.0	B
27	Fiddyment Rd	Baseline Rd	Signalized	61.9	E	75.8	E
28	Woodcreek Oaks Blvd/Cook Riolo Rd	Baseline Rd	Signalized	143.7	F	168.4	F
29	Foothills Blvd	Baseline Rd/Main St	Signalized	70.7	E	72.6	E
30	Westbrook Blvd	Brookstone Dr (North)	Signalized	8.5	A	7.4	A
31	Westbrook Blvd	Brookstone Dr (South)	Signalized	5.2	A	5.0	A
32	Fiddyment Rd	Parkland Wy/Angus Rd	Signalized	26.1	C	30.3	C
33	Fiddyment Rd	N Hayden Pkwy	Signalized	34.6	C	33.8	C
34	Fiddyment Rd	Crawford Pkwy/Old Coach Dr	Signalized	28.5	C	20.6	C
35	Fiddyment Rd	Hayden Pkwy	Signalized	13.3	B	12.5	B
36	Fiddyment Rd	Village Green Dr/Del Webb Blvd	Signalized	26.5	C	30.6	C

Notes:
Delay = Average vehicle delay in seconds
[1] The study area includes a portion of all signalized intersections citywide.
Source: Kittelson & Associates, Inc., 2025

Cumulative Plus Project Traffic Volumes

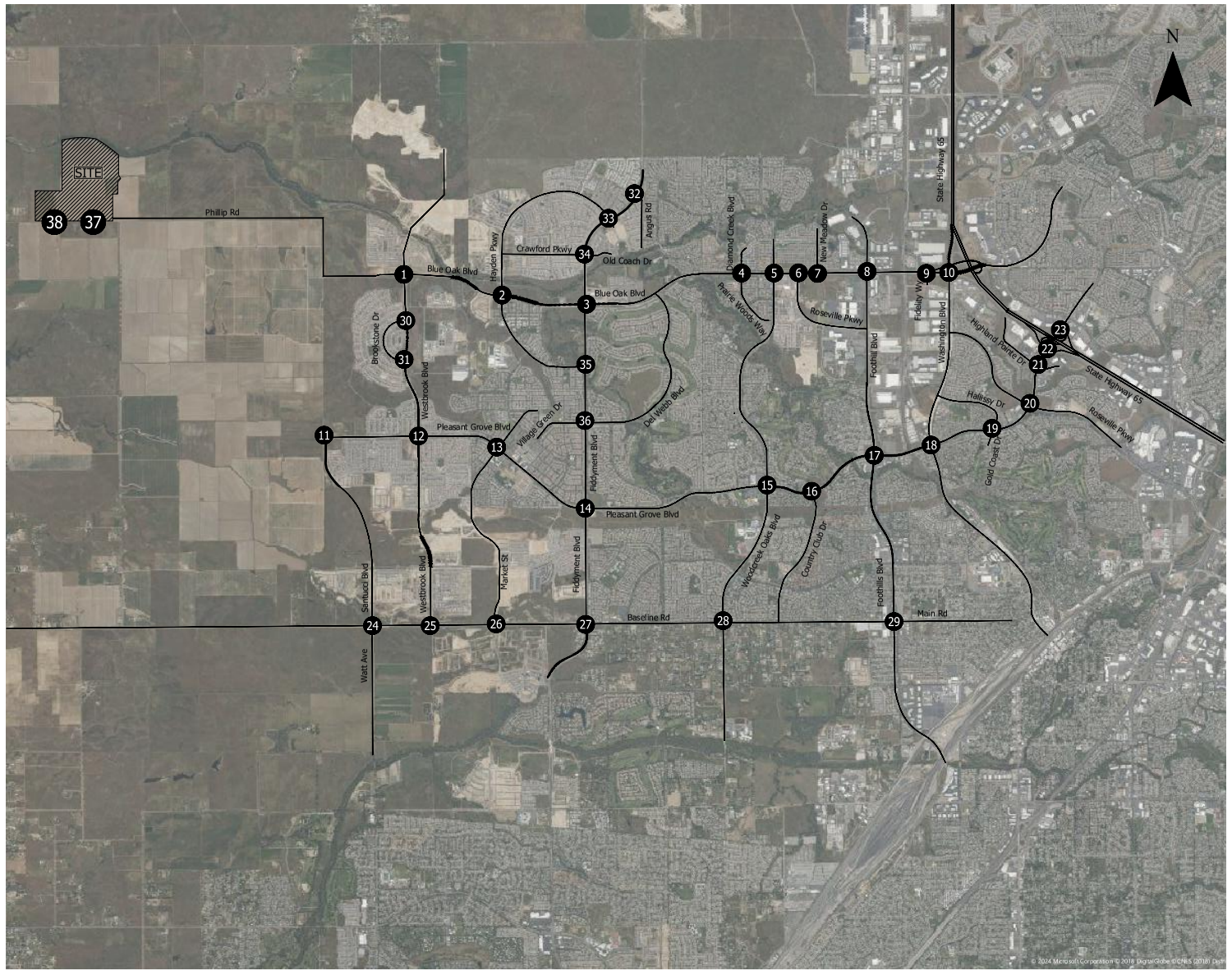
The cumulative plus project conditions reflect cumulative no project traffic volumes combined with proposed project generated trips, estimated based on the trip generation and distribution assumptions described in earlier sections. Traffic operations under these conditions were evaluated for both the AM and PM peak hours. This analysis assumes the same intersection lane configurations and traffic control types as in the cumulative no project scenario, as shown in Figure 19 previously. The cumulative plus project volumes for the study intersections in the AM and PM peak hour are shown in Figure 20 and Figure 21, respectively.

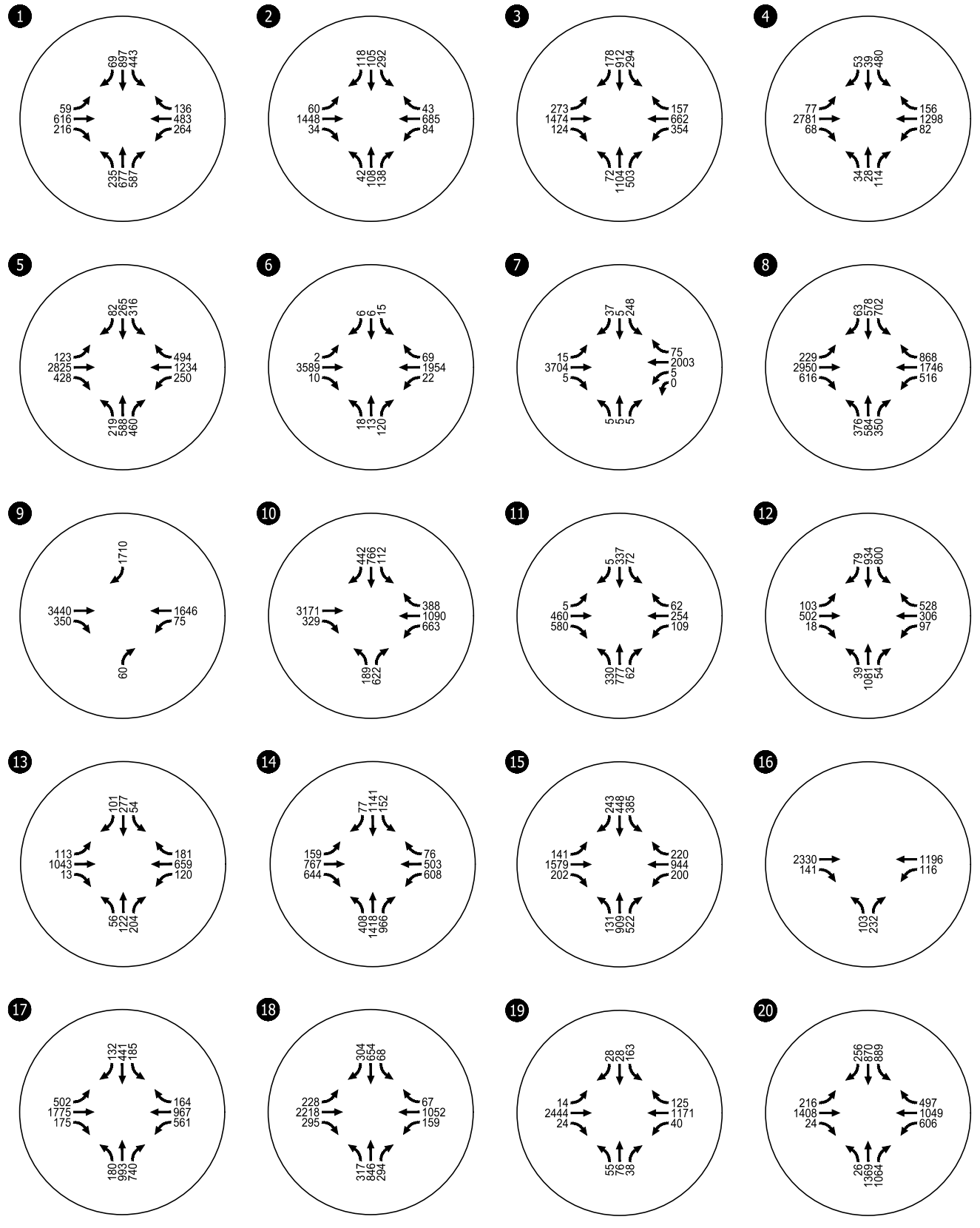
Cumulative Plus Project Intersection Operations

Table 16 summarizes the operations of the study intersections during the AM and PM peak hours in cumulative plus project conditions. All intersections are projected to operate at the same LOS as under the Cumulative No Project scenario. Therefore, the project is not anticipated to result in significant impacts on the roadway network in the cumulative year.

The unsignalized intersection of Phillip Road at the Passenger Vehicle Driveway is expected to operate at LOS D during the AM peak hour and LOS F during the PM peak hour. Similarly, the unsignalized intersection of Phillip Road at the Truck Driveway is projected to operate at LOS C in the AM peak hour and LOS F in the PM peak hour. Signal warrant analyses and recommended improvements for these two driveway intersections are presented in the following sections.

The LOS calculation sheets for cumulative year with project conditions are shown in Appendix K.





EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Cumulative Plus Project AM Peak Hour Volumes
(Intersections 1-20)
Roseville, CA

Figure
20

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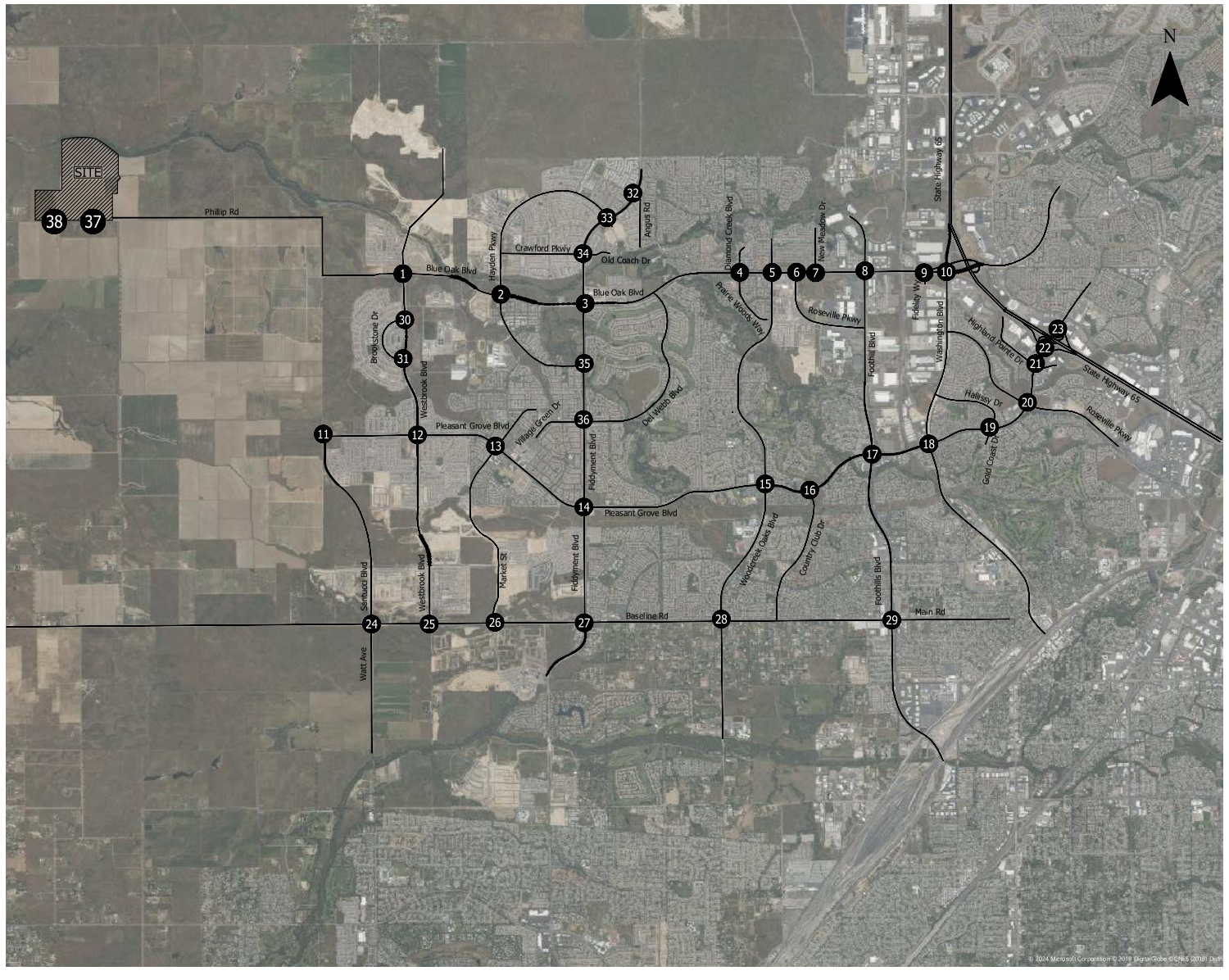

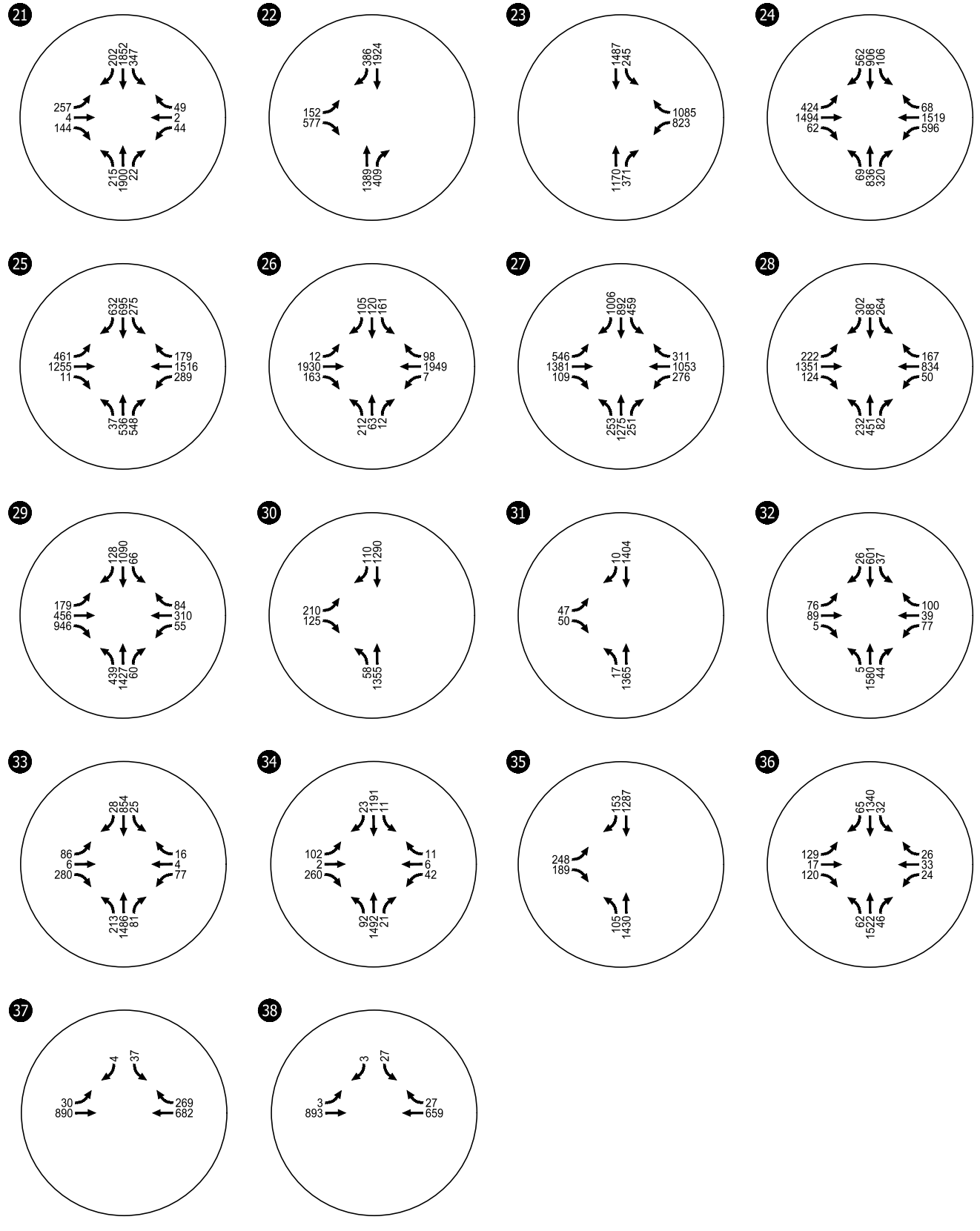

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Cumulative Plus Project AM Peak Hour Volumes
(Intersections 21-38)
Roseville, CA

Figure
20

KITTELSON & ASSOCIATES

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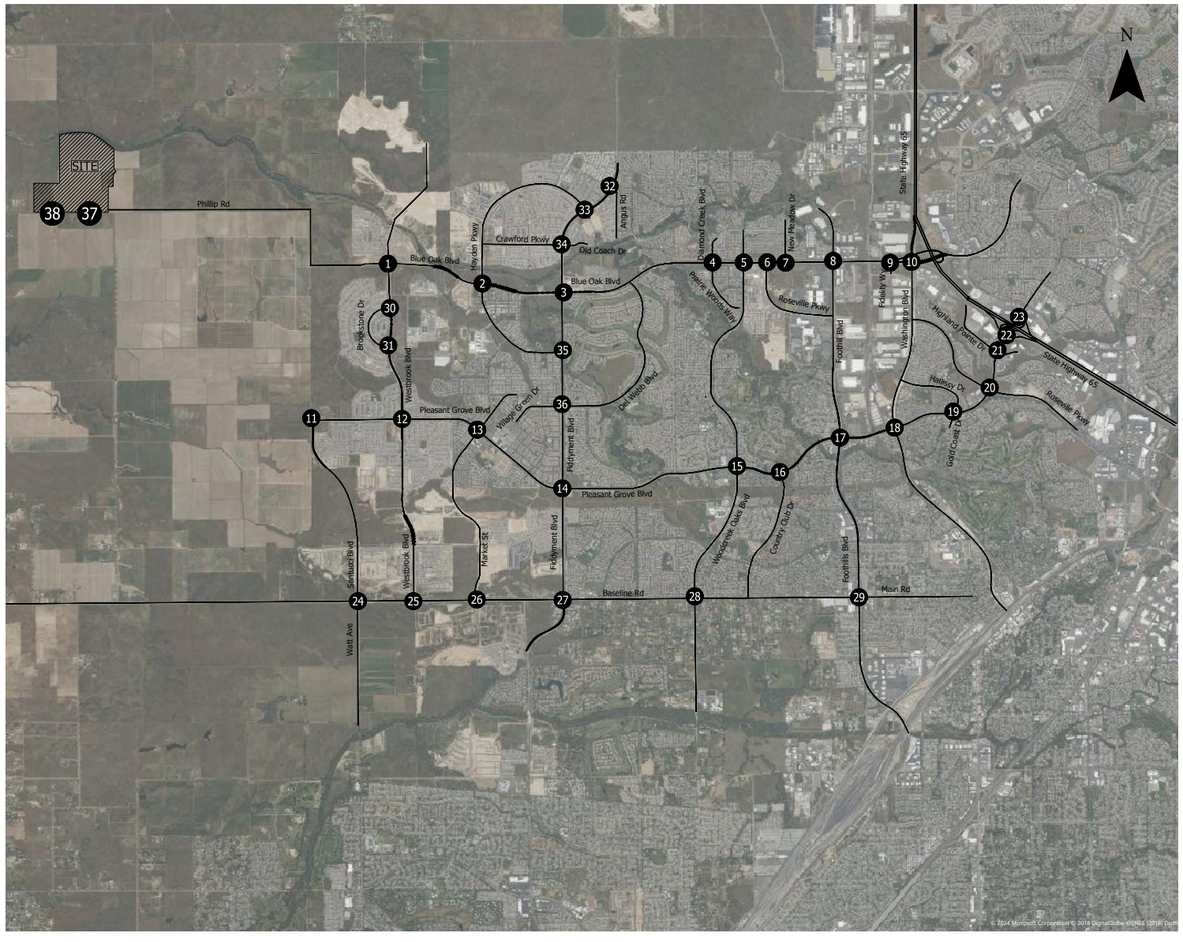

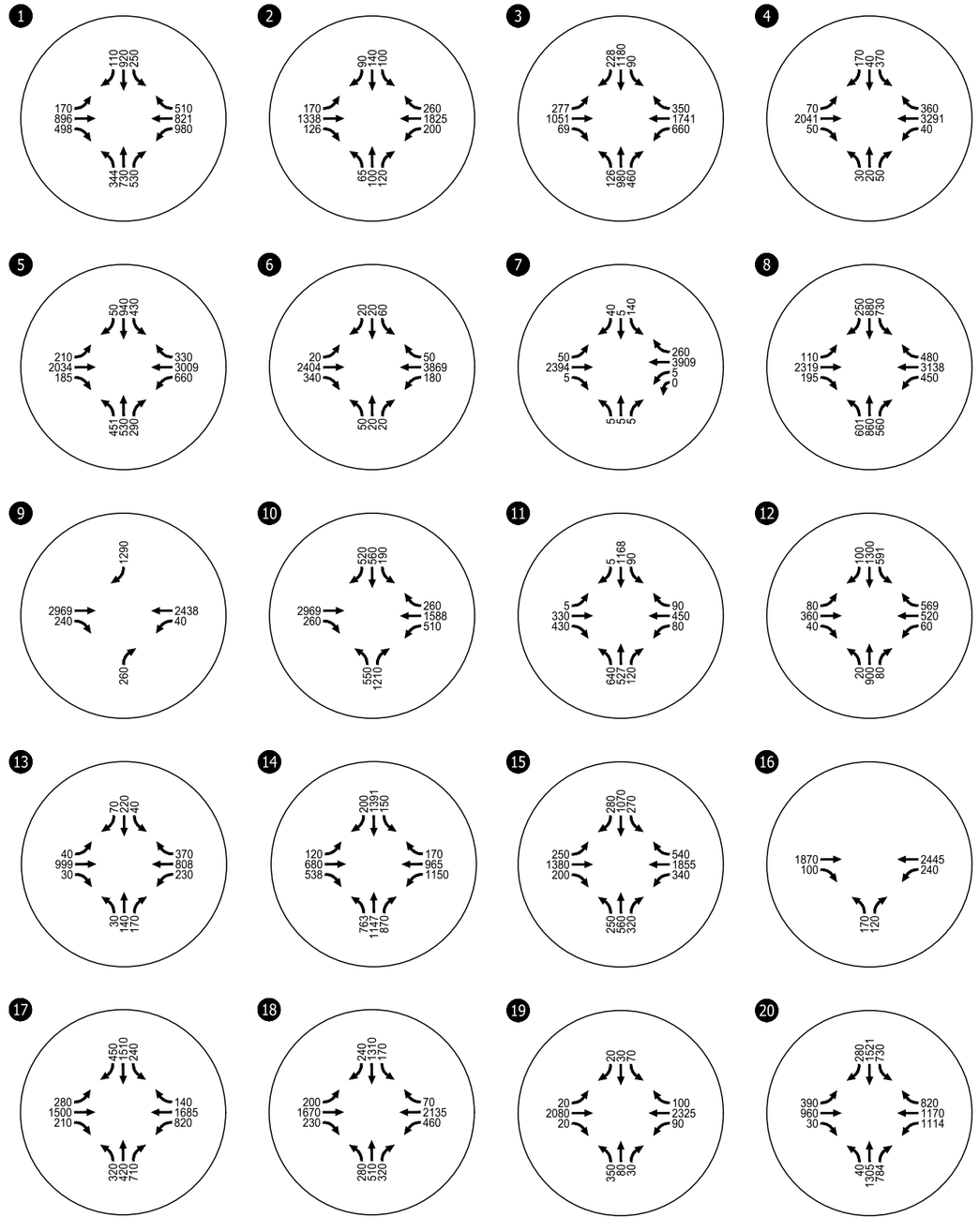

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Cumulative Plus Project PM Peak Hour Volumes
(Intersections 1-20)
Roseville, CA

Figure
21

KITTELSON & ASSOCIATES

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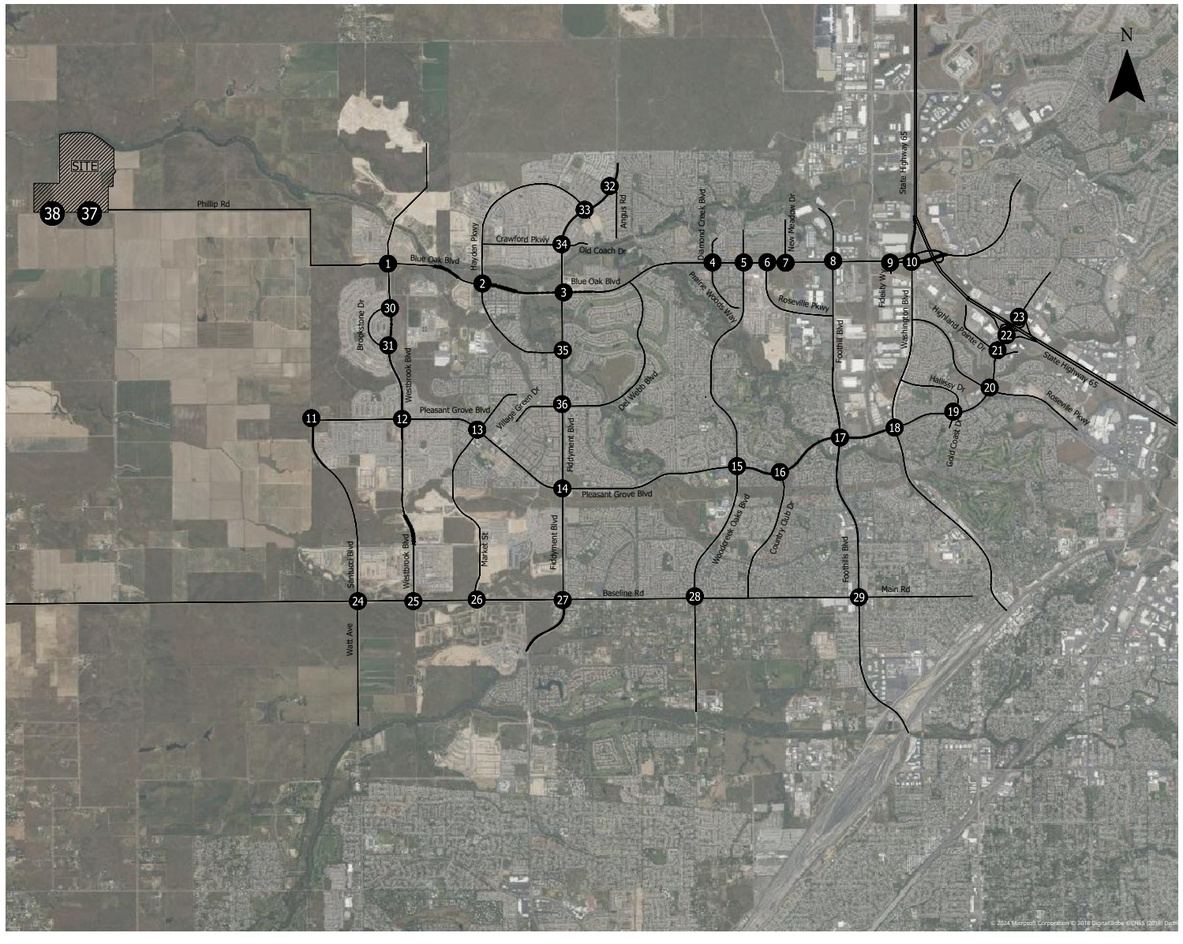

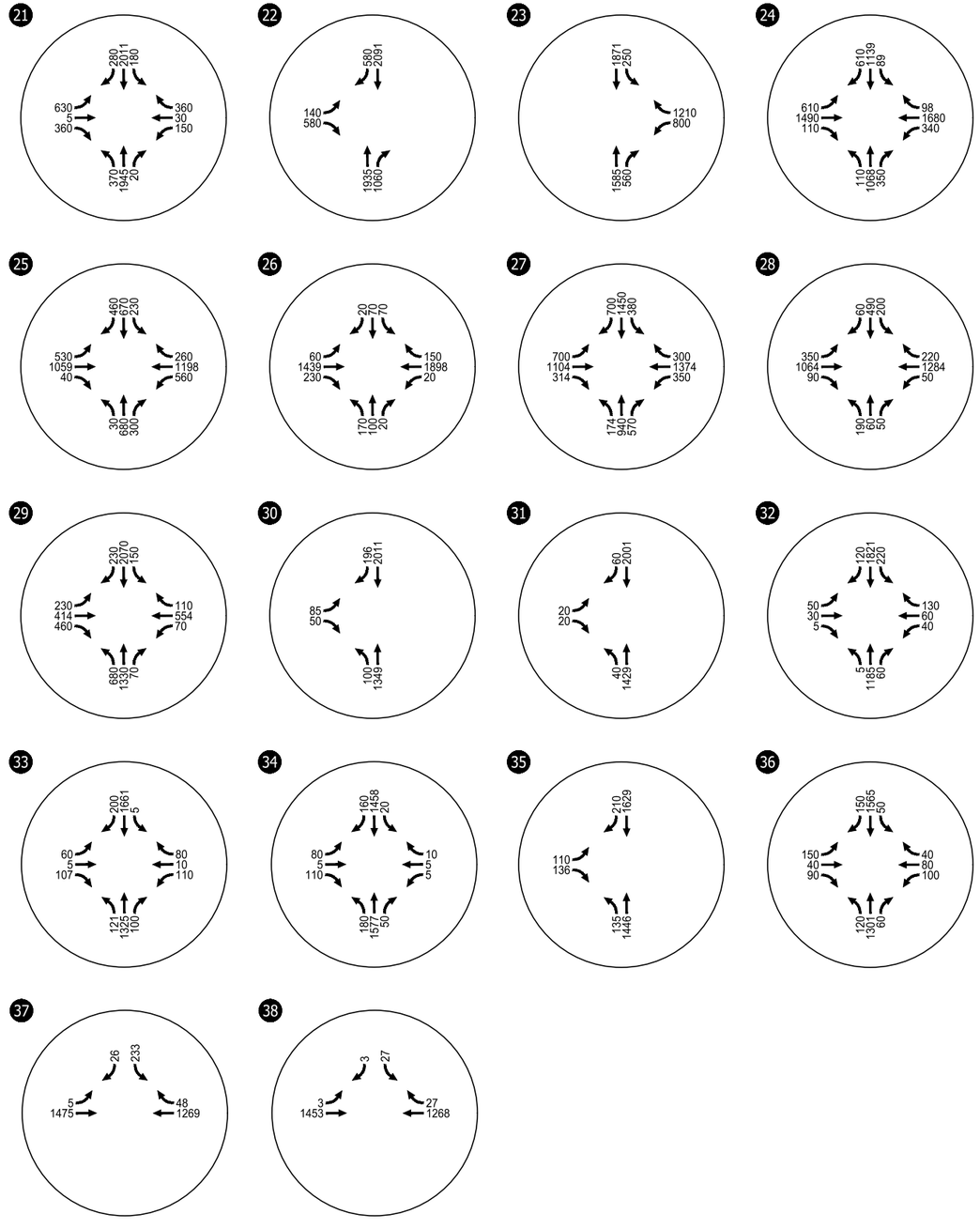

EXISTING ROADWAY
STATE HIGHWAY
PROJECT SITE LEGEND
STUDY INTERSECTION

Cumulative Plus Project PM Peak Hour Volumes
(Intersections 21-38)
Roseville, CA

Figure
21

KITTELSON & ASSOCIATES

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Table 16: Cumulative Plus Project Traffic Operations

ID	Intersection	Proposed Control Type	Cumulative No Project AM		Cumulative No Project PM		Cumulative Plus Project AM		Cumulative Plus Project PM	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Westbrook Blvd & Blue Oaks Blvd	Signalized	37.9	D	86.5	F	38.7	D	92.6	F
2	Hayden Pkwy & Blue Oaks Blvd	Signalized	27.8	C	30.5	C	27.8	C	30.6	C
3	Fiddyment Rd & Blue Oaks Blvd	Signalized	67.5	E	82.6	F	67.9	E	83.5	F
4	Diamond Creek Blvd/Prairie Woods Wy & Blue Oaks Blvd	Signalized	49.9	D	99.6	F	50.1	D	100.9	F
5	Woodcreek Oaks Blvd & Blue Oaks Blvd	Signalized	48.6	D	130.2	F	49.0	D	131.7	F
6	Walgreens Dwy/Roseville Pkwy & Blue Oaks Blvd	Signalized	3.0	A	8.9	A	2.9	A	8.9	A
7	New Meadow Dr & Blue Oaks Blvd	Signalized	8.1	A	15.3	B	8.9	A	15.3	B
8	Foothills Blvd & Blue Oaks Blvd	Signalized	127.9	F	157.4	F	129.2	F	159.1	F
9	Fidelity Wy & Blue Oaks Blvd	Signalized	29.3	C	12.6	B	29.7	C	12.7	B
10	Washington Blvd & Blue Oaks Blvd	Signalized	88.6	F	48.7	D	88.3	F	48.7	D
11	Santucci Blvd & Pleasant Grove Blvd	Signalized	23.3	C	33.0	C	24.5	C	34.5	C
12	Westbrook Blvd & Pleasant Grove Blvd	Signalized	74.0	E	31.3	C	77.0	E	31.9	C
13	Market St & Pleasant Grove Blvd	Signalized	44.6	D	43.7	D	45.1	D	44.3	D
14	Fiddyment Rd & Pleasant Grove Blvd	Signalized	130.5	F	104.2	F	129.9	F	104.7	F
15	Woodcreek Oaks Blvd & Pleasant Grove Blvd	Signalized	58.4	E	50.3	D	58.4	E	50.4	D
16	Country Club Dr & Pleasant Grove Blvd	Signalized	22.3	C	24.2	C	22.2	C	25.8	C
17	Foothills Blvd & Pleasant Grove Blvd	Signalized	59.1	E	70.8	E	59.7	E	70.8	E

ID	Intersection	Proposed Control Type	Cumulative No Project AM		Cumulative No Project PM		Cumulative Plus Project AM		Cumulative Plus Project PM	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
18	Washington Blvd & Pleasant Grove Blvd	Signalized	52.2	D	70.5	E	52.3	D	71.9	E
19	Hallissy Dr/Gold Coast Dr & Pleasant Grove Blvd	Signalized	46.8	D	46.3	D	47.1	D	46.3	D
20	Pleasant Grove Blvd & Roseville Pkwy	Signalized	100.7	F	99.5	F	102.2	F	100.5	F
21	Pleasant Grove Blvd & Highland Pointe Dr	Signalized	30.3	C	70.8	E	30.3	C	70.8	E
22	Pleasant Grove Blvd & SR 65 SB Ramps	Signalized	10.7	B	15.0	B	10.6	B	15.2	B
23	Pleasant Grove Blvd & SR 65 NB Ramps	Signalized	33.2	C	33.4	C	33.2	C	33.6	C
24	Santucci Blvd/Watt Ave & Baseline Rd	Signalized	49.3	D	64.0	E	49.8	D	64.2	E
25	Westbrook Blvd & Baseline Rd	Signalized	58.4	E	40.0	D	60.3	E	40.1	D
26	Market St/Stargazer Dr & Baseline Rd	Signalized	21.7	C	19.0	B	21.8	C	19.1	B
27	Fiddyment Rd & Baseline Rd	Signalized	61.9	E	75.8	E	62.2	E	76.3	E
28	Woodcreek Oaks Blvd/Cook Riolo Rd & Baseline Rd	Signalized	143.7	F	168.4	F	145.6	F	169.0	F
29	Foothills Blvd & Baseline Rd/Main St	Signalized	70.7	E	72.6	E	70.5	E	72.8	E
30	Westbrook Blvd & Brookstone Dr (North)	Signalized	8.5	A	7.4	A	8.5	A	7.5	A
31	Westbrook Blvd & Brookstone Dr (South)	Signalized	5.2	A	5.0	A	5.2	A	5.1	A
32	Fiddyment Rd & Parkland Wy/Angus Rd	Signalized	26.1	C	30.3	C	26.2	C	30.3	C
33	Fiddyment Rd & N Hayden Pkwy	Signalized	34.6	C	33.8	C	34.8	C	33.9	C
34	Fiddyment Rd & Crawford Pkwy/Old Coach Dr	Signalized	28.5	C	20.6	C	28.7	C	20.6	C

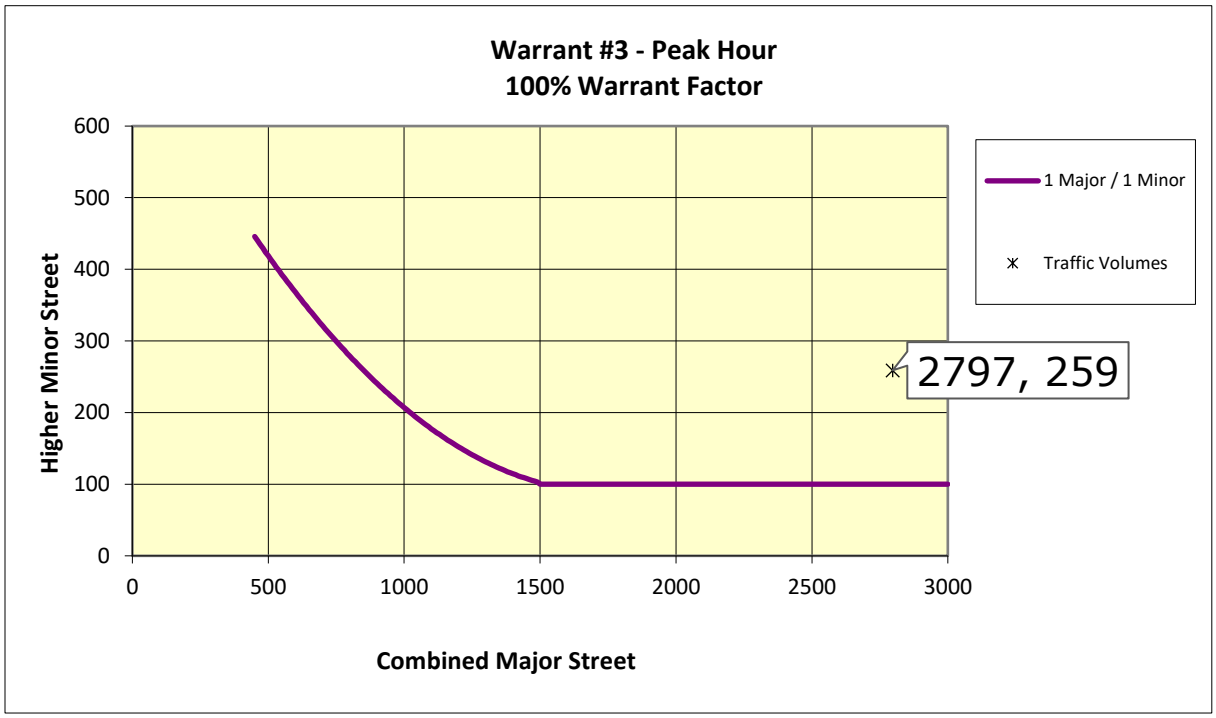
ID	Intersection	Proposed Control Type	Cumulative No Project AM		Cumulative No Project PM		Cumulative Plus Project AM		Cumulative Plus Project PM	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
35	Fiddyment Rd & Hayden Pkwy	Signalized	13.3	B	12.5	B	13.3	B	12.6	B
36	Fiddyment Rd & Village Green Dr/Del Webb Blvd	Signalized	26.5	C	30.6	C	26.9	C	31.0	C
37	Phillip Road & Passenger Vehicle Driveway	TWSC[1]	-	-	-	-	27.3	D	887.3	F
38	Phillip Road & Truck Driveway	TWSC[1]	-	-	-	-	23.2	C	54.2	F

Notes:
TWSC = Two-way stop control. Delay = Average vehicle delay in seconds
[1]The reported delay reflects the worst-performing approach at the two-way stop-controlled intersection
[2]The study area includes a portion of all signalized intersections citywide.
Source: Kittelson & Associates, Inc., 2025

SIGNAL WARRANT ANALYSIS

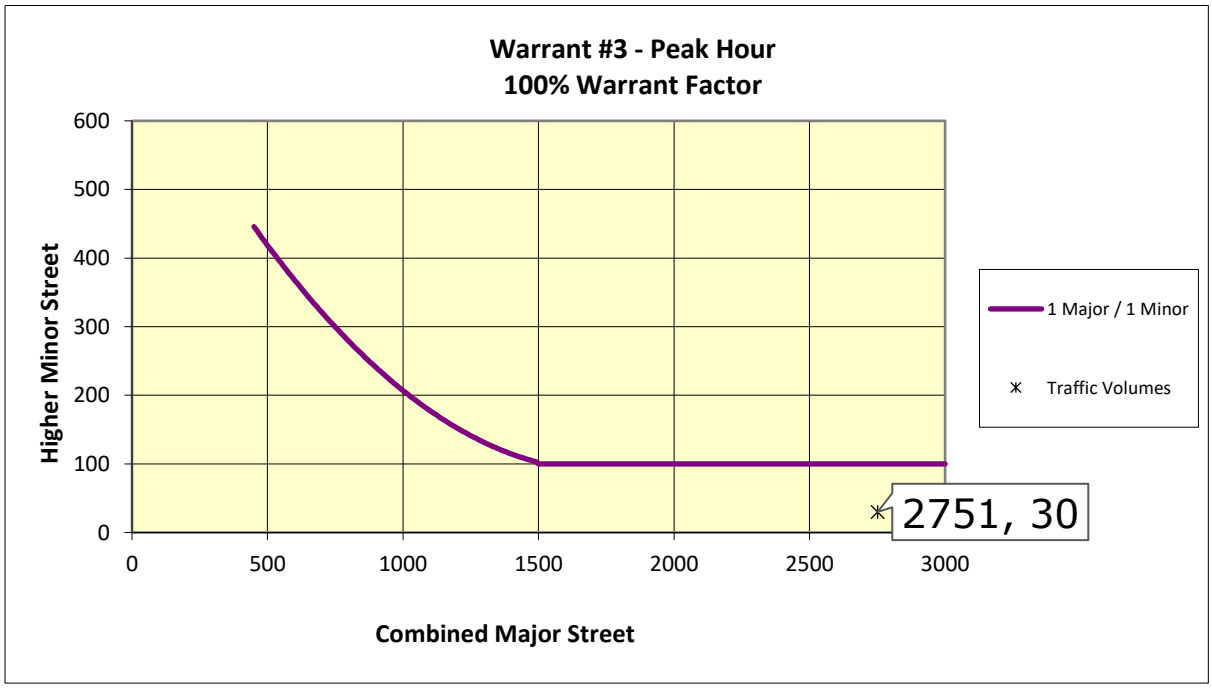
A signal warrant analysis was conducted for peak hour study periods using the procedures outlined in the 2014 California Manual on Uniform Traffic Control Devices (CA MUTCD). The Peak Hour Signal Warrant is intended to determine where traffic conditions suggest that, for at least one hour of an average day, minor-street traffic experiences undue delay when entering or crossing the major street. Peak Hour Signal Warrant analyses were conducted for two project driveway intersections under cumulative year conditions, which are one lane per direction on all roads. Figure 22 presents the warrant analysis results for the intersection of Phillip Road and the Passenger Vehicle Driveway, while Figure 23 shows the findings for the intersection of Phillip Road and the Truck Driveway. The plotted point, representing the total vehicles per hour on Phillip Road (both approaches combined) and the vehicles per hour on the Passenger Vehicle Driveway approach, falls above the applicable curve for the combination of approach lanes. Therefore, The intersection at Phillip Road and the Passenger Vehicle Driveway meets the peak hour signal warrant under cumulative plus project conditions, whereas the intersection at Phillip Road and the Truck Driveway does not meet the warrant criteria.

Figure 22: Peak Hour Signal Warrant Analysis for Intersection of Phillip Road and Passenger Vehicle Driveway



Source: Kittelson & Associates, Inc., 2025

Figure 23: Peak Hour Signal Warrant Analysis for Intersection of Phillip Road and Truck Driveway



Source: Kittelson & Associates, Inc., 2025

IMPROVEMENT RECOMMENDATIONS

Recommendations are provided for lane modifications and traffic control improvements at the project driveway intersections to address level of service (LOS) deficiencies under cumulative plus project conditions.

As shown in Table 17, it is recommended that a traffic signal be installed at the intersection of Phillip Road and Passenger Vehicle Driveway, along with the addition of a southbound right-turn pocket on the driveway.

Since the intersection of Phillip Road and the Truck Driveway does not meet signal warrant criteria, no feasible mitigation is identified to improve its operations, unless Phillip Road is widened from two lanes to four lanes.

Table 18 summarizes the traffic operations with and without the recommended improvements. With these improvements, the intersection of Phillip Road and the Passenger Vehicle Driveway is expected to improve from LOS D to LOS A during the AM peak hour, and from LOS F to LOS D during the PM peak hour. Achieving LOS C in the PM peak hour would require widening Phillip Road to four lanes.

Table 17: Recommended Improvements Under Cumulative Year Plus Project Conditions

ID	Intersection	Lane Changes	Traffic Control Change
37	Phillip Road & Passenger Vehicle Driveway*	Add a southbound right turn storage pocket	Add a signal

*-The City noted that they will need to take this item to the City Council for adoption as an allowable signal that does not meet the City's General Plan LOS policy (i.e., LOS C or better).

Table 18: Intersection Operations with Recommended Improvements – Cumulative Year Plus Project

ID	Intersection	Control Type	Peak Hour	Cumulative Year Plus Project		Recommended Improvements	Cumulative Year Plus Project With Improvement	
				Delay	LOS		Delay	LOS
37	Phillip Road & Passenger Vehicle Driveway	Signalized	AM	**27.3**	**D**	Add a southbound right turn storage pocket Add a signal	6.7	A
			PM	**887.3**	**F**		**42.6**	**D**

The LOS calculation sheets for cumulative plus project conditions with improvements are shown in Appendix L.

SITE ACCESS

Visitors to the site will primarily be accessed by vehicles based on the proposed land use. Employees working may access the site by driving, taking transit, or bicycling. It is unlikely walking trips will be a reasonable way to reach the site due to its proximity to residential areas. Access to the site by personal vehicle, transit, bicycling, and walking were considered.

Vehicle

There are two driveways provided for vehicle access – one for personal vehicles and one for trucks. The analysis performed in this report identified the following configurations for the driveways should be included in site design.

- The Phillip Road / Passenger Vehicle Driveway should include two outbound lanes (one left turn and one right turn) for outbound traffic and a single inbound lane that can be accessed from both directions via a shared westbound through-right lane and an eastbound left-turn lane. The driveway is anticipated to need a traffic signal in the future, but would not need it for opening year. Widening of Phillip Road to four lanes would be beneficial in the future to achieve LOS C or better during both peak hours.
- The Phillip Road / Truck Driveway should include a single outbound lane and a single inbound lane that can be accessed from both directions via a shared westbound through-right lane and an eastbound left-turn lane. The driveway should be wide enough to account for larger truck movements in and out of the driveway. The intersection can be stop-controlled for the driveway (free flowing on Phillip Road). Widening of Phillip Road to four lanes would be needed in the future to achieve LOS C or better during both peak hours.

Transit

A transit stop adjacent to the site is not anticipated and would not have demand generated the project for use by opening year. Additionally, no transit routes are planned along Phillip Road, as outlined in the Circulation Element of the General Plan 2035 adopted by the City Council in August 2020. Future evaluation of transit stops may be considered as the area further builds out around the site. It is not anticipated that taking transit will be a reasonable option for people accessing the site.

Bicycle

Although no specific bikeways are identified near the site in the city's Bicycle Master Plan, it is recommended that the site provide locker room facilities for employees who choose to commute by bicycle.

Walking

The project would develop sidewalks adjacent to the site according to the City's Design Standards. Further sidewalk connections from the site to other areas of the City will be dependent on future development and is not anticipated to be available by opening year or in the near term. It is not anticipated that walking will be a reasonable option for people accessing the site.

Appendix

A – CEQA Transportation Analysis – Document Review

B – Methodology to Calculate Project VMT

C – Turning Movement Count Data

D – Existing Conditions Synchro Reports

E – Phillip Road Site Project Trip Generation

F – Opening Year No Project Conditions Synchro Reports

G – Opening Year With Project Conditions Synchro Reports

H – Opening Year With Project and Improvements Conditions Synchro Reports

I – Intersection Lane Configuration and Traffic Control Types Changes in Opening Year

J – Cumulative Year No Project Conditions Synchro Reports

K – Cumulative Year With Project Conditions Synchro Reports

L – Cumulative Year With Project and Improvements Conditions Synchro Reports

Appendix A

CEQA Transportation Analysis – Document Review

State

SENATE BILL 743

Senate Bill 743 (SB 743) was signed into law in September 2013 and took full effect in July 2020. Senate Bill 743 (Steinberg, 2013) required changes to the California Environmental Quality Act (CEQA) Guidelines regarding the analysis of transportation impacts. The purpose of SB 743 is to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.

Prior to implementation of SB 743, CEQA transportation analyses of individual projects typically determined impacts on the circulation system in terms of roadway delay and/or capacity usage at specific locations, such as street intersections or freeway segments. SB 743 changes include the elimination of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts.

Under SB 743, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, level of service (LOS) and other similar vehicle delay or capacity metrics can no longer serve as transportation impact metrics for CEQA analysis. The California Office of Planning and Research (OPR) updated the CEQA Guidelines and provided a final technical advisory in December 2018[26] (OPR Technical Advisory), which recommends Vehicle Miles Traveled (VMT) as the most appropriate measure of transportation impacts under CEQA. The California Natural Resources Agency certified and adopted the CEQA Guidelines including the Guidelines section implementing SB 743. The changes have been approved by the Office of Administrative Law and are now in effect.

Revisions to CEQA transportation analysis requirements do not preclude the application of local general plan policies, municipal and zoning codes, conditions of approval, or any other planning requirements through a city's planning approval process. These requirements aim to ensure adequate operation of the transportation system in terms of transportation congestion measures related to vehicular delay and roadway capacity.

Other key guidance includes:

- VMT is the most appropriate metric to evaluate a project's transportation impact.
- OPR recommends tour- and trip-based travel models to estimate VMT but ultimately defers to local agencies to determine the appropriate tools.
- OPR recommends measuring VMT for residential and office projects on a "per rate" basis. Specifically, OPR recommends VMT per capita for residential projects and VMT per employee for office projects.
- OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development may be a reasonable threshold (page 10). In other words, an office project that generates VMT per employee that is more than 85 percent of the regional VMT per employee could result in a significant impact. OPR notes that this threshold is supported by evidence that connects this level of reduction to the State's emissions goals (pages 10-11).

[26] *California Governor's Office of Planning and Research, "Technical Advisory on Evaluating Transportation Impacts in CEQA," December 2018.*

- For retail projects, OPR recommends measuring the net decrease or increase in VMT in the planning area with and without the project. The recommended impact threshold is any increase in total VMT.
- Lead agencies ultimately have the discretion to set or apply their own significance thresholds, provided they are based on significant evidence.
- Cities and counties still have the ability to use measures of delay such as LOS for other plans, studies, or network monitoring. However, according to CEQA section 15064.3, Determining the Significance of Transportation Impacts, "effect on automobile delay shall not constitute a significant environmental impact."

CALIFORNIA TRANSPORTATION PLAN 2050 (2021) [27]

The California Transportation Plan 2050 is a long-range transportation roadmap to achieve a safe, resilient and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and economic health in the State of California. The Plan emphasizes implementation and puts forward goals, policies and recommendations to meet the future multimodal mobility needs and reduce greenhouse gas emissions (GHGs). The following are the goals are applicable to the proposed project:

- ***Safety***: Provide a safe and secure transportation system.
    - Eliminate fatalities and serious injuries on the transportation system.
    - Improve personal security and infrastructure security on the transportation system.
    - Improve emergency preparedness, response, and recovery on the transportation system.
- ***Climate***: Achieve statewide GHG emission reduction targets and increase resilience to climate change.
    - Advance a clean, carbon neutral transportation system.
    - Increase climate resiliency.
- ***Equity***: Eliminate transportation burdens for low-income communities, communities of color, people with disabilities and other disadvantaged groups.
    - Improve transportation-related economic, environmental, and public health outcomes for disadvantaged communities.
    - Improve access to a range of high-quality, safe, and affordable mobility options within disadvantaged communities.
    - Support disadvantaged communities in playing an active and direct role in transportation decision making.
- ***Accessibility***: Improve multimodal mobility and access to destinations for all users.
    - Increase access to destinations.
    - Increase the competitiveness of transit, shared mobility, and active transportation options.
    - Provide integrated and seamless travel connections.
    - Optimize system performance for all modes.
- ***Quality of life and public health***: Enable vibrant, healthy communities.
    - Expand access to healthy transportation options.
    - Reduce household transportation costs.
    - Improve transportation-related public health outcomes.
    - Support enjoyable trip experiences and vibrant public spaces.

[27] *https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/ctp-2050-v3-a11y.pdf*

- ***Environment***: Enhance environmental health and reduce negative transportation impacts.
    - Improve air quality and minimize pollutants from transportation.
    - Protect and enhance California's natural resources and ecosystems.
    - Protect and enhance California historic and cultural resource.
- ***Economy***: Support a vibrant, resilient economy.
    - Support diverse, equitable, and sustained economic growth.
    - Facilitate efficient, reliable, and sustainable goods movement.
    - Support local and regional economic development.
- ***Infrastructure***: Maintain a high-quality, resilient transportation system.
    - Preserve and maintain existing multimodal transportation assets in a state of good repair.
    - Increase infrastructure resiliency to climate change and natural disasters.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

The California Department of Transportation (Caltrans) is the primary State agency responsible for transportation issues. As owner/operator of the State Highway System, Caltrans may review projects and plans as a commenting agency or responsible agency under the California Environmental Quality Act (CEQA). In relation to this role, Caltrans published the Vehicle Miles Traveled-Focused Transportation Impact Study Guide" in May 2020. This replaced the "Guide for the Preparation of Traffic Impact Studies" (December 2002), which established Measures of Effectiveness based on level of service targets.

Caltrans recommends following the guidance on methods of VMT assessment found in OPR's Technical Advisory. Caltrans comments on a CEQA document may note methodological deviations from those methods and may recommend that significance determinations and mitigation be aligned with state greenhouse gas reduction goals as articulated in OPR's guidance, the California Air Resources Board's Scoping Plan, and related documentation.

Caltrans facilities within the study area include State Route 65 (SR 65).

For projects that may physically affect facilities under its administration, Caltrans requires encroachment permits before any construction work may be undertaken.

Regional

SACOG NEXT GENERATION TRANSIT STRATEGY (2021)[28]

SACOG's Next Generation Transit Strategy builds upon its 2020 MTP-SCS vision for a high quality, resilient and sustainable public transit system. The strategy is organized around four key focus areas:

- Seamless User Experience
- Planning and Funding
- Transit Design and Delivery
- Reduce Mobility Disparities

The objectives of the strategy are as follows:

[28] *https://www.sacog.org/home/showpublisheddocument/308/638218230960130000*

- Getting around by transit is fast, reliable and competitive with driving.
- Reduced disparities in travel time and cost; more travel options for disadvantaged communities.
- Improved transit access to top employment centers and destinations.
- Transit feels easy, seamless, and safe for all users.
- More coordination between agencies leads to better service for all.
- Makes the best use of public dollars by minimizing costs while maintaining or increasing ridership.
- Service is adequately and consistently funded.
- Meets or exceeds targets for renewable energy, emissions and VMT.

SACOG MTP/SCS (2020) [29]

SACOG's Metropolitan Transportation Plan and Sustainable Communities Strategy (MTP/SCS) outlines a transportation and land use strategy to support regional prosperity, enhance access to jobs and economic opportunities, and provide transportation options and affordable housing for all. The Plan is based on four priority policy areas:

- Build vibrant places for today's and tomorrow's residents.
- Foster the next generation of mobility solutions.
- Modernize the way we pay for transportation infrastructure.
- Build and maintain a safe, reliable, and multimodal transportation system.

SACOG CONGESTION MANAGEMENT PROCESS UPDATE (2020) [30]

Congestion management involves implementing strategies to enhance transportation system performance and reliability by minimizing the negative effects of congestion on the movement of people and goods. Congestion Management Process (CMP) provides updated data on transportation system performance and evaluates alternative strategies that address both state and local needs. SACOG's CMP is an integral component of its MTP-SCS, with updates occurring every four years. The latest update to the CMP objectives in 2020 involved integrating updated MTP policies/objectives and collaborating with the CMP working group.

The following are the objectives outlined in the CMP:

- Maintain or improve travel time reliability for freight and passenger vehicles
- Reduce traffic congestion for freight and passenger vehicles.
- Promote development that encourages making trips by public transit.
- Support proactive and innovative education and transportation demand management programs, covering all parts of the urbanized area, to offer a variety of choices to driving alone.
- Prioritize investments in transit, bike, and pedestrian improvements that reduce greenhouse gas emissions and vehicle miles traveled (VMT).
- Implement pilot projects aimed at making micromobility (such as bike and scooter share) work for urban, suburban, and low-income areas of the region.

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[29] *https://www.sacog.org/home/showpublisheddocument/76/638212804736270000*

[30] *https://www.sacog.org/home/showpublisheddocument/1810/638376412235970000*

SACOG REGIONAL MOBILITY HUB DESIGN GUIDANCE[31]

Mobility hubs provide a seamless connection between different transportation options, enabling people to easily transition between modes to reach their destinations. The vision of SACOG's Regional Mobility Hub Design Guidance is to establish a network of regional hubs that prioritize people, focusing on universal accessibility, safety, and community integration. These hubs are to be designed to seamlessly connect two or more transportation modes, including transit, biking, walking, shared mobility services, carpooling/vanpooling, and on-demand services and provide integrated, equitable mobility through flexible and user-friendly design.

PLACER COUNTY REGIONAL TRANSPORTATION PLAN (2019) [32]

The Placer County Regional Transportation Plan is a document developed to provide policy and funding guidelines for short-range and long-range transportation needs for the county's transportation system over the next twenty years. The Plan's goal is to support well-planned growth and land use patterns while improving environmental quality through better management of the transportation system. Additionally, the Plan seeks to improve access and mobility for all individuals, ensure viable travel options to jobs, services, and housing across the county. The goals and objectives of the Plan relevant to the proposed project are:

Goal 1: Highways/Streets/Roadways - Maintain and upgrade a safe, efficient, and convenient countywide roadway system that meets the travel needs of people and the movement of goods through and within the region.

- **Objective A:** Identify and prioritize improvements to the roadway system.
- **Objective B:** Construct, maintain, and upgrade roadways to meet current safety standards.
- **Objective C:** To promote economic development, prioritize roadway maintenance and improvement projects on principal freight and tourist travel routes in Placer County.

Goal 2: Public Transit - Provide effective, convenient, regionally and locally coordinated transit service that connects residential areas with employment centers, serves key activity centers and facilities, and offers a viable option to the drive-alone commute.

- **Objective A:** Provide transit services that fulfill all "unmet transit needs that are reasonable to meet."
- **Objective B:** Tailor transit services and programs to the area's population characteristics and special needs.
- **Objective C:** Develop and encourage the use of public transit as a viable alternative to the automobile in order to maximize transit ridership.
- **Objective D:** Coordinate various transportation services to maximize efficiency and convenience and minimize duplication of services.

Goal 5: Goods Movement - Provide for the safe and efficient movement of goods through, within, and into Placer County.

- **Objective A:** Promote a balance of roads, rail, and airports for the improvement of goods transport.

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[31] *https://www.sacog.org/planning/transportation/sustainable-mobility-program/mobility-hubs*

[32] *https://pctpa.specialdistrict.org/files/e9ce02f5b/Final_2040_RTP_Full_Document.pdf*

- **Objective B:** Mitigate conditions that transporters of goods and local jurisdictions deem dangerous or unacceptable.

Goal 6: Active & Alternative Transportation - Promote a safe, convenient, and efficient transportation system for bicyclists, pedestrians, and users of low-speed vehicles, as part of a balanced overall transportation system.

- **Objective A:** Plan and develop a continuous and easily accessible bicycle, pedestrian, and low-speed vehicle system within the region.
- **Objective B:** Provide a bicycle, pedestrian, and low-speed vehicle system that emphasizes the safety of people and property.
- **Objective C:** Integrate pedestrian, bicycle, and low-speed vehicle facilities into a multi-modal transportation system that encourages alternatives to driving alone.
- **Objective D:** Promote the development of multi-use trails in rural and open space areas.

Goal 7: Transportation Systems Management (TSM) - Provide an economical alternative to single-occupant vehicle travel through the use of alternative transportation methods.

- **Objective A:** Create a multi-modal transportation network between major residential areas, educational and recreational facilities, and employment centers.
- **Objective B:** Advance the use of Transportation Demand Management (TDM) in a thorough, cost-effective manner.
- **Objective C:** Promote the use of technology to reduce work-related, education related, and personal trips.

Goal 9: Integrated Land Use, Air Quality & Transportation Planning - By integrating land, air, and transportation planning, build and maintain the most efficient and effective transportation system possible while achieving the highest possible environmental benefit.

- **Objective A:** Provide information and support services to jurisdictions regarding the countywide transportation impacts of local land use decisions.
- **Objective B:** Provide transportation infrastructure that meets existing and future needs.

PLACER COUNTY GENERAL PLAN (2013 UPDATE) [33]

Placer County General Plan (last updated in May 2013) serves as a guiding document for land use and development in the County. The goals and policies of the Plan that are applicable to the proposed project:

Goal 3.B: To promote a safe and efficient mass transit system, including both rail and bus, to reduce congestion, improve the environment, and provide viable non-automotive means of transportation in and through Placer County.

- **Policy 3.B.1.** The County shall work with transit providers to plan and implement additional transit services within and to the County that are timely, cost-effective, and responsive to growth patterns and existing and future transit demand.
- **Policy 3.B.3.** The County shall consider the need for future transit right-of-way in reviewing and approving plans for development. Rights-of-way may either be exclusive or shared with other vehicles.

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[33] *https://www.placer.ca.gov/DocumentCenter/View/8571/Introduction-PDF*

- **Policy 3.B.7.** The County shall continue to explore development of other rail systems, such as the Roseville to Marysville service, to serve Placer County residents, workers, and businesses.
- **Policy 3.B.11.** The County shall support efforts to provide demand-responsive service ("paratransit") and other transportation services for those unable to use conventional transit.

Goal 3.C: To maximize the efficient use of transportation facilities so as to: 1) reduce travel demand on the County's roadway system; 2) reduce the amount of investment required in new or expanded facilities; 3) reduce the quantity of emissions of pollutants from automobiles; and 4) increase the energy-efficiency of the transportation system.

- **Policy 3.C.1.** The County shall promote the use of transportation systems management (TSM) programs that divert automobile commute trips to transit, walking, and bicycling.
- **Policy 3.C.2.** The County shall promote the use, by both the public and private sectors, of TSM programs that increase the average occupancy of vehicles.

Goal 3.D: To provide a safe, comprehensive, and integrated system of facilities for non-motorized transportation.

- **Policy 3.D.1.** The County shall promote the development of a comprehensive and safe system of recreational and commuter bicycle routes that provide connections between the County's major employment and housing areas and between its existing and planned bikeways.
- **Policy 3.D.2.** The County shall work with neighboring jurisdictions to coordinate planning and development of the County's bikeways and multi-purpose trails with those of neighboring jurisdictions.
- **Policy 3.D.4.** The County shall promote non-motorized travel (bikeways, pedestrian, and equestrian) through appropriate facilities, programs, and information.
- **Policy 3.D.10.** Consider the accessibility and accommodation of cycle and pedestrian traffic, where appropriate, on and across major thoroughfares.
- **Policy 3.D.11.** The County shall work to achieve equality of convenience and choice among all modes of transportation – pedestrian, cycling, transit and motor vehicles, through a balanced and interconnected transportation system.
- **Policy 3.D.112.** Provide safe and comfortable routes for walking, cycling, and where feasible, public transportation, to encourage use of these modes of transportation, enable convenient and active travel as part of daily activities, reduce pollution, and meet the needs of all users of the roadway system.

PLACER COUNTY SUSTAINABILITY PLAN (2020) [34]

The Placer County Sustainability Plan puts forward the analyzes and recommendations for GHG reduction and climate adaptation strategies in the unincorporated county. It sets GHG emission reduction targets for the years 2030 and 2050 for the county in MTCO2e/person. The strategies identified in the Plan to reduce transportation-related GHG emissions are:

- **Strategy T-1:** Facilitate the installation of public electric vehicle (EV) charging stations at existing and new residential and non-residential uses.

[34] *https://www.placer.ca.gov/DocumentCenter/View/42940/PCSP-ADOPTION?bidId=*

- **Strategy T-4:** Partner with surrounding regional transit agencies to improve connectivity to regional transportation systems.
- **Strategy T-5:** Partner with incorporated communities and regional agencies to develop bikeways and trails between communities.
- **Strategy T-9:** Increase on-demand micro-transit opportunities in the county to provide reliable transit between underserved areas and major transportation hubs.
- **Strategy T-11:** Encourage active transportation use by increasing street and roadway safety through infrastructure improvements.
- **Strategy T-12:** Consider the feasibility of implementing bike share programs in developed areas of the county, in concert with incorporated communities and regional agencies.

PLACER COUNTY REGIONAL BIKEWAY PLAN (2018) [35]

The Placer County Regional Bikeway Plan updates the prior Regional Bikeway Plan adopted in 2002 and establishes a vision to promote safe, convenient, and enjoyable bicycling by establishing a comprehensive system of bikeways that link the communities throughout the county. The Plan develops a regional system of bikeways that connect six incorporated cities and other unincorporated areas of the county and proposes bikeways in the unincorporated county or bikeways requiring multijurisdictional coordination. The Plan aims to enhance bicycling for commuter and recreational use in the county through policies in three categories: safety, mobility and preservation.

The Plan proposes the following bikeways in the project's study area:

- Baseline Road between Fiddyment Road and West County limits – Buffered Bike Lane
- Pleasant Grove Road between Baseline Road and Moore Road – Shared Use Path/Side Path

Local

CITY OF ROSEVILLE GENERAL PLAN (2020) [36]

The City of Roseville General Plan 2035, adopted in 2020, acts as a policy guide for the city's future development and growth. The Plan is intended to be long-range, comprehensive and community focused. The Plan designates land use categories throughout the city, defining each land use category, including general uses, development, intensity, siting and compatibility standards.

The Circulation Element of the General Plan outlines Roseville's objectives for its circulation system, including the overall framework, level of service standards, design requirements, and policies that align with the city's broader planning, economic, social, and environmental goals. The objective of this element is to ensure accessibility to key destinations for all modes of travel, enhance travel options for residents, workers, and visitors, and maintain the transportation network in optimal condition.

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[35] *https://www.placer.ca.gov/DocumentCenter/View/57938/Placer-County-Regional-Bikeway-Plan-FINAL-20180629?bidId=*

[36] *https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Development%20Services/Planning/City%20of%20Roseville%20GP.pdf*

The General Plan includes the following goals and policies related to transportation and circulation applicable to the proposed project:

Goal CIRC2 Maintain an appropriate level of transportation service for all of Roseville's residents, employees, and consumers through a balanced transportation system that considers automobiles, transit, bicyclists, and pedestrians.

- **Policy CIRC2.1** Maintain a LOS "C" standard at a minimum of 70 percent of all signalized intersections and roadway segments in the City during the a.m. and p.m. peak hours. Exceptions to the LOS "C" standard may be considered where improvements required to achieve the standard would adversely affect pedestrian, bicycle, or transit access, and where feasible LOS improvements and travel demand-reducing strategies have been exhausted.
- **Policy CIRC2.2** Strive to meet the level of service standard through a balanced transportation system that reduces the auto emissions that contribute to climate change, by providing alternatives to the automobile and avoiding excessive vehicle congestion through roadway improvements, Intelligent Transportation Systems, and transit improvements.
- **Policy CIRC2.3** Work with neighboring jurisdictions to provide acceptable and compatible levels of service on the roadways that cross the City's boundaries.
- **Policy CIRC2.4** Secure adequate funding for all components of the City's transportation system to ensure the level of service policy is maintained.
- **Policy CIRC2.5** Pedestrian, bicycle travel, and transit access have a higher priority than automobile travel in the City's Pedestrian Districts, and development projects in these areas are exempt from the City's LOS standard.
- **Policy CIRC2.6** Prioritize investments in pedestrian, bicycle, and transit access in Pedestrian Districts.

Goal CIRC3 Provide a safe, convenient, and efficient transit system to enhance mobility; reduce congestion; reduce auto emissions, including emissions that contribute to climate change; improve the environment; and provide viable non-automotive means of transportation in and through Roseville.

- **Policy CIRC3.1** Promote transit service that is convenient, cost-effective, and responsive to the challenges and opportunities of serving Roseville and surrounding communities and explore opportunities for transit innovation and service improvements.
- **Policy CIRC3.2** Pursue all available sources of funding for sustainable transit services.
- **Policy CIRC3.3** Continue to study options for introducing high quality transit and/or other regional transit linkages to Roseville and developing convenient connections to Sacramento Regional Transit light rail service.
- **Policy CIRC3.4** Support and remain actively involved in planning for the expansion of Capitol Corridor rail service, as well as other regional linkages.
- **Policy CIRC3.5** Consider access to health care, community services and employment, and the needs of persons who may be transit-dependent when making decisions regarding transit service.
- **Policy CIRC3.6** Identify opportunities to increase the number and/or capacity of park-and-ride lots as needed, to increase transit and carpool/vanpool use.
- **Policy CIRC3.7** Pursue transit routes that optimize ridership.

- **Policy CIRC3.8** Include transit improvements with new roadway or roadway expansion projects.

Goal CIRC4 Reduce vehicle miles traveled on the City's and regional roadway systems, while expanding mobility options for residents, employees, and visitors.

- **Policy CIRC4.1** The City will review and condition projects as appropriate, to reduce travel demand per capita and per employee by promoting increased density near transit, improving the quality of non-vehicular transportation options, providing incentives for non-vehicular travel, encouraging the mixing of complementary land uses in proximity to one another, and using other feasible methods.
- **Policy CIRC4.2** Work with appropriate agencies to develop implementation measures to reduce vehicular travel demand and total vehicle miles traveled and meet air quality and greenhouse gas emissions goals.
- **Policy CIRC4.3** Specific Plan Amendments and land use development projects not included in a Specific Plan shall be evaluated for consistency with the City's VMT Impact Standards.
- **Policy CIRC4.4** If the evaluation required by CIRC4.3 finds a Specific Plan Amendment or land use development project not included in an adopted Specific Plan is inconsistent with thresholds established within the City's VMT Impact Standards, on-site land use, transportation, and urban design-related VMT-reducing features should be prioritized to demonstrate consistency. If feasible on-site features cannot achieve the VMT threshold, Specific Plan Amendments and land use development projects outside Specific Plan Areas may demonstrate equivalent consistency through off-site actions or fair-share fee contributions, or if consistency cannot be achieved, shall implement all feasible measures.
- **Policy CIRC4.5** Policy CIRC4.3 does not apply to projects that propose residential or office uses in Transit Priority Areas or low-VMT areas. Low-VMT areas are those shown to have per-capita, per-employee, or per-service-population VMT rates that are at least 15 percent less than the baseline citywide or regional rate.
- **Policy CIRC4.6** Promote and incentivize Infill development, particularly affordable housing development, through assistance in obtaining outside grant funding and reductions or deferrals in impact fees.
- **Policy CIRC4.7** Continue to educate the public and business community about alternative modes of travel through Safe Routes to School, Transportation Systems Management, and other local and regional programs and events.

Goal CIRC5.1 Increase the percentage of all trips made by bicycles in Roseville.

Goal CIRC5.2 Establish and maintain a safe, comprehensive, and integrated bikeway and trail system that encourages the use of bikes and walking for commuting, recreational, and other trips.

Goal CIRC5.3 Maintain the Bicycle Friendly Community Designation from the League of American Bicyclists.

- **Policy CIRC5.1** Develop a comprehensive and safe system of recreational and commuter bicycle routes and trails that provides connections between the City's major destinations (including employment) and housing areas and between its existing and planned bikeways.
- **Policy CIRC5.2** Coordinate Roseville's bikeway and trail system with those of neighboring jurisdictions to provide both local and regional connections.
- **Policy CIRC5.3** Pursue available sources of funding for bikeways and trails.
- **Policy CIRC5.4** Enhance bicycle education, encouragement, and enforcement programs targeted at adult and child bicyclists and motorists.
- **Policy CIRC5.5** Specific Plans shall incorporate an off-street, Class I bicycle system as part of the comprehensive on-street and off-street bikeway plan.
- **Policy CIRC5.6** Educate, encourage, and enforce programs that increase bicyclist and motorist awareness of the rights and responsibilities of bicyclists in order to foster a climate of acceptance for bicycle riding.
- **Policy CIRC5.7** Include on-street and off-street bicycle improvements with new roadway and roadway expansion projects.

Goal CIRC6.1 Increase the percentage of pedestrian trips in Roseville.

- **Policy CIRC6.1** Establish and maintain a safe and continuous pedestrian network that provides connections between residential areas and commercial retail and services, employment, public services, parks, and public transit.
- **Policy CIRC6.2** Promote development patterns that encourage people to walk to destinations.
- **Policy CIRC6.3** Enhance pedestrian-friendly street environments and design public spaces and destinations in a way that encourages walking.
- **Policy CIRC6.4** Sidewalks shall be required in all new Specific Plan Areas, with new roadway construction, and with roadway expansion.
- **Policy CIRC6.5** In reviewing proposed development projects and implementing public projects, the City will incorporate standards designed to protect the security of pedestrians and minimize the potential for collisions involving pedestrians.
- **Policy CIRC6.6** In the Infill Area, the City will actively seek funding sources to complete and maintain sidewalk networks.

In addition to the Circulation Element, other elements in the General Plan including Chapter 4 Air Quality and Climate Change Element and Chapter 5 Open Space and Conservation Element include components relevant to the proposed project.

Chapter 4 Air Quality and Climate Change Element: The goals and policies in the Air Quality and Climate Element relevant to the proposed project are:

Goal AQ1.3 Coordinate all forms of public transport to decrease vehicle miles traveled, while encouraging an increase in the commute vehicle occupancy rate.

Goal AQ.4 Increase the capacity of the pedestrian, bicycle, and public transportation systems and promote vehicular transportation that uses less-polluting fuels, such as electricity.

Goal AQ1.5 Provide adequate pedestrian and bicycle facilities for present and future transportation needs.

Goal AQ1.6 Promote a well-designed and efficient transit system.

Goal AQ1.7 Improve transit, bicycle, and pedestrian access to lessen dependence on automobile travel and reduce household transportation costs.

- **Policy AQ1.12** Develop transportation systems that reduce vehicle emissions by improving the desirability of walking, bicycling, and public transportation relative to vehicular travel.
- **Policy AQ1.13** Identify feasible strategies to reduce transportation emissions from new projects and existing development within the Planning Area.
- **Policy AQ1.14** Encourage alternative modes of transportation, including pedestrian, bicycle, and transit use.
- **Policy AQ1.15** Promote and incentivize low-emissions vehicles and associated charging infrastructure and pursue funding from state programs and other sources to facilitate local purchase and use of electric vehicles.
- **Policy AQ1.16** Implement land use policies that maintain and improve air quality and expand opportunities for transit-oriented development, which allows residents to significantly reduce vehicular transportation and associated air pollutant emissions.
- **Policy AQ1.17** Conserve energy and reduce air pollutant emissions by encouraging energy efficient building designs and transportation systems and promoting energy efficiency retrofits of existing structures.
- **Policy AQ1.18** Promote building and transportation energy efficiency in new residential and commercial development by encouraging and incentivizing implementation measures early in the design and development process.

Chapter 5 Open Space and Conservation Element: The goals and policies in the Open Space and Conservation Element relevant to the proposed project are:

Goal OS1.3 Provide access to public open space areas through a network of pedestrian and bicycle trails that will be adequately managed and protected.

- **Policy OS1.1** Provide an interconnecting system of open space corridors that, where feasible, incorporate bikeways and pedestrian paths.
- **Policy OS1.2** Provide interconnected open space corridors between open space and habitat resources, recreation areas, schools, employment, commercial service, and residential areas.
- **Policy OS1.3** Work with adjacent jurisdictions to connect the City with regional open space and trail systems, providing a network of open space and habitat resources,

pathways, and, where feasible, equestrian trails through the City to link nearby communities.

- **Policy OS1.4** Require all new development to provide pedestrian and bicycle linkages to existing and planned open space systems. Where such access cannot be provided through the creation of open space connections, identify alternative linkages.

CITY OF ROSEVILLE PEDESTRIAN MASTER PLAN (2011) [37]

The City of Roseville's Pedestrian Master Plan focuses on improving the design and development of public pedestrian pathways to create a safe, efficient, and visually appealing environment for all pedestrians. The Plan aims to establish a well-connected network of sidewalks and street crossings, providing Roseville residents with diverse transportation options, including walking, biking, transit, and driving. It prioritizes inclusive design, incorporating policies, projects, and programs to promote walking as a fundamental mode of transportation, while also supporting health and recreation for people of all ages and abilities. Additionally, it proposes the creation of Pedestrian Overlay Districts in areas where increased pedestrian activity is desired through the provision of enhanced pedestrian facilities.

CITY OF ROSEVILLE COMMUNITYWIDE SUSTAINABILITY ACTION PLAN (2010) [38]

The City of Roseville Communitywide Sustainability Action Plan (SAP) outlines key objectives aimed at implementing transportation measures that reduce Vehicle Miles Traveled (VMT) and associated Greenhouse Gas (GHG), NOx and PM10 emissions. The objectives of the Plan relevant to the proposed project are:

- **Objective T-2**: Manage the availability and cost of parking to minimize driving demand, encourage alternatives to driving and reduce emissions.
- **Objective T-3**: Increase carpool and vanpool opportunities to increase the non-single occupancy vehicle mode share (by ~2%).
- **Objective T-4**: Enhance local and regional transit systems to increase transit ridership (~1% mode shift).
- **Objective T-5**: Expand and enhance the bikeway network and support facilities and encourage their use to increase bike ridership (~1% biking and walking combined mode shift).
- **Objective T-6**: Improve the pedestrian environment to increase walking.
- **Objective T-8**: Promote use of alternative fuel or high-fuel efficient vehicles to help reduce emissions.
- **Objective T-9**: Enhance efficiency of the City's roadway network to reduce vehicle delays and emissions while maintaining or enhancing the bicycle and pedestrian environment.

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[37] *https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Public%20Works/Biking%20&%20Walking/Planning/2-2011_Pedestrian%20Master%20Plan_WEB.pdf*

[38] *https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Public%20Works/Roseville%20Transit/Air%20Quality/SAP010611.pdf*

The objectives of the Plan aim to reduce the overall environmental footprint of the transportation system and serve as guidelines in setting VMT reduction strategies for the proposed project.

CITY OF ROSEVILLE BICYCLE MASTER PLAN (2008) [39]

The City of Roseville Bicycle Master Plan aims to achieve a balanced, multi-modal transportation system by developing a well-connected, safe, and accessible bikeway network that serves bicyclists of all levels and provides Roseville residents a variety of transportation choices, including automobile, transit, bicycle, and pedestrian options. The Plan also focuses on creating bikeway support facilities such as bike racks and repair stations to encourage both commuter and recreational cycling. The plan sets a goal to increase bicycle use in the City by 50 percent by 2020, promoting cycling for work, school, play and other destinations through incentives and encouragement efforts.

Additionally, the Plan identifies existing and proposed bicycle routes in the City. The proposed bikeway system includes 28 miles of Class I trails, 27 miles of Class II bike lanes and 33 miles of proposed Class III bike routes, totaling approximately 95 miles of new bikeways. In the study area, the Plan proposes a Class II bike lane along Blue Oaks Boulevard between Fiddyment Road and Lower Bank Drive.

CITY OF ROSEVILLE COMMUNITY DESIGN GUIDELINES (2008) [40]

The Community Design Guidelines establishes design and technical guidelines including a list of specific recommendations and requirements for each land use category including commercial, office and industrial, multi-family and compact residential, for including in project design. The design goals for office and industrial development in relation to transportation are:

1. To seek site designs that preserve, enhance, and incorporate the natural features of a site as an element within the overall design.
2. To require project designs to incorporate pedestrian and transit linkages within the project, with adjacent properties, and with the City as a whole.
3. To establish a streetscape presence and appearance through setbacks, landscaping, building placement and architecture that defines the pedestrian and vehicle corridor, and presents an appealing and continuous theme along a sidewalk or street.

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[39] *https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Public%20Works/Biking%20&%20Walking/Planning/2008%20Bicycle%20Master%20Plan2.pdf*

[40] *https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Development%20Services/Planning/General%20Plan/cdgweb032408.pdf*

Appendix B

Methodology to Calculate Project VMT

APPENDIX B

METHODOLOGY TO CALCULATE PROJECT VMT

This section outlines the methodology followed to calculate Project VMT.

1. Based on the 2020 City of Roseville's travel forecasting model, the project is in Traffic Analysis Zone (TAZ) 848.
2. In the base year 2020, TAZ 848 includes 5 single-family homes and 2 multi-family homes.
3. The land use types in the model that are relevant to the project's trip generation are Office (for employee trips) and Industrial (for truck trips).
4. However, the Office and Industrial land use types are included as Thousand Square Feet (KSF) in the model, while the project trip generation is measured in units of the number of employee trips and number of truck trips.
5. To be compatible with the land use inputs in the model, the project employee and truck trips are converted to KSF units.
6. The project trip generation for employees and trucks is calculated based on the full build-out of the project.

Table 1. Project Trip Generation in units of Thousand Square Feet

Project Weekday Daily Vehicle Trips (full build-out)	Model Trip Generation Rates			Project Trip Generation to use in the model (KSF)
	Land Use Type	Units	Daily Vehicle Trip Rate	
2318 (Employees)	Office	KSF	17.7	130.94
586 (Trucks)	Industrial	KSF	7.6	77.1

*KSF – Thousand Square Feet

As shown in Table 1, the project trip generation (in KSF) is added to TAZ 848 to calculate the With Project VMT.

7. The 2020 City of Roseville travel forecasting model is run for the No Project and With Project scenarios.
8. Total VMT for TAZ 848 is the sum of "VMT From" and "VMT To" of the TAZ.

$$Total\ VMT = VMT_{From} + VMT_{To}$$

Table 2 shows the Total VMT for the Project TAZ 848 for the No Project and With Project scenarios. The Total VMT includes the VMT Produced from residents, employees and trucks.

Table 2. Total VMT for the Project TAZ (848)

Scenario	VMT From	VMT To	Total VMT
Project TAZ No Project	289	289	578
Project TAZ With Project (full build out)	15,153	15,230	30,383

9. The Project VMT is then calculated as the difference in the Project TAZ VMT for the No Project and With Project scenarios.

$$Project\ VMT = Total\ VMT_{(With\ Project)} - Total\ VMT_{(No\ Project)}$$

Project VMT = 30,383 – 578 = 29,805.

Appendix C

Turning Movement Count Data

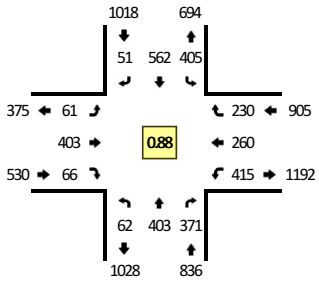
Type of peak hour being reported: Intersection Peak

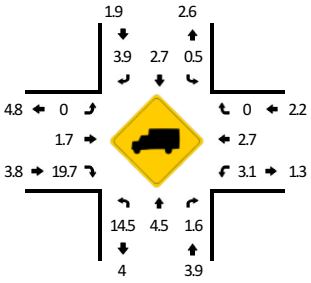
Method for determining peak hour: Total Entering Volume

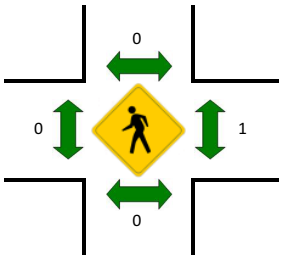
LOCATION: Fiddyment Rd -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

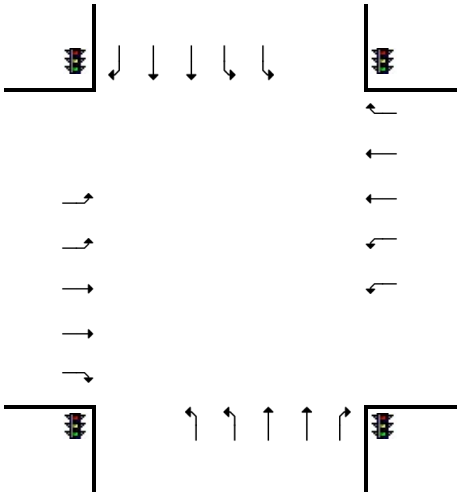
QC JOB #: 16723519
DATE: Wed, Oct 23 2024

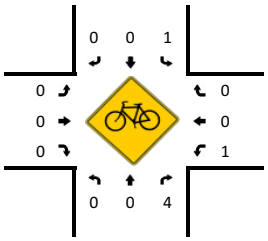
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:40 AM -- 7:55 AM

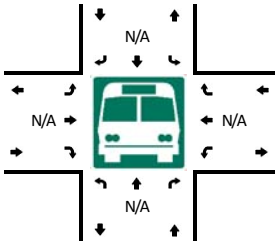


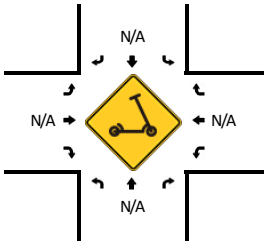












5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	5	17	23	0	27	50	6	0	5	21	5	0	21	25	13	0	218	
7:05 AM	2	20	16	0	23	45	6	0	3	17	5	0	15	14	7	0	173	
7:10 AM	3	21	27	0	30	34	5	0	5	28	3	0	30	10	17	0	213	
7:15 AM	7	25	23	0	20	33	6	0	5	49	6	1	34	16	21	2	248	
7:20 AM	8	51	27	0	42	47	4	0	4	43	7	1	37	18	18	1	308	
7:25 AM	3	21	36	0	44	56	4	0	4	58	8	0	34	16	17	0	301	
7:30 AM	7	48	32	0	18	41	2	0	4	37	3	0	33	16	22	2	265	
7:35 AM	3	39	30	0	53	53	5	0	1	37	9	0	41	18	17	2	308	
7:40 AM	8	28	32	0	47	62	6	0	6	44	5	0	31	20	15	0	304	
7:45 AM	4	46	33	0	39	72	7	1	5	18	2	0	43	30	16	2	318	
7:50 AM	8	44	39	0	60	58	4	0	9	31	4	0	22	20	15	0	314	
7:55 AM	4	29	29	0	21	42	2	0	4	12	5	0	36	31	16	0	231	3201
8:00 AM	0	26	30	0	21	39	4	0	7	34	4	0	27	21	26	0	239	3222
8:05 AM	9	26	40	0	12	24	2	1	2	20	9	0	32	29	26	3	235	3284
8:10 AM	1	20	20	0	26	35	5	0	8	20	4	0	30	25	21	3	218	3289
8:15 AM	9	36	38	0	18	23	3	0	5	23	5	1	34	18	15	1	229	3270
8:20 AM	3	33	27	0	28	35	4	0	4	16	4	1	36	15	19	2	227	3189
8:25 AM	5	21	21	0	15	35	3	0	8	21	8	0	34	14	13	2	200	3088
8:30 AM	10	27	34	0	22	35	4	1	4	27	5	0	21	22	12	2	226	3049
8:35 AM	3	17	33	0	27	30	0	0	4	28	8	0	22	17	8	1	198	2939
8:40 AM	6	34	31	0	25	19	1	0	4	25	3	0	24	15	11	1	199	2834
8:45 AM	3	23	25	0	29	38	6	0	7	34	3	1	34	20	16	5	244	2760
8:50 AM	8	35	41	0	19	31	5	0	5	26	4	1	23	16	19	3	236	2682
8:55 AM	3	25	28	0	16	38	6	0	6	21	3	0	33	24	21	2	226	2677

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	80	472	416	0	584	768	68	4	80	372	44	0	384	280	184	8	3744
Heavy Trucks	12	20	4		4	24	4		0	0	4		8	8	0		88
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	8		0	0	0		0	0	0		0	0	0		8
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

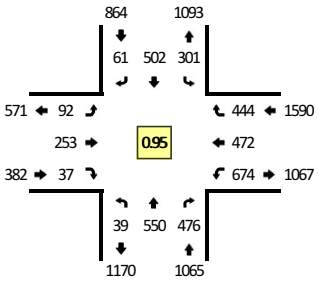
Type of peak hour being reported: Intersection Peak

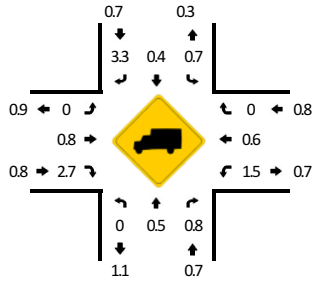
Method for determining peak hour: Total Entering Volume

LOCATION: Fiddyment Rd -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

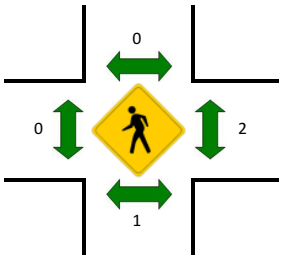
QC JOB #: 16723520
DATE: Wed, Oct 23 2024

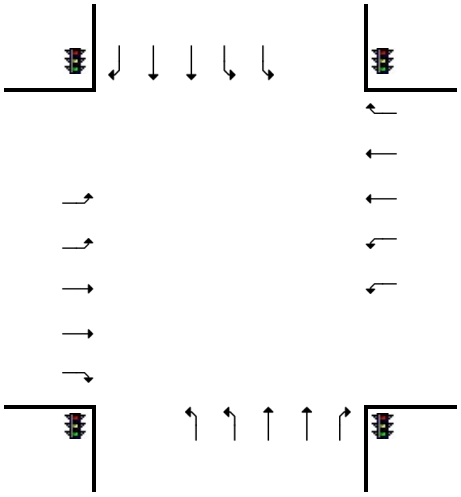
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

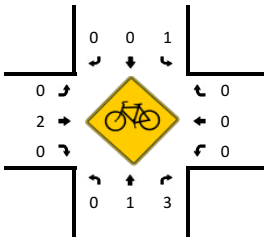


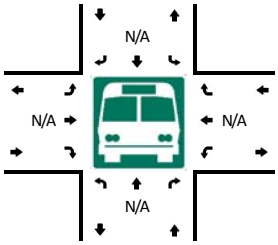


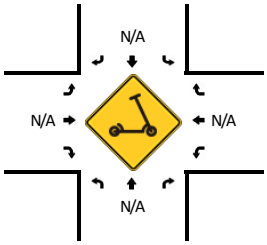
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	6	37	35	0	21	37	3	1	8	15	8	0	57	22	21	5	276	
4:05 PM	5	33	36	0	32	49	6	0	7	19	5	0	56	33	46	4	331	
4:10 PM	11	53	36	0	22	18	5	0	4	29	5	0	40	38	29	9	299	
4:15 PM	5	56	33	0	33	56	2	0	4	27	3	0	38	39	22	4	322	
4:20 PM	1	60	24	0	31	58	7	1	1	15	4	0	31	32	32	3	300	
4:25 PM	2	50	32	0	19	44	9	2	7	20	3	1	46	33	30	2	300	
4:30 PM	3	29	29	0	11	23	2	1	4	22	3	1	49	40	26	3	246	
4:35 PM	5	40	44	0	29	35	5	0	7	21	3	0	37	33	25	3	287	
4:40 PM	5	27	27	0	28	27	2	1	9	22	1	0	43	39	40	4	275	
4:45 PM	3	44	35	0	26	41	2	1	4	18	4	0	59	32	26	2	297	
4:50 PM	2	45	31	0	26	48	2	1	1	23	5	0	41	33	32	7	297	
4:55 PM	4	61	37	0	13	36	2	1	7	13	2	0	36	38	32	5	287	3517
5:00 PM	3	42	36	0	25	43	7	1	4	24	4	0	48	36	41	3	317	3558
5:05 PM	3	26	37	0	20	47	4	1	7	22	2	0	66	37	47	5	324	3551
5:10 PM	1	48	39	0	34	66	8	1	5	15	4	0	36	26	29	3	315	3567
5:15 PM	6	37	30	0	20	39	3	0	4	22	1	0	54	36	43	2	297	3542
5:20 PM	2	66	45	0	20	54	8	0	11	17	3	0	38	31	28	6	329	3571
5:25 PM	5	42	48	0	23	27	8	0	9	22	4	0	66	47	39	2	342	3613
5:30 PM	1	50	31	0	23	43	0	0	9	22	4	0	53	36	33	6	311	3678
5:35 PM	4	36	40	0	38	42	4	2	10	21	3	0	58	62	40	3	363	3754
5:40 PM	4	77	49	0	26	45	2	2	7	22	6	0	48	34	30	3	355	3834
5:45 PM	3	33	41	0	18	29	4	0	7	20	2	0	53	45	30	4	289	3826
5:50 PM	0	57	51	0	28	46	6	0	13	27	1	0	43	29	42	5	348	3877
5:55 PM	6	36	29	1	19	21	7	0	6	19	3	0	67	53	42	2	311	3901

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	36	652	480	0	348	520	24	16	104	260	52	0	636	528	412	48	4116
Heavy Trucks	0	0	0		4	4	4		0	0	0		16	0	0		28
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	4	4		4	0	0		0	0	0		0	0	0		12
Scooters																	

Comments:

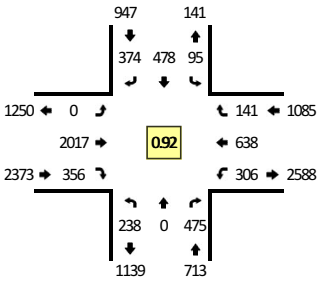
Report generated on 11/5/2024 3:38 PM

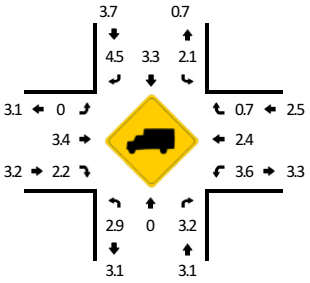
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

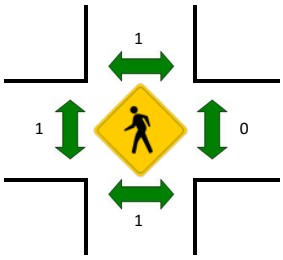
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

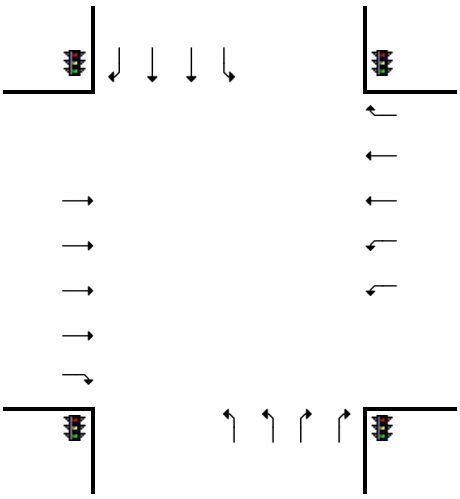
LOCATION: Washington Blvd -- Blue Oaks Blvd | **QC JOB #:** 16723521
CITY/STATE: Roseville, CA | **DATE:** Thu, Oct 24 2024

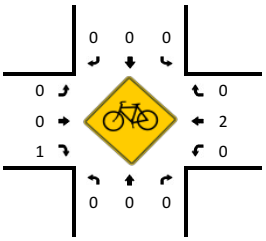
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 7:50 AM -- 8:05 AM

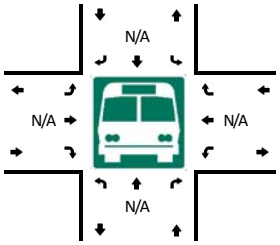


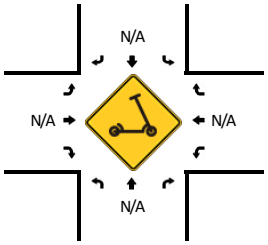












5-Min Count Period Beginning At	Washington Blvd (Northbound)				Washington Blvd (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	8	0	22	0	3	18	19	0	0	97	16	0	8	26	11	0	228	
7:05 AM	19	0	29	0	4	23	24	0	0	118	31	0	23	20	9	0	300	
7:10 AM	7	0	28	0	6	25	25	0	0	118	28	0	8	18	10	0	273	
7:15 AM	5	0	20	0	2	26	16	0	0	125	29	0	27	32	17	0	299	
7:20 AM	9	0	34	0	5	45	24	0	0	120	38	0	11	17	8	0	311	
7:25 AM	19	0	30	0	2	28	33	0	0	159	38	0	26	33	7	0	375	
7:30 AM	10	0	29	0	2	38	30	0	0	187	28	0	18	33	11	0	386	
7:35 AM	20	0	38	0	5	22	23	0	0	172	49	0	19	46	17	0	411	
7:40 AM	15	0	40	0	8	40	32	0	0	166	23	0	19	47	13	0	403	
7:45 AM	24	0	44	0	8	31	33	0	0	123	22	0	32	55	13	1	386	
7:50 AM	12	0	58	0	7	48	31	0	0	227	20	0	23	59	17	0	502	
7:55 AM	26	0	48	0	6	39	35	0	0	165	28	0	25	51	13	0	436	4310
8:00 AM	17	0	43	0	7	53	33	0	0	207	19	0	21	45	10	0	455	4537
8:05 AM	19	0	30	0	2	33	28	0	0	174	44	0	30	52	3	0	415	4652
8:10 AM	16	0	42	0	11	53	33	0	0	174	35	0	22	44	12	0	442	4821
8:15 AM	28	0	51	0	11	36	22	0	0	161	34	0	35	75	12	0	465	4987
8:20 AM	17	0	24	0	16	47	33	0	0	158	19	0	23	57	13	0	407	5083
8:25 AM	23	0	34	0	7	32	38	0	0	129	40	0	36	50	8	0	397	5105
8:30 AM	21	0	23	0	7	44	33	0	0	161	23	0	20	57	10	0	399	5118
8:35 AM	22	0	41	0	3	25	31	0	0	135	30	0	28	50	12	0	377	5084
8:40 AM	10	0	30	0	7	33	29	0	0	142	33	0	22	37	8	0	351	5032
8:45 AM	19	0	27	0	7	15	22	0	0	136	45	0	26	42	10	0	349	4995
8:50 AM	15	0	22	0	10	26	33	0	0	125	27	0	16	30	7	0	311	4804
8:55 AM	17	0	19	0	7	21	24	0	0	157	34	0	16	40	11	0	346	4714

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	220	0	596	0	80	560	396	0	0	2396	268	0	276	620	160	0	5572
Heavy Trucks	12	0	28		0	12	16		0	76	4		4	12	0		164
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	4	0		4
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

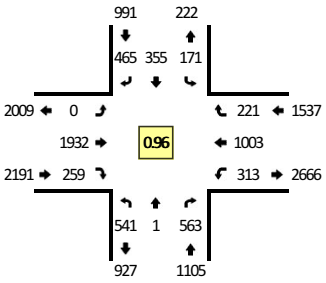
Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

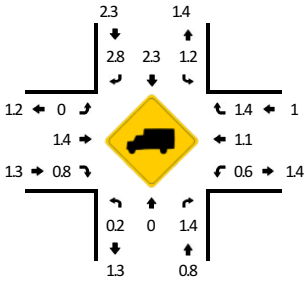
LOCATION: Washington Blvd -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

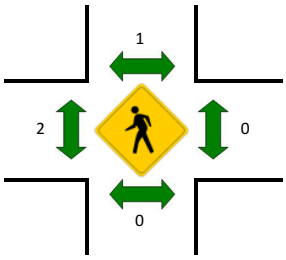
QC JOB #: 16723522
DATE: Thu, Oct 24 2024

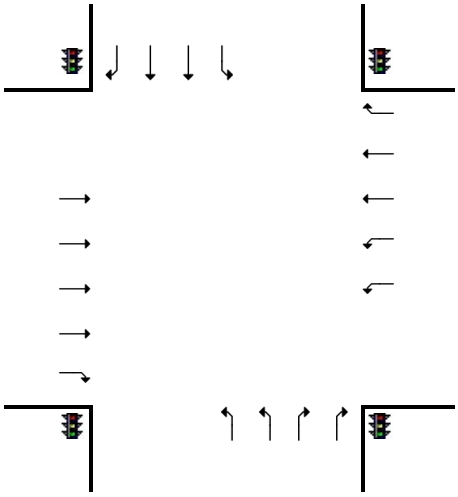
Peak-Hour: 4:55 PM -- 5:55 PM
Peak 15-Min: 5:10 PM -- 5:25 PM

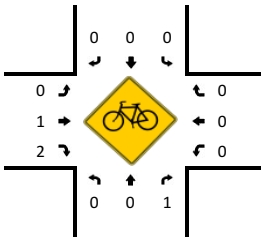


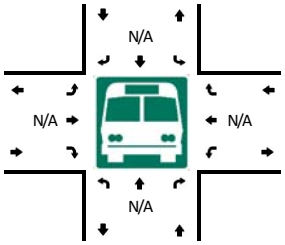
TRUE DATA TO IMPROVE MOBILITY

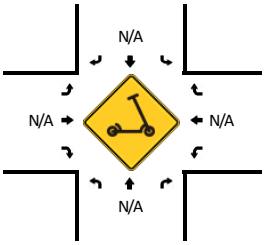












5-Min Count Period Beginning At	Washington Blvd (Northbound)				Washington Blvd (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	35	0	47	0	12	50	40	0	0	108	15	0	19	73	6	0	405	
4:05 PM	53	0	54	0	9	32	66	0	0	74	23	0	23	81	19	0	434	
4:10 PM	38	0	34	0	18	45	47	0	0	87	9	0	14	49	14	0	355	
4:15 PM	51	0	65	0	11	27	48	0	0	80	8	0	15	81	10	0	396	
4:20 PM	35	0	32	0	8	45	56	0	0	91	5	0	12	63	13	0	360	
4:25 PM	53	0	54	0	9	29	51	0	0	87	10	0	32	89	12	0	426	
4:30 PM	35	0	39	0	9	40	48	0	0	97	7	0	21	60	15	0	371	
4:35 PM	44	0	55	0	6	27	37	0	0	52	11	0	38	65	26	0	361	
4:40 PM	26	0	43	0	8	34	25	0	0	120	11	0	32	57	16	0	372	
4:45 PM	39	0	65	0	5	31	31	0	0	99	19	0	25	88	16	0	418	
4:50 PM	25	0	23	0	17	34	37	0	0	186	18	0	21	54	19	0	434	
4:55 PM	57	0	51	0	16	17	57	0	0	156	21	0	25	71	25	0	496	4828
5:00 PM	33	0	48	0	20	32	45	0	0	177	19	0	19	76	20	0	489	4912
5:05 PM	60	0	65	0	12	17	37	0	0	149	20	0	35	90	18	0	503	4981
5:10 PM	37	0	37	0	15	38	39	0	0	193	20	0	19	95	23	0	516	5142
5:15 PM	50	0	46	0	9	28	43	0	0	148	22	0	33	96	24	0	499	5245
5:20 PM	37	0	49	0	14	35	35	0	0	184	34	0	19	83	19	0	509	5394
5:25 PM	57	1	48	0	8	33	38	0	0	139	23	0	36	94	12	0	489	5457
5:30 PM	32	0	50	0	22	32	38	0	0	120	16	0	28	87	16	0	441	5527
5:35 PM	58	0	48	0	11	19	31	0	0	150	17	0	34	80	17	0	465	5631
5:40 PM	37	0	28	0	20	43	36	0	0	199	25	0	20	84	12	0	504	5763
5:45 PM	51	0	54	0	9	21	28	0	0	155	22	0	31	80	22	0	473	5818
5:50 PM	32	0	39	0	15	40	38	0	0	162	20	0	14	67	13	0	440	5824
5:55 PM	49	0	51	0	8	22	20	0	0	98	19	0	24	61	30	0	382	5710

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	496	0	528	0	152	404	468	0	0	2100	304	0	284	1096	264	0	6096
Heavy Trucks	0	0	8		4	8	20		0	20	0		0	4	0		64
Buses		0				0				0				0			0
Pedestrians																	
Bicycles	0	0	0		0	0	0		0	4	8		0	0	0		12
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

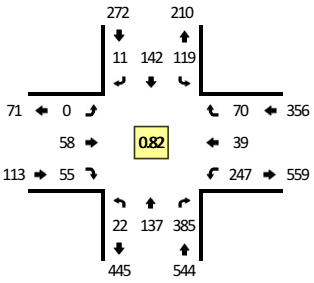
Type of peak hour being reported: Intersection Peak

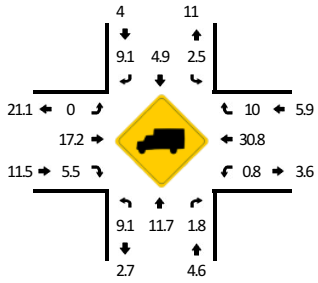
Method for determining peak hour: Total Entering Volume

LOCATION: Westbrook Blvd -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

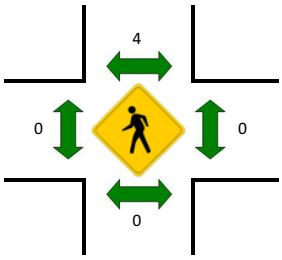
QC JOB #: 16723523
DATE: Wed, Oct 23 2024

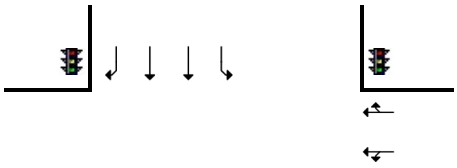
Peak-Hour: 7:10 AM -- 8:10 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

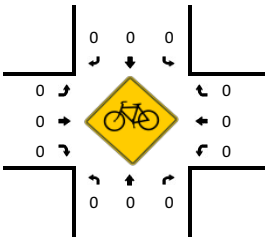


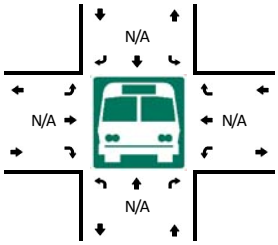


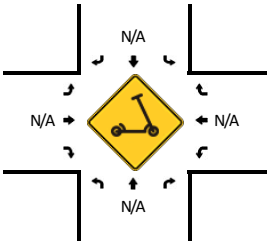
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Westbrook Blvd (Northbound)				Westbrook Blvd (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	12	16	0	10	4	0	0	0	2	3	0	11	1	10	0	71	
7:05 AM	1	9	11	0	6	10	1	0	0	3	4	0	15	3	5	0	68	
7:10 AM	1	9	19	1	8	4	4	3	0	8	7	0	11	2	7	0	84	
7:15 AM	0	11	22	0	15	12	4	0	0	12	7	0	7	4	5	0	99	
7:20 AM	0	12	22	0	25	25	0	0	0	8	9	0	23	2	5	0	131	
7:25 AM	1	8	20	0	12	30	1	0	0	6	6	0	28	2	1	0	115	
7:30 AM	3	15	32	0	12	21	0	0	0	8	5	0	30	2	11	0	139	
7:35 AM	1	11	51	0	10	17	0	0	0	3	8	0	32	1	5	0	139	
7:40 AM	3	21	50	0	2	7	0	0	0	3	3	0	15	4	8	0	116	
7:45 AM	3	24	69	0	8	6	0	0	0	1	0	0	9	2	4	0	126	
7:50 AM	3	12	48	0	1	1	1	0	0	4	4	0	20	3	8	0	105	
7:55 AM	2	6	22	0	6	4	1	0	0	3	4	0	25	5	6	0	84	1277
8:00 AM	1	6	14	0	7	6	0	0	0	1	2	0	30	7	4	0	78	1284
8:05 AM	3	2	16	0	10	9	0	0	0	1	0	0	17	5	6	0	69	1285
8:10 AM	1	6	14	0	8	3	0	0	0	6	4	0	9	4	6	0	61	1262
8:15 AM	1	3	14	0	7	4	0	0	0	3	3	0	10	8	5	0	58	1221
8:20 AM	1	7	6	0	9	7	0	0	0	5	2	0	12	3	4	0	56	1146
8:25 AM	2	4	6	0	3	4	0	0	0	4	1	0	9	4	7	0	44	1075
8:30 AM	2	7	14	0	6	6	1	0	0	5	3	0	6	3	4	0	57	993
8:35 AM	0	3	17	0	7	9	1	0	0	9	2	0	7	1	7	0	63	917
8:40 AM	2	9	18	0	9	5	0	0	1	6	0	0	8	4	4	0	66	867
8:45 AM	0	2	12	0	10	4	1	0	0	4	2	0	6	2	5	0	48	789
8:50 AM	2	3	16	0	7	4	0	0	0	4	3	0	8	3	3	0	53	737
8:55 AM	0	7	25	0	12	5	0	0	0	3	1	0	14	7	8	0	82	735

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	28	188	532	0	96	180	0	0	0	56	64	0	308	28	96	0	1576
Heavy Trucks	4	20	0		0	12	0		0	4	0		0	4	0		44
Buses																	
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

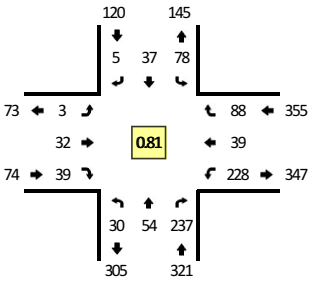
Type of peak hour being reported: Intersection Peak

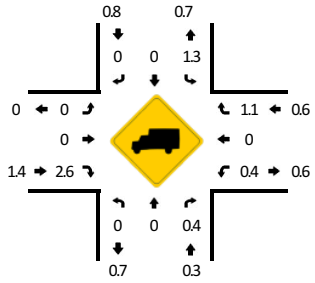
Method for determining peak hour: Total Entering Volume

LOCATION: Westbrook Blvd -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

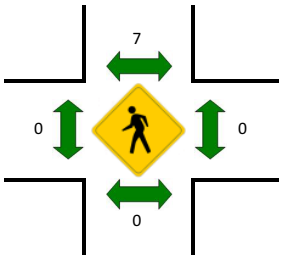
QC JOB #: 16723524
DATE: Wed, Oct 23 2024

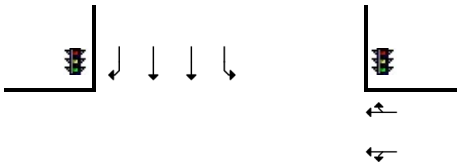
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

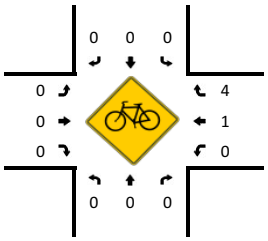


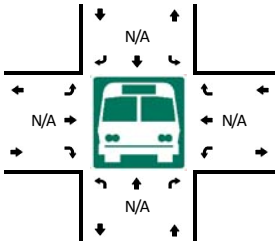


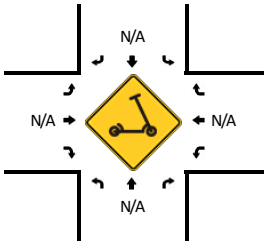
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Westbrook Blvd (Northbound)				Westbrook Blvd (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	2	16	0	6	10	0	0	0	1	1	0	24	2	2	0	64	
4:05 PM	2	6	22	0	3	5	0	0	0	4	0	0	15	4	4	0	65	
4:10 PM	1	5	19	0	7	3	0	0	0	2	0	0	21	5	4	0	67	
4:15 PM	1	5	22	0	6	8	0	0	0	2	2	0	17	8	6	0	77	
4:20 PM	0	7	19	0	9	4	1	0	0	2	0	0	18	5	5	0	70	
4:25 PM	1	5	22	1	3	5	0	0	0	1	1	0	26	7	10	1	83	
4:30 PM	1	4	19	1	9	3	1	0	0	4	1	0	19	2	4	0	68	
4:35 PM	1	8	19	0	8	5	0	0	0	2	1	0	27	0	5	0	76	
4:40 PM	4	4	17	0	4	8	0	0	0	2	0	0	11	4	11	0	65	
4:45 PM	3	2	13	0	8	6	0	0	0	2	1	0	18	1	10	0	64	
4:50 PM	1	3	10	0	11	1	0	0	0	3	3	0	21	3	8	0	64	
4:55 PM	3	3	13	0	10	6	0	0	0	3	2	0	16	2	6	0	64	827
5:00 PM	2	3	17	0	6	6	0	0	0	4	0	0	14	2	9	0	63	826
5:05 PM	2	1	20	0	7	2	0	0	0	0	5	0	15	2	8	0	62	823
5:10 PM	0	3	16	0	8	7	0	0	0	1	5	0	18	2	3	0	63	819
5:15 PM	6	7	21	0	7	5	0	0	0	4	6	0	12	4	3	0	75	817
5:20 PM	4	8	20	0	7	0	0	0	0	2	0	0	20	4	4	0	69	816
5:25 PM	1	3	22	0	7	2	0	0	0	3	1	0	18	2	10	0	69	802
5:30 PM	3	7	24	0	3	3	1	0	0	3	5	0	20	5	8	0	82	816
5:35 PM	5	5	27	0	12	2	0	0	0	2	4	0	23	7	10	0	97	837
5:40 PM	1	5	19	0	4	2	1	0	0	4	4	0	33	5	10	0	88	860
5:45 PM	4	5	16	0	8	3	1	0	3	3	7	0	14	2	4	0	70	866
5:50 PM	1	2	18	0	6	1	1	0	0	5	1	0	21	1	9	0	66	868
5:55 PM	0	5	17	1	3	4	1	0	0	1	1	0	20	3	10	0	66	870

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	36	68	280	0	76	28	8	0	0	36	52	0	304	68	112	0	1068
Heavy Trucks	0	0	4		0	0	0		0	0	0		0	0	4		8
Buses																	
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

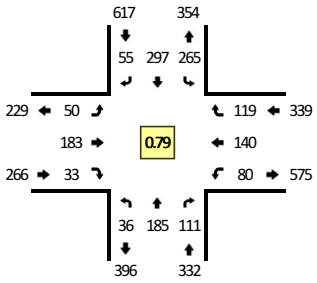
Type of peak hour being reported: Intersection Peak

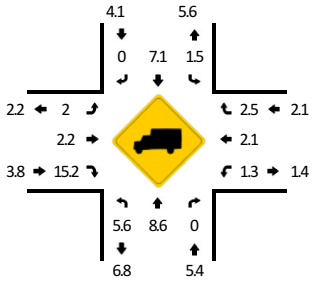
Method for determining peak hour: Total Entering Volume

LOCATION: Westbrook Blvd -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

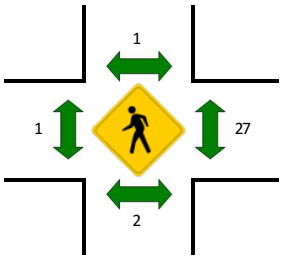
QC JOB #: 16723525
DATE: Thu, Oct 24 2024

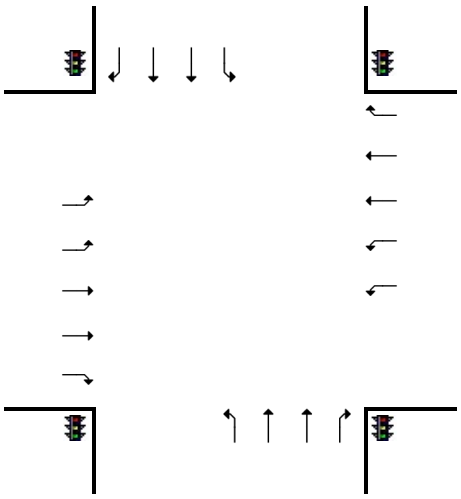
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

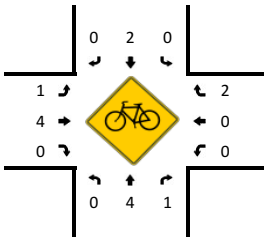


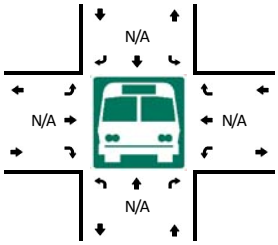


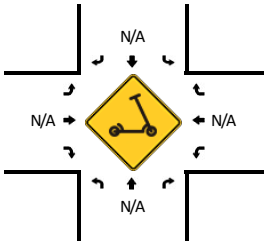
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Westbrook Blvd (Northbound)				Westbrook Blvd (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	4	15	4	0	12	15	1	0	0	6	2	0	6	5	7	2	79	
7:05 AM	4	11	4	0	13	20	2	0	4	9	4	0	9	5	4	1	90	
7:10 AM	3	13	5	0	10	24	1	0	0	4	4	0	6	6	10	1	87	
7:15 AM	1	14	10	0	21	38	2	0	0	9	2	0	6	9	8	3	123	
7:20 AM	5	10	10	0	24	19	10	0	1	17	1	0	12	26	11	1	147	
7:25 AM	5	20	13	1	18	37	13	0	3	12	2	0	2	16	9	2	153	
7:30 AM	5	23	9	0	27	29	12	0	13	15	5	0	4	14	6	4	166	
7:35 AM	3	21	12	2	26	19	4	0	6	34	6	0	3	8	10	1	155	
7:40 AM	7	28	11	0	22	46	1	0	10	20	6	0	4	3	11	1	170	
7:45 AM	1	20	13	0	21	14	3	0	9	15	1	0	5	11	9	1	123	
7:50 AM	0	11	9	0	28	26	4	0	1	9	0	0	2	5	10	1	106	
7:55 AM	1	11	4	0	13	21	2	1	0	11	4	0	5	21	6	1	101	1500
8:00 AM	3	11	6	0	20	19	2	0	0	15	0	0	4	11	16	1	108	1529
8:05 AM	2	6	9	0	23	14	1	0	2	9	2	1	8	7	6	0	90	1529
8:10 AM	0	10	5	0	21	15	1	0	4	17	4	0	8	9	17	1	112	1554
8:15 AM	1	10	9	1	11	11	0	0	1	18	2	0	10	9	5	1	89	1520
8:20 AM	1	11	4	0	6	12	0	0	0	12	1	0	1	4	8	0	60	1433
8:25 AM	0	5	7	0	10	13	1	0	0	13	0	0	2	12	5	1	69	1349
8:30 AM	1	5	5	0	6	9	1	0	2	8	2	0	2	8	15	4	68	1251
8:35 AM	0	6	2	1	11	8	1	0	3	12	4	0	4	7	8	0	67	1163
8:40 AM	1	6	3	0	12	11	1	0	2	9	1	0	1	0	6	0	53	1046
8:45 AM	0	8	3	0	16	7	2	0	1	5	2	0	2	3	6	0	55	978
8:50 AM	0	3	1	0	10	6	1	0	0	9	1	0	2	14	9	0	56	928
8:55 AM	1	6	6	0	16	10	0	0	1	8	0	0	3	6	6	0	63	890

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	60	288	128	8	300	376	68	0	116	276	68	0	44	100	108	24	1964
Heavy Trucks	8	12	0		0	20	0		4	4	16		0	4	4		72
Buses																	
Pedestrians		0				0				0				28			28
Bicycles	0	8	4		0	0	0		0	4	0		0	0	0		16
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

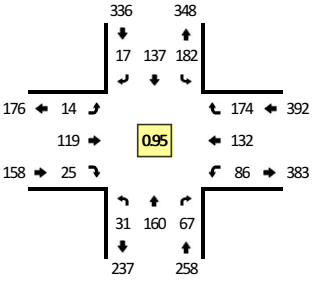
Type of peak hour being reported: Intersection Peak

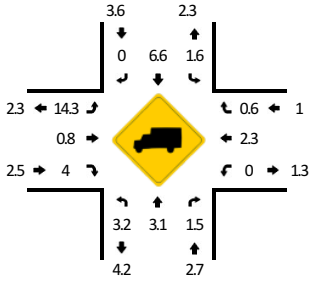
Method for determining peak hour: Total Entering Volume

LOCATION: Westbrook Blvd -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

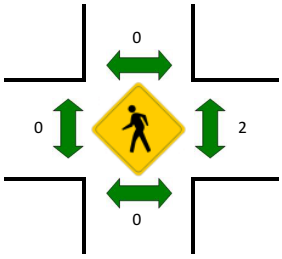
QC JOB #: 16723526
DATE: Thu, Oct 24 2024

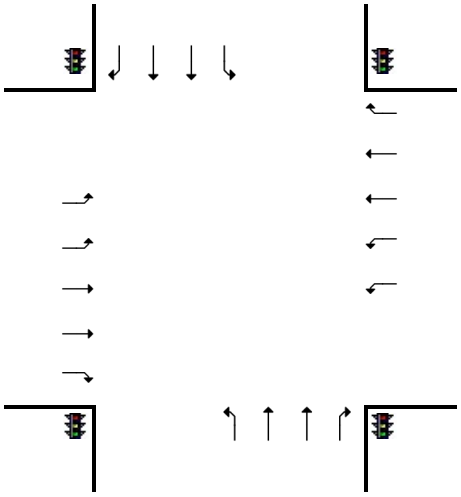
Peak-Hour: 4:10 PM -- 5:10 PM
Peak 15-Min: 4:30 PM -- 4:45 PM

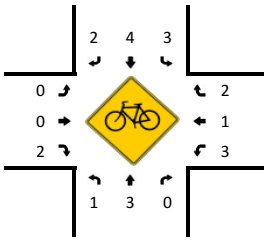


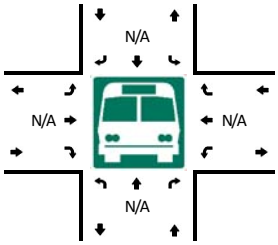


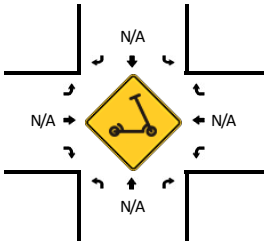
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Westbrook Blvd (Northbound)				Westbrook Blvd (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	18	5	0	11	12	2	0	0	10	6	0	5	8	8	0	87	
4:05 PM	1	14	5	1	13	9	6	0	3	8	5	0	5	13	14	0	97	
4:10 PM	0	16	6	0	13	8	0	0	0	16	1	0	2	16	16	0	94	
4:15 PM	3	10	4	2	12	10	2	0	1	11	1	0	4	9	17	2	88	
4:20 PM	4	12	9	0	15	11	1	0	5	9	5	0	7	10	9	3	100	
4:25 PM	4	12	5	0	18	8	4	0	0	8	2	0	3	6	12	2	84	
4:30 PM	0	18	5	0	17	10	0	0	0	15	0	0	7	10	12	1	95	
4:35 PM	2	15	4	0	9	19	2	0	2	15	2	0	9	21	15	0	115	
4:40 PM	3	10	5	0	18	13	0	0	1	5	1	0	5	10	19	2	92	
4:45 PM	4	15	7	0	13	9	0	0	2	3	3	0	5	10	10	0	81	
4:50 PM	1	10	9	1	16	13	2	0	0	11	2	0	5	6	19	0	95	
4:55 PM	2	11	3	1	17	12	1	0	1	10	3	0	7	10	12	3	93	1121
5:00 PM	3	16	5	0	6	15	2	0	1	9	2	0	7	14	20	1	101	1135
5:05 PM	1	15	5	0	28	9	3	0	1	7	3	0	10	10	13	1	106	1144
5:10 PM	1	11	6	0	11	8	1	0	3	8	1	0	8	9	14	4	85	1135
5:15 PM	2	16	6	0	14	9	2	0	2	9	1	0	5	4	11	1	82	1129
5:20 PM	0	8	8	0	13	15	5	0	1	10	1	0	4	9	10	3	87	1116
5:25 PM	3	12	5	0	14	6	0	0	1	8	0	0	6	17	15	1	88	1120
5:30 PM	1	17	3	0	13	8	2	0	0	13	1	0	4	10	11	4	87	1112
5:35 PM	3	6	7	0	13	13	1	0	0	10	6	0	6	9	14	1	89	1086
5:40 PM	1	11	7	0	5	10	2	0	3	5	0	0	2	12	25	0	83	1077
5:45 PM	2	22	4	0	13	10	1	1	0	6	2	0	7	10	17	0	95	1091
5:50 PM	4	13	3	0	16	11	1	0	1	3	2	0	8	16	12	3	93	1089
5:55 PM	4	13	5	0	16	11	0	0	0	7	4	0	5	10	17	0	92	1088

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	20	172	56	0	176	168	8	0	12	140	12	0	84	164	184	12	1208
Heavy Trucks	4	0	4		8	12	0		0	0	0		0	4	0		32
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	4	0	0		4	0	0		0	0	4		0	4	4		20
Scooters																	

Comments:

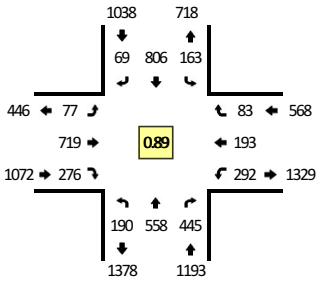
Report generated on 11/5/2024 3:38 PM

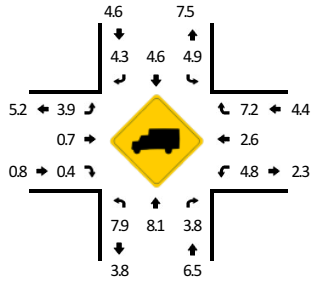
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

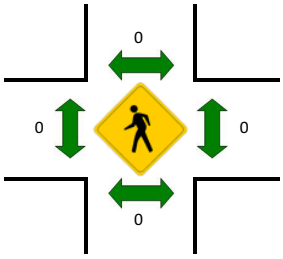
LOCATION: Fiddyment Rd -- Pleasant Grove Blvd | **QC JOB #:** 16723527
CITY/STATE: Roseville, CA | **DATE:** Wed, Oct 23 2024

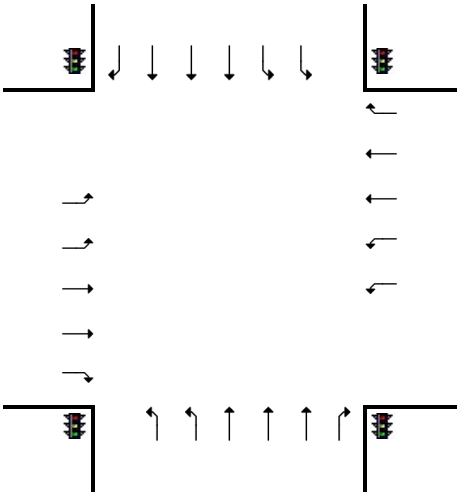
Peak-Hour: 7:10 AM -- 8:10 AM
Peak 15-Min: 7:35 AM -- 7:50 AM

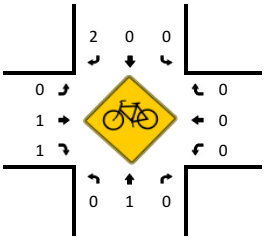


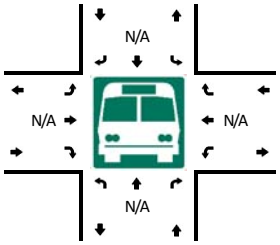


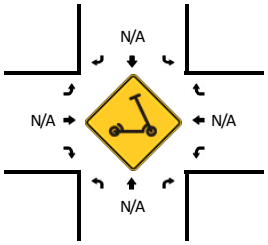
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	12	28	24	1	4	71	3	0	2	24	26	0	18	11	1	0	225	
7:05 AM	10	34	30	0	4	80	2	0	7	30	24	0	15	18	0	0	254	
7:10 AM	12	33	27	0	5	69	5	0	6	49	15	0	20	23	9	0	273	
7:15 AM	22	50	35	1	9	63	4	0	3	39	32	0	18	11	11	0	298	
7:20 AM	17	51	39	1	7	69	4	0	9	45	20	0	22	14	4	0	302	
7:25 AM	18	53	33	0	13	67	4	0	3	51	24	0	19	18	7	0	310	
7:30 AM	18	50	54	0	17	55	5	0	4	61	20	0	25	19	6	0	334	
7:35 AM	11	50	44	0	12	76	10	0	8	85	24	0	25	12	5	0	362	
7:40 AM	10	59	48	1	16	80	7	0	6	83	26	0	22	12	5	1	376	
7:45 AM	13	42	55	0	13	79	3	0	15	58	29	0	25	16	3	0	351	
7:50 AM	21	42	27	1	24	63	10	0	10	73	17	0	35	25	11	1	360	
7:55 AM	20	53	31	1	19	70	7	0	5	62	23	0	27	16	7	0	341	3786
8:00 AM	9	47	22	0	19	56	7	0	4	60	17	0	30	16	6	0	293	3854
8:05 AM	13	28	30	1	9	59	3	0	4	53	29	0	22	11	9	0	271	3871
8:10 AM	21	52	31	0	13	38	3	0	2	35	22	0	18	24	3	0	262	3860
8:15 AM	14	39	40	1	12	67	5	0	1	44	17	0	18	17	5	0	280	3842
8:20 AM	5	53	28	0	5	56	7	0	5	43	20	0	26	15	5	0	268	3808
8:25 AM	18	56	40	1	13	51	1	0	6	37	23	0	20	29	1	0	296	3794
8:30 AM	16	48	38	1	7	59	4	1	4	50	16	0	20	21	2	1	288	3748
8:35 AM	9	60	36	1	8	50	0	1	5	37	19	0	29	21	6	0	282	3668
8:40 AM	10	41	40	1	13	46	3	0	5	62	20	0	19	19	9	0	288	3580
8:45 AM	15	51	38	0	13	48	1	1	4	52	18	0	24	16	7	0	288	3517
8:50 AM	10	39	40	0	12	43	3	0	5	40	7	0	25	32	6	0	262	3419
8:55 AM	8	60	42	2	10	50	0	0	4	43	6	0	15	17	4	0	261	3339

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	136	604	588	4	164	940	80	0	116	904	316	0	288	160	52	4	4356
Heavy Trucks	12	64	4		8	24	8		0	0	0		16	0	8		144
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	4	0		0	0	0		0	0	4		0	0	0		8
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

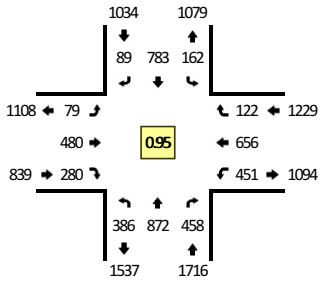
Type of peak hour being reported: Intersection Peak

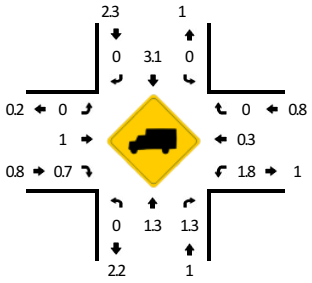
Method for determining peak hour: Total Entering Volume

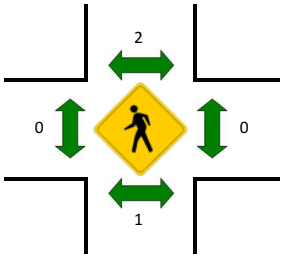
LOCATION: Fiddyment Rd -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

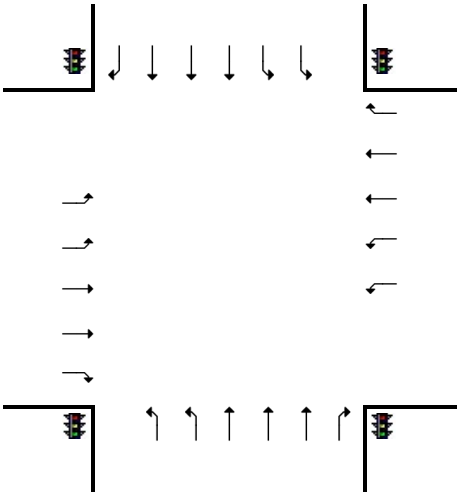
QC JOB #: 16723528
DATE: Wed, Oct 23 2024

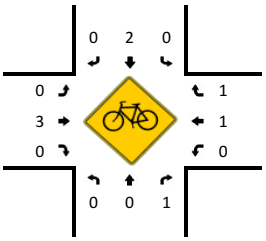
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

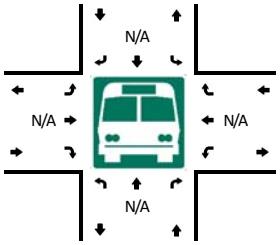


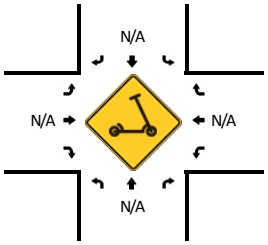












5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	28	77	31	1	20	68	5	0	5	42	13	0	30	46	13	0	379	
4:05 PM	21	75	41	1	12	70	6	0	7	38	23	0	25	48	8	0	375	
4:10 PM	33	71	56	2	18	66	8	1	6	43	14	0	38	42	12	0	410	
4:15 PM	17	58	35	2	9	66	4	0	5	29	22	0	53	50	14	2	366	
4:20 PM	31	54	29	3	11	51	2	0	4	47	21	0	27	38	10	0	328	
4:25 PM	27	72	49	2	20	54	5	1	4	33	9	0	41	54	11	0	382	
4:30 PM	29	69	43	5	12	75	5	0	5	27	9	0	38	47	8	1	373	
4:35 PM	28	50	32	1	8	58	6	0	6	45	28	0	43	35	2	0	342	
4:40 PM	30	55	40	0	12	44	5	0	5	65	12	0	32	63	17	0	380	
4:45 PM	32	74	53	4	11	60	10	0	5	41	24	0	39	39	8	1	401	
4:50 PM	29	84	36	1	11	79	8	0	8	22	17	0	35	34	11	0	375	
4:55 PM	25	45	39	1	13	50	7	0	5	44	18	0	59	58	8	0	372	4483
5:00 PM	35	52	32	2	12	44	4	0	3	57	27	0	42	57	12	0	379	4483
5:05 PM	20	68	31	1	14	64	10	0	7	54	21	0	31	44	7	0	372	4480
5:10 PM	19	65	39	2	13	75	6	0	3	30	27	0	39	50	16	0	384	4454
5:15 PM	28	75	40	1	14	75	5	0	8	41	21	0	35	49	9	0	401	4489
5:20 PM	39	95	38	5	10	76	8	1	8	20	25	0	45	64	17	0	451	4612
5:25 PM	40	64	31	1	18	71	7	2	10	39	16	0	44	43	3	0	389	4619
5:30 PM	31	84	40	2	11	73	8	0	11	40	22	0	39	52	7	0	420	4666
5:35 PM	43	73	38	1	11	78	6	0	1	52	23	0	27	63	14	0	430	4754
5:40 PM	28	63	39	1	8	41	6	1	8	50	29	0	50	88	9	0	421	4795
5:45 PM	21	54	27	4	19	63	11	2	10	35	25	0	33	44	6	0	354	4748
5:50 PM	21	78	57	1	14	69	10	0	7	38	28	0	42	58	8	0	431	4804
5:55 PM	38	101	46	2	12	54	8	0	3	24	16	0	24	44	14	0	386	4818

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	408	880	468	16	120	768	80	4	80	568	296	0	464	812	120	0	5084
Heavy Trucks	0	4	4		0	44	0		0	4	4		8	4	0		72
Buses																	
Pedestrians		4				0				0				0			4
Bicycles	0	0	4		0	0	0		0	4	0		0	0	0		8
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

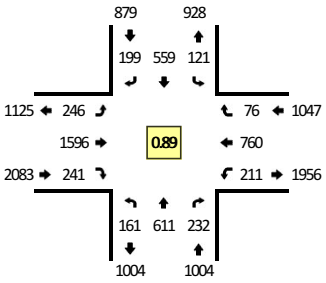
Type of peak hour being reported: Intersection Peak

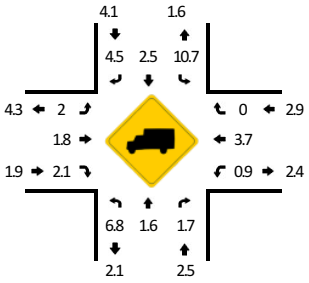
Method for determining peak hour: Total Entering Volume

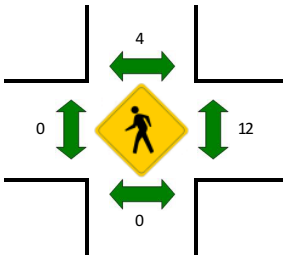
LOCATION: Washington Blvd -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

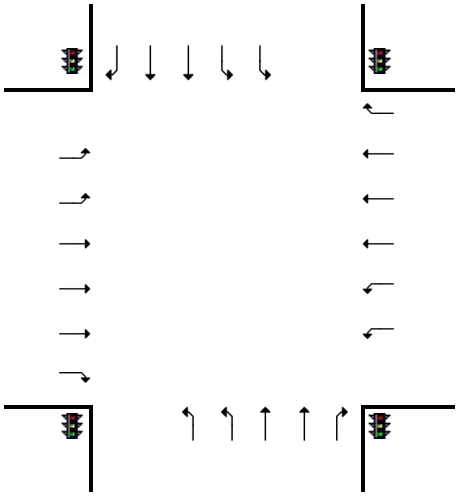
QC JOB #: 16723529
DATE: Thu, Oct 24 2024

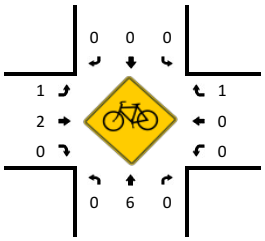
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

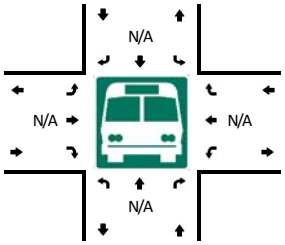


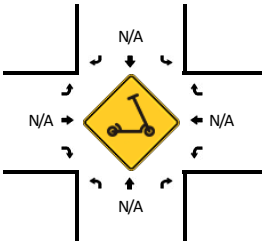












5-Min Count Period Beginning At	Washington Blvd (Northbound)				Washington Blvd (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	4	24	9	0	4	13	8	0	11	69	4	0	6	48	1	1	202	
7:05 AM	4	16	11	0	4	12	9	0	14	89	9	0	8	49	2	0	227	
7:10 AM	12	26	21	0	8	38	10	0	8	76	17	0	5	39	1	1	262	
7:15 AM	9	22	15	0	4	6	16	0	21	117	12	0	12	63	2	2	301	
7:20 AM	5	28	14	0	7	40	6	0	16	88	16	1	12	41	1	0	275	
7:25 AM	11	42	22	0	5	29	10	0	32	138	15	0	4	61	4	2	375	
7:30 AM	7	56	29	0	1	37	16	0	23	79	7	0	19	48	3	0	325	
7:35 AM	13	54	23	0	6	39	14	0	50	156	21	0	11	61	8	0	456	
7:40 AM	19	85	22	0	9	52	20	0	21	99	17	0	19	59	9	1	432	
7:45 AM	9	57	29	0	13	35	23	0	29	144	4	0	10	97	10	0	460	
7:50 AM	15	87	20	0	8	65	29	0	19	113	21	0	31	64	9	0	481	
7:55 AM	23	60	25	0	6	37	19	0	23	173	13	0	13	62	6	0	460	4256
8:00 AM	9	56	12	0	10	67	18	0	20	118	27	0	26	55	6	0	424	4478
8:05 AM	17	32	14	0	2	32	17	0	9	156	32	0	11	69	8	0	399	4650
8:10 AM	11	41	14	0	17	54	17	0	14	107	32	0	28	56	3	1	395	4783
8:15 AM	11	32	21	0	10	40	7	0	18	151	24	2	6	68	3	0	393	4875
8:20 AM	14	46	17	0	12	54	12	0	13	116	22	0	22	57	5	2	392	4992
8:25 AM	6	25	17	0	9	34	16	0	18	154	18	0	10	72	4	0	383	5000
8:30 AM	14	36	18	0	19	50	7	0	7	109	10	3	17	40	5	3	338	5013
8:35 AM	10	18	18	0	11	26	11	0	15	156	11	1	8	63	3	1	352	4909
8:40 AM	8	21	17	0	11	41	18	0	8	120	17	0	23	38	6	0	328	4805
8:45 AM	7	21	35	0	6	30	11	0	13	179	13	0	13	84	7	0	419	4764
8:50 AM	17	20	12	0	14	38	12	0	9	100	14	0	19	47	6	1	309	4592
8:55 AM	20	16	19	0	2	22	9	0	15	116	14	1	17	67	3	0	321	4453

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	188	816	296	0	108	548	284	0	284	1720	152	0	216	892	100	0	5604
Heavy Trucks	24	16	4		8	4	20		0	24	0		0	24	0		124
Buses																	
Pedestrians		0				8				0				32			40
Bicycles	0	8	0		0	0	0		0	4	0		0	0	4		16
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

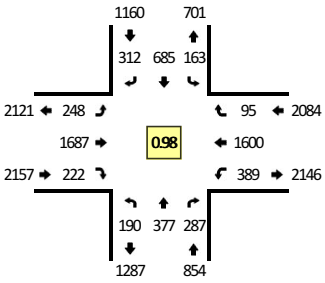
Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

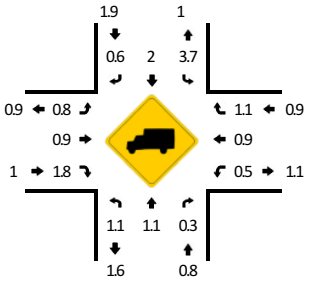
LOCATION: Washington Blvd -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

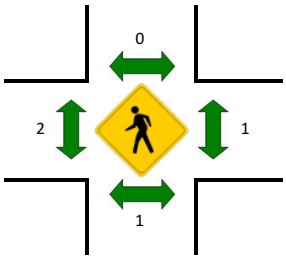
QC JOB #: 16723530
DATE: Thu, Oct 24 2024

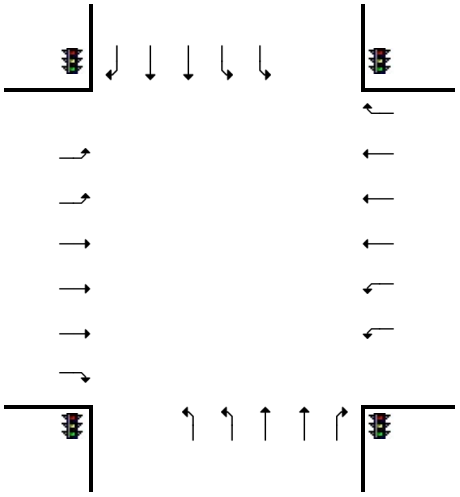
Peak-Hour: 4:25 PM -- 5:25 PM
Peak 15-Min: 4:45 PM -- 5:00 PM

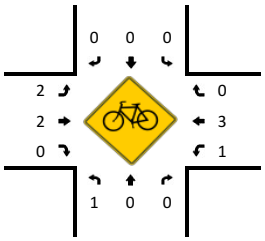


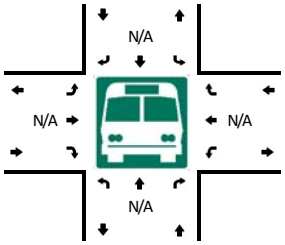
TRUE DATA TO IMPROVE MOBILITY

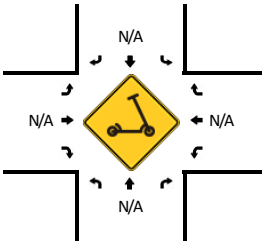












5-Min Count Period Beginning At	Washington Blvd (Northbound)				Washington Blvd (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	16	23	22	0	21	56	22	0	11	86	13	0	28	130	6	1	435	
4:05 PM	19	32	27	0	15	45	20	0	18	149	13	0	27	144	0	2	511	
4:10 PM	23	32	25	2	23	69	28	0	10	90	8	0	26	127	2	3	468	
4:15 PM	21	37	24	0	10	32	17	0	13	143	14	1	15	151	4	0	482	
4:20 PM	16	39	19	0	11	41	25	0	11	108	11	0	41	157	7	2	488	
4:25 PM	18	19	26	0	12	52	23	0	11	190	19	2	19	174	6	0	571	
4:30 PM	14	35	23	0	22	71	24	0	15	107	12	0	34	109	2	1	469	
4:35 PM	16	22	33	0	10	50	31	0	20	152	22	2	16	122	2	0	498	
4:40 PM	9	33	28	0	10	53	28	0	14	123	31	2	43	151	1	1	527	
4:45 PM	19	22	19	0	20	44	27	0	29	165	16	2	26	132	5	1	527	
4:50 PM	16	41	24	0	12	52	23	0	18	128	11	3	37	123	19	0	507	
4:55 PM	12	37	22	0	16	64	20	0	27	152	15	1	42	141	10	2	561	6044
5:00 PM	17	40	15	0	11	56	26	0	21	146	20	2	28	115	11	2	510	6119
5:05 PM	22	29	19	0	16	56	22	0	17	137	20	1	33	134	4	1	511	6119
5:10 PM	18	41	28	0	5	73	36	0	20	124	14	0	38	116	10	1	524	6175
5:15 PM	15	31	24	0	16	66	30	0	18	130	19	1	29	143	15	0	537	6230
5:20 PM	14	27	26	0	13	48	22	0	19	133	23	3	35	140	10	0	513	6255
5:25 PM	12	35	25	0	11	54	25	0	22	122	17	3	35	150	9	1	521	6205
5:30 PM	17	51	25	0	9	53	21	0	13	110	17	0	22	153	3	1	495	6231
5:35 PM	15	26	17	0	17	56	23	0	13	108	13	1	26	146	3	1	465	6198
5:40 PM	14	35	18	0	12	36	31	0	16	126	14	0	23	138	11	0	474	6145
5:45 PM	21	37	27	0	13	35	24	0	18	119	14	0	23	136	7	0	474	6092
5:50 PM	20	38	20	0	10	43	28	0	17	114	9	0	20	132	5	0	456	6041
5:55 PM	21	35	16	0	12	42	14	0	14	98	8	1	31	138	4	1	435	5915

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	188	400	260	0	192	640	280	0	296	1780	168	24	420	1584	136	12	6380
Heavy Trucks	0	12	0		8	16	0		0	24	4		0	16	0		80
Buses																	
Pedestrians		4				0				4				4			12
Bicycles	4	0	0		0	0	0		0	0	0		0	8	0		12
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

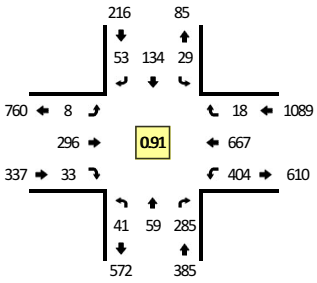
Type of peak hour being reported: Intersection Peak

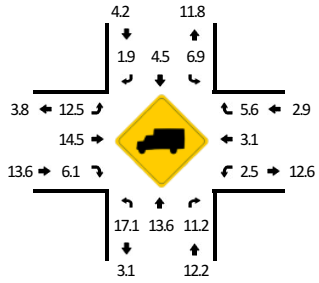
Method for determining peak hour: Total Entering Volume

LOCATION: Santucci Blvd/Watt Ave -- Baseline Rd
CITY/STATE: Placer, CA

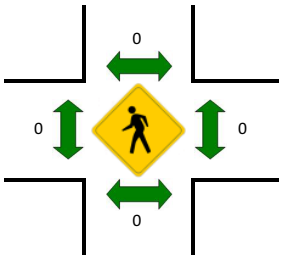
QC JOB #: 16723531
DATE: Wed, Oct 23 2024

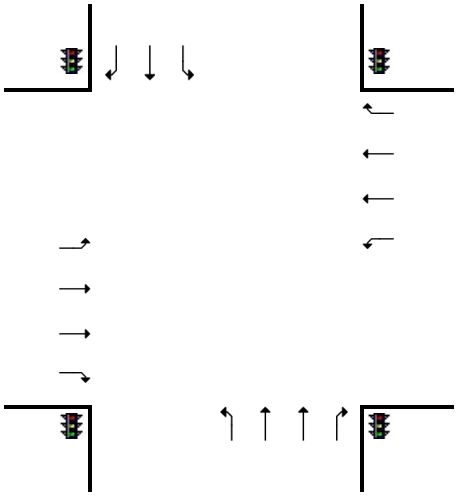
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:10 AM -- 7:25 AM

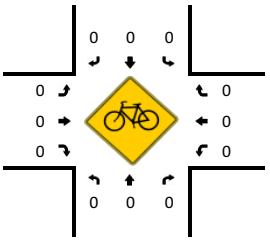


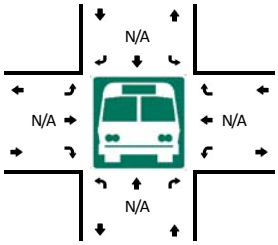


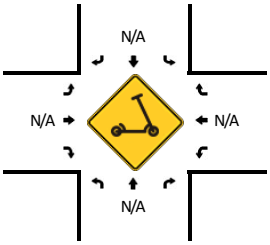
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Santucci Blvd/Watt Ave (Northbound)				Santucci Blvd/Watt Ave (Southbound)				Baseline Rd (Eastbound)				Baseline Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	6	23	0	2	9	3	0	0	27	2	0	29	66	2	0	171	
7:05 AM	2	7	23	0	3	13	8	0	2	19	5	0	20	50	2	0	154	
7:10 AM	7	4	23	0	3	12	5	0	0	32	3	0	49	80	1	0	219	
7:15 AM	6	7	23	0	3	10	3	0	1	21	0	0	22	59	2	0	157	
7:20 AM	0	1	22	0	2	13	5	0	2	37	2	0	38	57	0	0	179	
7:25 AM	2	6	30	0	4	11	2	0	0	22	4	0	29	38	3	0	151	
7:30 AM	5	2	34	0	4	10	5	0	2	32	3	0	34	60	1	0	192	
7:35 AM	5	4	25	0	2	12	4	0	0	19	2	0	29	54	5	0	161	
7:40 AM	4	3	24	0	0	12	4	0	1	21	3	0	43	39	0	0	154	
7:45 AM	3	4	14	0	2	9	3	0	0	19	1	0	42	57	1	0	155	
7:50 AM	3	9	24	1	1	12	4	0	0	31	7	0	41	45	0	0	178	
7:55 AM	1	6	20	0	3	11	7	0	0	16	1	0	28	62	1	0	156	2027
8:00 AM	6	1	21	0	2	5	4	0	0	31	3	0	28	52	1	0	154	2010
8:05 AM	4	3	23	0	3	17	4	0	1	17	7	0	19	55	3	0	156	2012
8:10 AM	1	4	22	0	2	5	7	0	2	32	7	0	31	45	2	0	160	1953
8:15 AM	0	7	27	0	3	15	6	0	2	20	2	0	28	50	2	0	162	1958
8:20 AM	4	3	18	0	3	6	6	0	4	28	8	0	15	33	4	0	132	1911
8:25 AM	0	7	16	0	2	9	0	0	1	26	4	0	16	39	0	0	120	1880
8:30 AM	0	8	17	0	1	6	2	0	3	22	6	0	21	40	2	0	128	1816
8:35 AM	5	7	15	0	2	2	1	0	1	25	5	0	25	32	0	0	120	1775
8:40 AM	2	2	14	0	1	9	4	0	1	15	2	0	28	42	1	0	121	1742
8:45 AM	1	6	23	0	0	6	3	0	2	36	4	0	18	35	2	0	136	1723
8:50 AM	5	4	24	0	1	6	4	0	2	22	1	0	27	33	2	0	131	1676
8:55 AM	3	3	12	0	3	4	4	0	0	19	5	0	21	35	1	0	110	1630

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	52	48	272	0	32	140	52	0	12	360	20	0	436	784	12	0	2220
Heavy Trucks	16	4	36		0	0	4		0	64	4		12	28	0		168
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

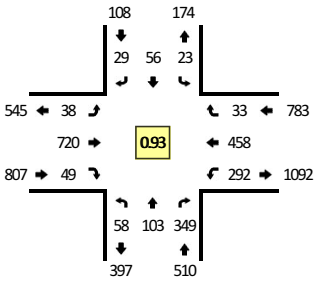
Report generated on 11/5/2024 3:38 PM

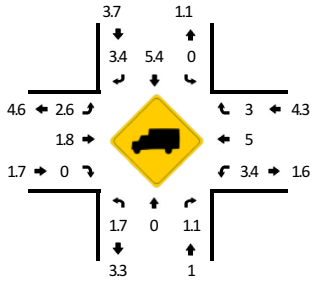
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

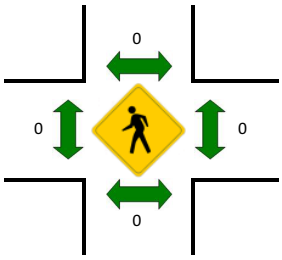
LOCATION: Santucci Blvd/Watt Ave -- Baseline Rd | **QC JOB #:** 16723532
CITY/STATE: Placer, CA | **DATE:** Wed, Oct 23 2024

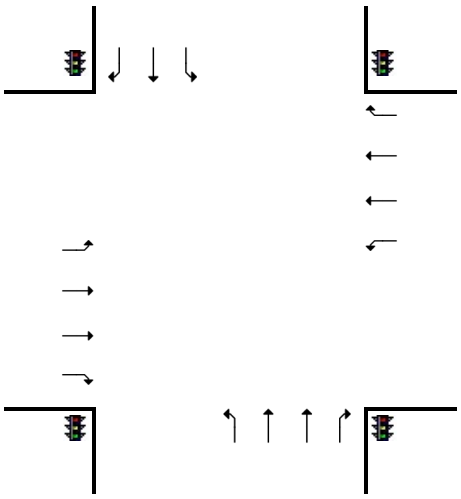
Peak-Hour: 4:40 PM -- 5:40 PM
Peak 15-Min: 4:40 PM -- 4:55 PM

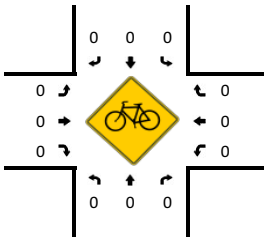


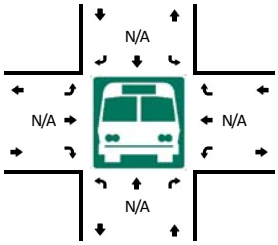


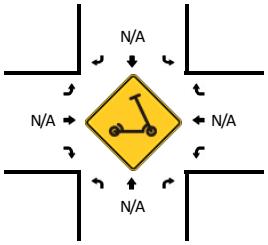
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Santucci Blvd/Watt Ave (Northbound)				Santucci Blvd/Watt Ave (Southbound)				Baseline Rd (Eastbound)				Baseline Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	5	4	33	0	3	3	7	0	2	58	3	0	26	37	2	0	183	
4:05 PM	5	7	31	0	1	5	5	0	3	49	3	0	22	36	4	0	171	
4:10 PM	4	8	21	0	2	5	6	0	1	54	8	0	28	41	1	0	179	
4:15 PM	6	4	24	0	4	4	7	0	3	73	4	0	14	39	4	0	186	
4:20 PM	4	7	21	0	2	7	3	0	0	59	2	0	12	37	1	0	155	
4:25 PM	7	11	26	0	2	3	3	0	4	57	4	0	27	30	4	0	178	
4:30 PM	4	11	36	0	1	3	4	0	6	56	4	0	20	44	7	0	196	
4:35 PM	4	6	31	0	2	3	2	0	2	46	5	0	27	31	2	0	161	
4:40 PM	5	10	26	0	4	4	2	0	1	71	6	0	35	46	6	0	216	
4:45 PM	3	7	29	0	4	6	2	0	5	55	10	0	29	32	1	0	183	
4:50 PM	3	8	32	0	3	4	2	0	5	65	2	0	19	50	0	0	193	
4:55 PM	7	8	25	0	4	1	2	0	3	58	3	0	30	38	4	0	183	2184
5:00 PM	5	8	29	0	1	3	1	0	2	61	4	0	17	35	1	0	167	2168
5:05 PM	3	6	16	0	2	2	3	0	2	65	3	0	21	48	3	0	174	2171
5:10 PM	8	9	32	0	2	0	2	0	4	59	3	0	25	38	3	0	185	2177
5:15 PM	3	6	38	0	2	6	4	0	4	57	3	0	20	38	2	0	183	2174
5:20 PM	5	6	25	0	0	5	6	0	5	68	6	0	15	35	7	0	183	2202
5:25 PM	5	19	31	0	0	5	1	0	3	60	3	0	22	29	4	0	182	2206
5:30 PM	1	8	32	0	0	6	2	0	2	57	2	0	21	31	1	0	163	2173
5:35 PM	10	8	34	0	1	14	2	0	2	44	4	0	38	38	1	0	196	2208
5:40 PM	6	8	34	0	3	5	2	0	0	73	2	0	15	29	4	0	181	2173
5:45 PM	4	3	32	0	1	5	3	0	2	62	2	0	23	33	5	0	175	2165
5:50 PM	6	11	31	0	0	2	2	0	1	50	1	0	24	24	6	0	158	2130
5:55 PM	9	12	23	0	4	6	5	0	5	76	7	0	11	21	1	0	180	2127

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	44	100	348	0	44	56	24	0	44	764	72	0	332	512	28	0	2368
Heavy Trucks	4	0	4		0	8	0		0	28	0		16	28	0		88
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

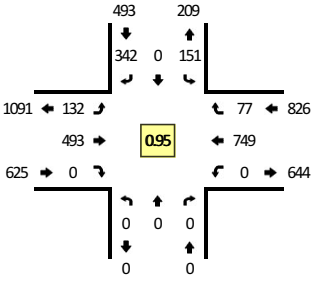
Type of peak hour being reported: Intersection Peak

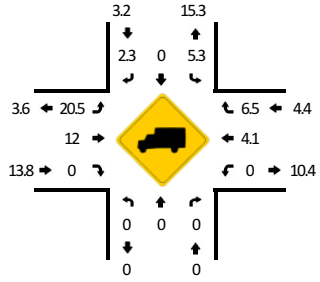
Method for determining peak hour: Total Entering Volume

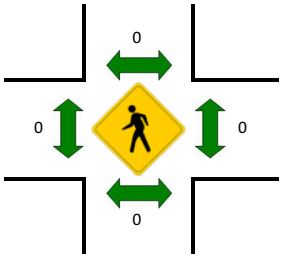
LOCATION: Westbrook Blvd -- Baseline Rd
CITY/STATE: Roseville, CA

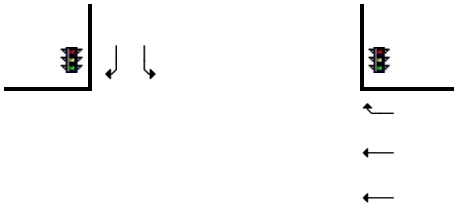
QC JOB #: 16723533
DATE: Wed, Oct 23 2024

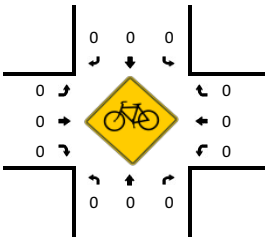
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:00 AM -- 7:15 AM

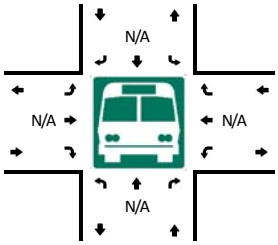


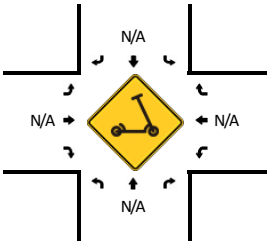












5-Min Count Period Beginning At	Westbrook Blvd (Northbound)				Westbrook Blvd (Southbound)				Baseline Rd (Eastbound)				Baseline Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	13	0	36	0	20	37	0	0	0	55	3	0	164	
7:05 AM	0	0	0	0	6	0	34	0	14	34	0	0	0	79	10	0	177	
7:10 AM	0	0	0	0	9	0	35	0	19	34	0	0	0	64	9	0	170	
7:15 AM	0	0	0	0	11	0	39	0	19	31	0	0	0	48	3	0	151	
7:20 AM	0	0	0	0	8	0	28	0	11	51	0	0	0	63	4	0	165	
7:25 AM	0	0	0	0	9	0	21	0	8	40	0	0	0	51	3	0	132	
7:30 AM	0	0	0	0	13	0	27	0	10	63	0	0	0	58	7	0	178	
7:35 AM	0	0	0	0	16	0	20	0	6	46	0	0	0	72	2	0	162	
7:40 AM	0	0	0	0	21	0	23	0	5	42	0	0	0	60	4	0	155	
7:45 AM	0	0	0	0	21	0	35	0	4	36	0	0	0	74	9	0	179	
7:50 AM	0	0	0	0	11	0	23	0	9	46	0	0	0	68	9	0	166	
7:55 AM	0	0	0	0	13	0	21	0	7	33	0	0	0	57	14	0	145	1944
8:00 AM	0	0	0	0	11	0	28	0	9	41	0	0	0	65	8	0	162	1942
8:05 AM	0	0	0	0	16	0	16	0	11	38	0	0	0	65	8	0	154	1919
8:10 AM	0	0	0	0	10	0	22	0	8	41	0	0	0	53	1	0	135	1884
8:15 AM	0	0	0	0	13	0	17	0	8	40	0	0	0	52	8	0	138	1871
8:20 AM	0	0	0	0	21	0	9	0	12	45	0	0	0	45	7	0	139	1845
8:25 AM	0	0	0	0	8	0	19	0	6	39	0	0	0	48	5	0	125	1838
8:30 AM	0	0	0	0	20	0	17	0	14	29	0	0	0	44	7	0	131	1791
8:35 AM	0	0	0	0	11	0	22	0	5	30	0	0	0	36	5	0	109	1738
8:40 AM	0	0	0	0	8	0	12	0	3	34	0	0	0	57	10	0	124	1707
8:45 AM	0	0	0	0	13	0	18	0	9	44	0	0	0	37	7	0	128	1656
8:50 AM	0	0	0	0	10	0	14	0	8	49	0	0	0	42	5	0	128	1618
8:55 AM	0	0	0	0	8	0	13	0	5	20	0	0	0	47	3	0	96	1569

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	112	0	420	0	212	420	0	0	0	792	88	0	2044
Heavy Trucks	0	0	0		0	0	4		44	76	0		0	40	4		168
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

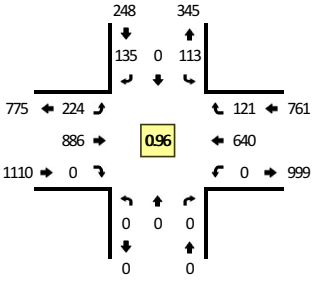
Type of peak hour being reported: Intersection Peak

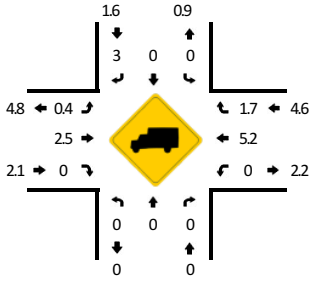
Method for determining peak hour: Total Entering Volume

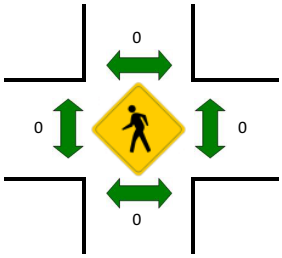
LOCATION: Westbrook Blvd -- Baseline Rd
CITY/STATE: Roseville, CA

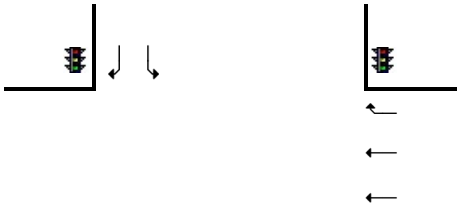
QC JOB #: 16723534
DATE: Wed, Oct 23 2024

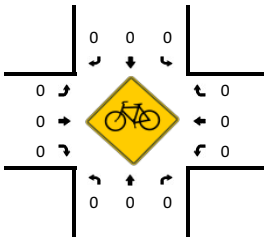
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 4:50 PM -- 5:05 PM

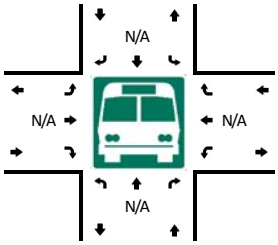


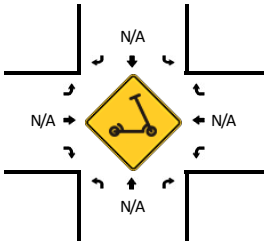












5-Min Count Period Beginning At	Westbrook Blvd (Northbound)				Westbrook Blvd (Southbound)				Baseline Rd (Eastbound)				Baseline Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	5	0	8	0	18	68	0	0	0	45	9	0	153	
4:05 PM	0	0	0	0	10	0	17	0	15	78	0	0	0	49	9	0	178	
4:10 PM	0	0	0	0	10	0	15	0	11	67	0	0	0	47	15	0	165	
4:15 PM	0	0	0	0	6	0	11	0	15	83	0	0	0	48	11	0	174	
4:20 PM	0	0	0	0	7	0	10	0	21	73	0	0	0	43	14	0	168	
4:25 PM	0	0	0	0	6	0	13	0	12	47	0	0	0	61	6	0	145	
4:30 PM	0	0	0	0	9	0	12	0	18	80	0	0	0	58	9	0	186	
4:35 PM	0	0	0	0	9	0	10	0	20	79	0	0	0	54	9	0	181	
4:40 PM	0	0	0	0	8	0	20	0	16	72	0	0	0	57	5	0	178	
4:45 PM	0	0	0	0	4	0	11	0	15	77	0	0	0	49	10	0	166	
4:50 PM	0	0	0	0	10	0	11	0	13	77	0	0	0	72	6	0	189	
4:55 PM	0	0	0	0	7	0	11	0	14	91	0	0	0	56	13	0	192	2075
5:00 PM	0	0	0	0	9	0	6	0	24	63	0	0	0	49	18	0	169	2091
5:05 PM	0	0	0	0	14	0	9	0	22	69	0	0	0	53	7	0	174	2087
5:10 PM	0	0	0	0	8	0	13	0	19	73	0	0	0	45	7	0	165	2087
5:15 PM	0	0	0	0	12	0	11	0	19	79	0	0	0	46	12	0	179	2092
5:20 PM	0	0	0	0	10	0	12	0	15	76	0	0	0	63	9	0	185	2109
5:25 PM	0	0	0	0	13	0	9	0	29	50	0	0	0	38	16	0	155	2119
5:30 PM	0	0	0	0	6	0	3	0	22	63	0	0	0	52	5	0	151	2084
5:35 PM	0	0	0	0	6	0	20	0	19	67	0	0	0	48	8	0	168	2071
5:40 PM	0	0	0	0	13	0	9	0	26	83	0	0	0	54	25	0	210	2103
5:45 PM	0	0	0	0	10	0	8	0	19	75	0	0	0	37	8	0	157	2094
5:50 PM	0	0	0	0	4	0	8	0	20	69	0	0	0	46	18	0	165	2070
5:55 PM	0	0	0	0	7	0	12	0	22	72	0	0	0	29	14	0	156	2034

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	104	0	112	0	204	924	0	0	0	708	148	0	2200
Heavy Trucks	0	0	0		0	0	0		0	24	0		0	32	4		60
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

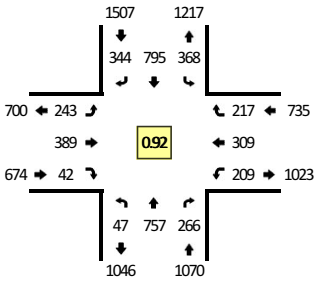
Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

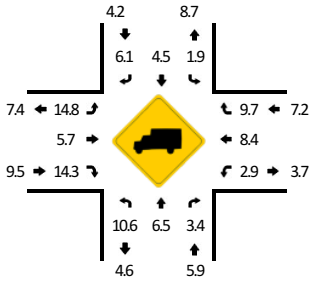
LOCATION: Fiddyment Rd -- Baseline Rd
CITY/STATE: Roseville, CA

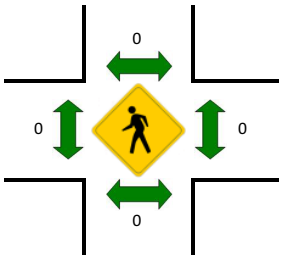
QC JOB #: 16723535
DATE: Thu, Oct 24 2024

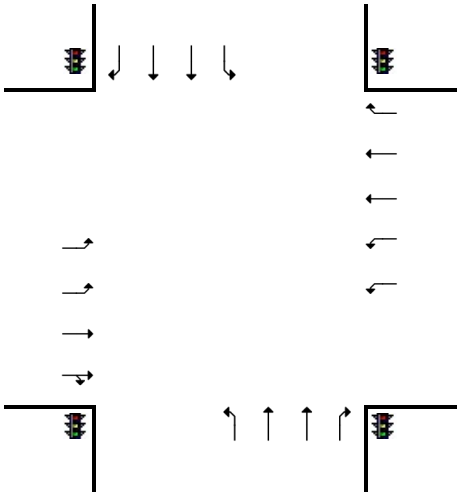
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

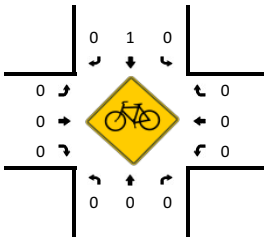


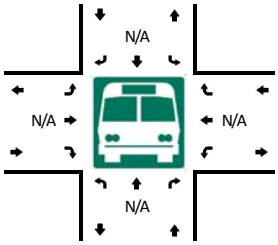
TRUE DATA TO IMPROVE MOBILITY

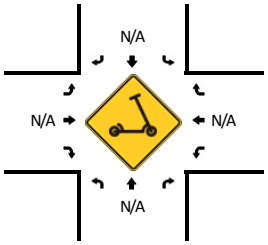












5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Baseline Rd (Eastbound)				Baseline Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	4	33	15	0	10	69	41	0	9	26	4	0	14	29	8	0	262	
7:05 AM	2	73	10	0	21	57	32	0	15	16	1	0	12	19	6	0	264	
7:10 AM	1	36	15	0	21	57	40	0	23	27	2	0	18	33	17	0	290	
7:15 AM	11	65	22	0	29	70	27	0	12	27	2	0	10	22	14	0	311	
7:20 AM	1	72	19	0	21	75	28	0	17	29	2	0	21	26	25	0	336	
7:25 AM	3	55	18	0	27	62	23	0	30	22	3	0	15	17	14	0	289	
7:30 AM	2	63	16	0	29	63	22	0	34	40	4	0	17	22	19	0	331	
7:35 AM	4	79	25	0	29	54	35	0	13	43	3	0	13	36	20	0	354	
7:40 AM	4	58	30	0	41	70	28	0	14	40	5	0	16	25	13	0	344	
7:45 AM	3	62	30	0	42	58	24	0	17	36	4	0	14	32	21	0	343	
7:50 AM	5	53	17	0	38	86	31	0	16	49	4	0	17	30	16	0	362	
7:55 AM	4	75	21	0	31	78	31	0	35	31	6	0	25	22	17	0	376	3862
8:00 AM	3	44	16	0	38	48	27	0	19	22	4	0	19	31	19	0	290	3890
8:05 AM	3	78	30	0	22	71	42	0	9	23	3	0	12	25	14	0	332	3958
8:10 AM	4	53	22	0	21	60	26	0	27	27	2	0	30	21	25	0	318	3986
8:15 AM	3	37	24	0	22	52	24	0	10	29	4	0	13	21	20	0	259	3934
8:20 AM	8	65	22	0	22	50	25	0	15	34	4	0	24	25	13	0	307	3905
8:25 AM	2	38	18	0	21	52	31	0	24	21	8	0	17	37	29	0	298	3914
8:30 AM	6	66	19	0	34	58	25	0	13	32	4	0	9	26	27	0	319	3902
8:35 AM	4	66	25	0	27	57	23	0	13	21	7	0	17	17	12	0	289	3837
8:40 AM	7	71	21	0	29	45	27	0	22	27	2	0	10	14	21	0	296	3789
8:45 AM	0	50	14	0	30	55	28	1	25	25	6	0	19	22	21	0	296	3742
8:50 AM	6	29	21	0	25	45	26	0	21	32	4	0	9	17	19	0	254	3634
8:55 AM	3	43	7	0	15	32	21	0	18	20	2	0	16	26	17	0	220	3478

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	48	760	272	0	444	888	344	0	272	464	56	0	224	336	216	0	4324
Heavy Trucks	4	32	16		4	28	20		24	16	16		4	16	16		196
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

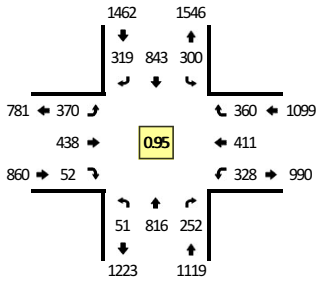
Type of peak hour being reported: Intersection Peak

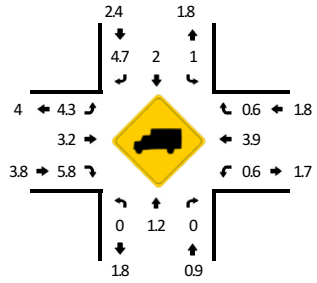
Method for determining peak hour: Total Entering Volume

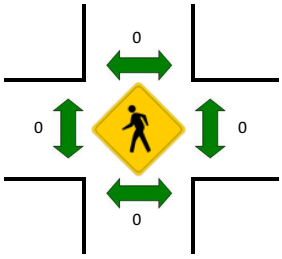
LOCATION: Fiddyment Rd -- Baseline Rd
CITY/STATE: Roseville, CA

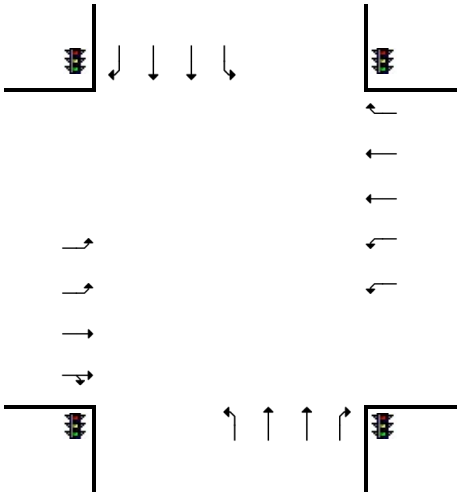
QC JOB #: 16723536
DATE: Thu, Oct 24 2024

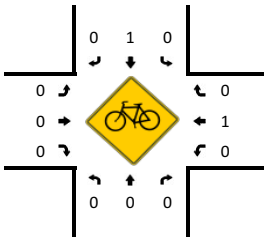
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:10 PM -- 5:25 PM

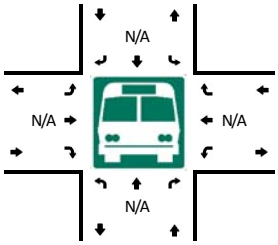


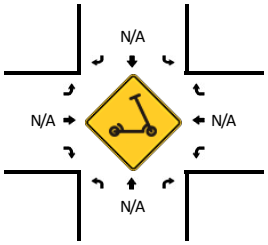












5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Baseline Rd (Eastbound)				Baseline Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	4	40	17	0	24	73	26	0	42	28	1	0	20	21	37	0	333	
4:05 PM	0	53	21	0	23	42	22	0	31	30	4	0	27	28	34	0	315	
4:10 PM	2	54	19	1	22	72	31	0	31	29	2	0	25	39	33	0	360	
4:15 PM	5	69	13	0	18	69	28	0	30	33	1	0	24	36	28	0	354	
4:20 PM	4	61	26	0	21	80	32	0	41	59	2	0	27	32	29	0	414	
4:25 PM	4	52	25	0	23	72	31	0	41	39	7	0	15	23	28	0	360	
4:30 PM	6	67	18	0	24	62	25	0	35	51	4	0	26	33	25	0	376	
4:35 PM	6	55	20	0	20	72	27	0	22	37	5	0	32	42	31	0	369	
4:40 PM	7	87	33	0	16	77	26	0	28	25	4	0	21	26	40	0	390	
4:45 PM	2	63	9	0	36	64	17	0	29	35	4	0	29	37	31	0	356	
4:50 PM	3	66	21	0	22	64	41	0	31	28	1	0	29	43	24	0	373	
4:55 PM	3	64	21	0	29	74	17	0	26	37	3	0	22	42	36	0	374	4374
5:00 PM	4	76	22	0	25	73	17	0	28	37	4	0	34	23	19	0	362	4403
5:05 PM	3	71	24	0	22	66	22	0	38	42	6	0	24	34	24	0	376	4464
5:10 PM	5	62	21	0	23	70	41	0	36	35	3	0	24	27	37	0	384	4488
5:15 PM	4	49	18	0	33	80	37	0	45	40	7	0	19	31	31	0	394	4528
5:20 PM	4	90	30	0	20	72	29	0	23	33	6	0	33	40	34	0	414	4528
5:25 PM	4	66	15	0	30	69	20	0	29	38	5	0	35	33	28	0	372	4540
5:30 PM	6	60	19	0	25	68	23	0	34	41	5	0	23	37	32	0	373	4537
5:35 PM	4	69	20	0	17	62	24	0	37	40	3	0	25	28	31	0	360	4528
5:40 PM	2	36	16	0	20	70	16	0	40	37	6	0	32	45	47	0	367	4505
5:45 PM	8	54	15	0	18	60	34	0	34	29	5	0	25	36	36	0	354	4503
5:50 PM	1	64	12	0	23	67	19	0	30	39	4	0	11	16	31	0	317	4447
5:55 PM	7	48	17	1	30	73	28	0	27	23	7	0	23	31	24	0	339	4412

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	52	804	276	0	304	888	428	0	416	432	64	0	304	392	408	0	4768
Heavy Trucks	0	8	0		4	4	28		16	32	4		0	12	0		108
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	4	0		4
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

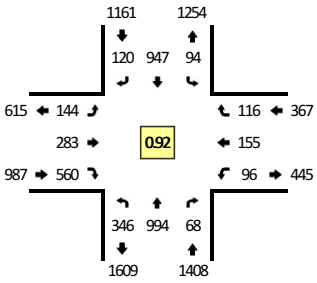
Type of peak hour being reported: Intersection Peak

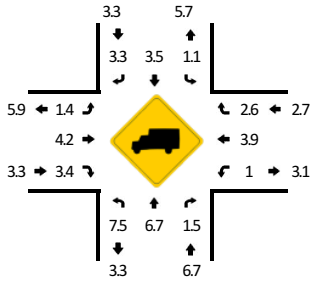
Method for determining peak hour: Total Entering Volume

LOCATION: Foothills Blvd -- Baseline Rd/Main St
CITY/STATE: Roseville, CA

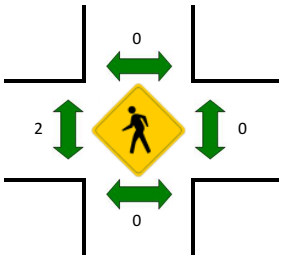
QC JOB #: 16723537
DATE: Thu, Oct 24 2024

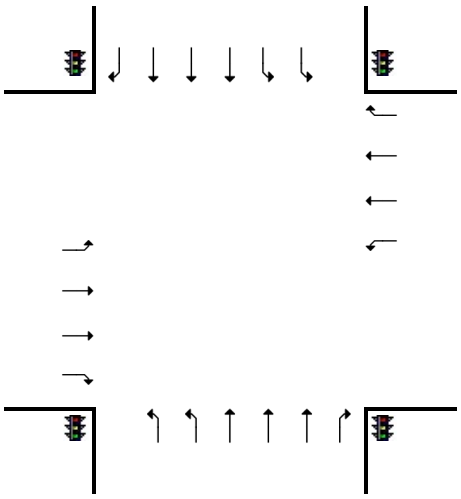
Peak-Hour: 7:25 AM -- 8:25 AM
Peak 15-Min: 7:40 AM -- 7:55 AM

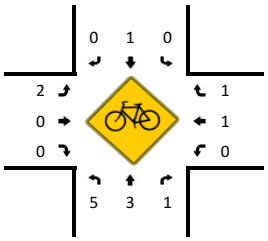


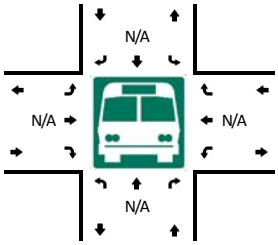


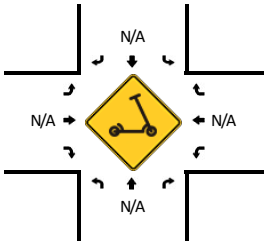
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Foothills Blvd (Northbound)				Foothills Blvd (Southbound)				Baseline Rd/Main St (Eastbound)				Baseline Rd/Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	16	44	6	0	4	56	7	0	8	13	39	0	9	5	2	0	209	
7:05 AM	18	48	4	0	3	81	5	0	3	11	41	0	7	7	4	0	232	
7:10 AM	19	58	5	0	1	67	9	0	13	15	36	0	10	11	2	0	246	
7:15 AM	28	41	1	1	7	59	11	1	7	19	47	0	8	10	4	0	244	
7:20 AM	18	66	6	0	2	67	8	1	9	25	38	0	6	6	12	0	264	
7:25 AM	39	70	10	3	8	74	5	0	4	18	49	0	3	12	5	0	300	
7:30 AM	20	62	12	0	7	60	8	0	19	23	53	0	6	9	15	0	294	
7:35 AM	24	67	11	0	6	84	3	0	17	30	54	0	5	10	16	0	327	
7:40 AM	40	85	7	0	17	64	10	0	11	15	54	0	8	9	15	0	335	
7:45 AM	16	92	3	0	3	101	13	0	16	19	56	0	17	16	10	0	362	
7:50 AM	33	105	3	0	8	78	17	0	8	33	48	0	6	17	8	0	364	
7:55 AM	27	80	4	0	7	92	8	0	9	21	42	0	8	9	9	0	316	3493
8:00 AM	26	66	5	0	7	86	16	0	13	32	40	0	7	18	9	0	325	3609
8:05 AM	32	111	3	1	7	67	3	0	9	22	44	0	5	14	3	0	321	3698
8:10 AM	20	89	2	1	10	92	13	0	18	22	42	0	3	15	10	0	337	3789
8:15 AM	26	75	3	1	6	77	11	0	12	28	34	0	16	17	10	0	316	3861
8:20 AM	37	92	5	0	8	72	13	0	8	20	44	0	12	9	6	0	326	3923
8:25 AM	20	63	4	0	5	74	4	0	15	23	36	0	10	18	9	0	281	3904
8:30 AM	23	72	7	0	10	101	10	2	10	14	42	0	4	7	5	0	307	3917
8:35 AM	21	43	2	1	6	70	4	0	16	24	48	0	4	22	4	0	265	3855
8:40 AM	28	60	2	0	6	56	7	0	15	17	52	0	7	22	6	0	278	3798
8:45 AM	27	54	2	1	4	87	9	1	10	24	47	0	2	8	12	0	288	3724
8:50 AM	27	91	0	0	6	84	9	0	4	24	35	0	6	17	4	0	307	3667
8:55 AM	21	59	5	0	6	54	10	1	17	18	33	0	3	13	7	0	247	3598

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	356	1128	52	0	112	972	160	0	140	268	632	0	124	168	132	0	4244
Heavy Trucks	12	44	0		0	32	8		0	4	16		4	8	4		132
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	4	8	4		0	0	0		0	0	0		0	0	0		16
Scooters																	

Comments:

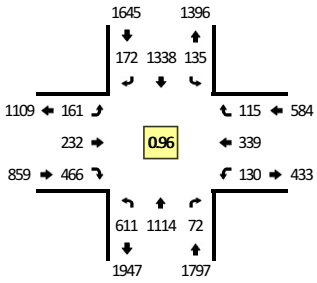
Report generated on 11/5/2024 3:38 PM

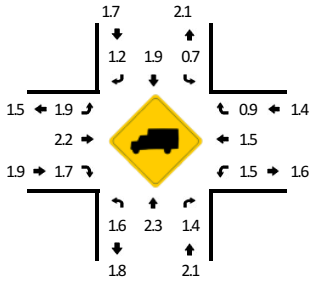
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

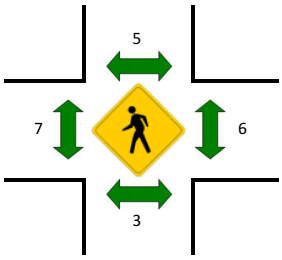
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

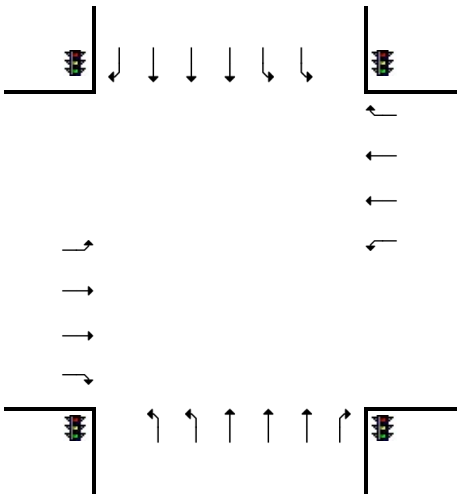
LOCATION: Foothills Blvd -- Baseline Rd/Main St | **QC JOB #:** 16723538
CITY/STATE: Roseville, CA | **DATE:** Thu, Oct 24 2024

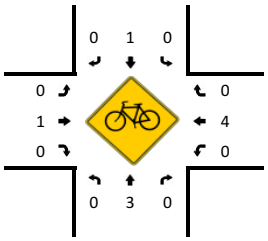
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

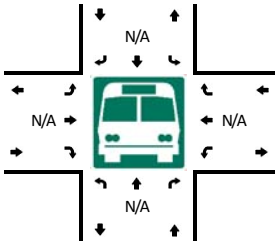


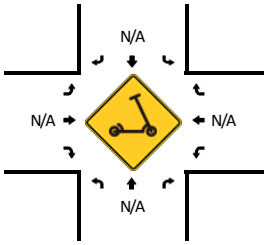












5-Min Count Period Beginning At	Foothills Blvd (Northbound)				Foothills Blvd (Southbound)				Baseline Rd/Main St (Eastbound)				Baseline Rd/Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	59	83	2	1	14	81	10	1	11	28	43	0	5	31	7	0	376	
4:05 PM	47	89	4	2	4	109	10	1	8	10	41	0	9	24	7	0	365	
4:10 PM	63	106	7	2	11	94	18	0	12	17	29	0	9	28	4	0	400	
4:15 PM	36	100	7	1	9	115	12	0	12	19	40	0	6	29	8	0	394	
4:20 PM	52	77	5	0	8	134	12	0	13	18	24	0	7	20	10	0	380	
4:25 PM	33	87	10	2	13	85	9	1	18	25	20	0	17	25	11	0	356	
4:30 PM	45	82	4	1	15	94	14	1	10	21	37	0	8	29	9	0	370	
4:35 PM	48	94	7	0	8	113	13	1	14	16	41	0	12	27	9	0	403	
4:40 PM	65	84	1	2	24	79	15	1	15	13	39	0	3	27	10	0	378	
4:45 PM	50	119	3	1	4	102	15	0	11	17	36	0	15	20	15	0	408	
4:50 PM	47	113	3	1	11	103	11	0	14	23	47	0	12	37	7	0	429	
4:55 PM	38	76	6	0	8	125	9	1	13	5	39	0	7	27	8	0	362	4621
5:00 PM	40	112	9	0	10	119	11	2	10	28	36	0	14	20	8	0	419	4664
5:05 PM	46	91	10	0	9	112	5	1	13	12	34	0	8	24	6	0	371	4670
5:10 PM	45	89	4	1	8	119	14	0	19	27	47	0	4	38	11	0	426	4696
5:15 PM	48	88	6	1	14	112	20	1	14	24	43	0	13	30	7	0	421	4723
5:20 PM	56	84	6	1	20	112	14	0	14	21	38	0	13	30	14	0	423	4766
5:25 PM	49	93	11	1	7	131	24	1	13	26	28	0	9	29	6	0	428	4838
5:30 PM	56	77	3	2	12	105	19	0	12	10	43	0	15	28	16	0	398	4866
5:35 PM	55	80	4	1	12	107	15	0	12	17	42	0	7	22	13	0	387	4850
5:40 PM	68	92	7	4	14	91	15	0	16	22	33	0	13	34	4	0	413	4885
5:45 PM	55	82	7	1	17	100	18	1	13	10	27	0	9	29	9	0	378	4855
5:50 PM	45	84	3	3	18	122	21	1	15	18	33	0	10	22	5	0	400	4826
5:55 PM	47	88	4	1	4	64	12	0	18	18	24	0	10	26	9	0	325	4789

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	612	1060	92	12	164	1420	232	8	164	284	436	0	140	356	108	0	5088
Heavy Trucks	8	28	0		0	12	4		8	4	4		4	8	0		80
Buses																	
Pedestrians		4				12				0				16			32
Bicycles	0	0	0		0	0	0		0	0	0		0	4	0		4
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

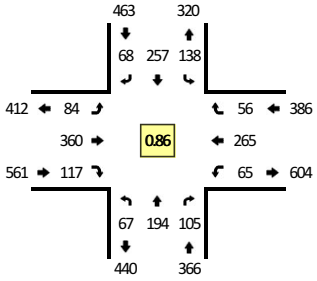
Type of peak hour being reported: Intersection Peak

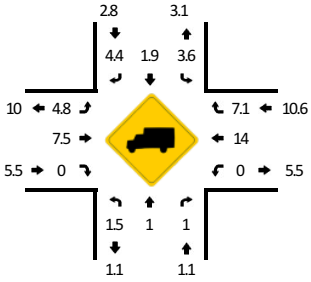
Method for determining peak hour: Total Entering Volume

LOCATION: Hayden Pkwy -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

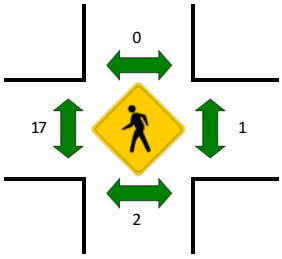
QC JOB #: 16723539
DATE: Thu, Oct 24 2024

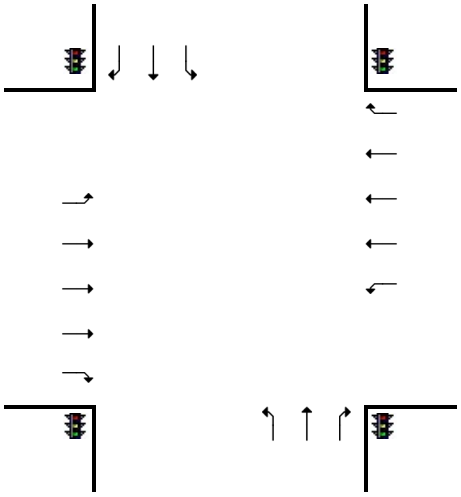
Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 8:05 AM -- 8:20 AM

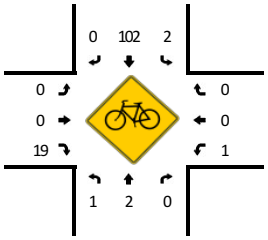


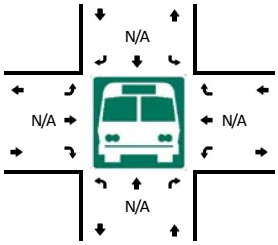


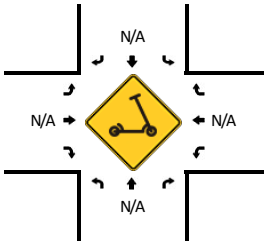
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Hayden Pkwy (Northbound)				Hayden Pkwy (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	3	3	0	11	1	4	0	3	23	2	0	1	30	6	0	88	
7:05 AM	1	3	3	0	12	7	4	0	2	18	6	0	1	15	4	0	76	
7:10 AM	3	6	4	0	10	7	3	0	4	26	2	2	4	12	6	0	89	
7:15 AM	2	10	4	0	18	7	1	0	7	36	2	4	0	16	4	0	111	
7:20 AM	2	19	5	0	12	12	4	0	12	42	4	1	3	22	1	0	139	
7:25 AM	4	20	5	0	10	4	1	0	9	45	3	2	5	13	4	0	125	
7:30 AM	10	27	4	0	9	14	5	0	5	27	0	5	3	16	4	0	129	
7:35 AM	6	15	10	0	12	26	13	0	10	41	9	2	1	11	1	0	157	
7:40 AM	2	12	8	0	24	29	8	0	6	29	8	1	3	19	2	1	152	
7:45 AM	4	7	8	0	8	26	7	0	3	21	6	0	3	28	4	0	125	
7:50 AM	0	12	7	0	10	19	6	0	3	32	8	1	10	19	9	0	136	
7:55 AM	10	14	10	0	13	19	6	0	5	28	4	0	6	32	8	0	155	1482
8:00 AM	3	19	10	2	10	18	3	0	6	24	9	1	5	24	5	0	139	1533
8:05 AM	8	19	11	0	8	21	5	0	5	30	23	1	8	29	6	0	174	1631
8:10 AM	5	12	14	0	15	44	4	0	3	17	21	0	11	33	8	0	187	1729
8:15 AM	11	18	13	0	7	25	6	0	3	24	22	0	6	19	4	0	158	1776
8:20 AM	4	17	9	0	9	12	5	0	2	29	6	0	3	13	4	0	113	1750
8:25 AM	10	22	10	0	13	5	3	0	3	18	3	0	4	13	4	0	108	1733
8:30 AM	6	21	13	0	10	4	1	0	3	30	0	1	4	24	4	0	121	1725
8:35 AM	2	3	7	0	17	2	2	0	1	36	2	0	1	22	13	1	109	1677
8:40 AM	1	4	9	0	9	6	1	0	0	22	0	0	1	17	8	1	79	1604
8:45 AM	1	4	5	0	12	3	4	0	0	18	1	0	1	15	6	0	70	1549
8:50 AM	2	1	3	0	5	4	2	0	1	32	0	0	0	21	7	0	78	1491
8:55 AM	1	0	1	0	9	1	2	0	0	21	0	0	2	9	9	0	55	1391

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	96	196	152	0	120	360	60	0	44	284	264	4	100	324	72	0	2076
Heavy Trucks	0	0	0		8	0	4		4	24	0		0	48	12		100
Buses																	
Pedestrians		0				0				32				4			36
Bicycles	4	4	0		0	144	0		0	0	44		4	0	0		200
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

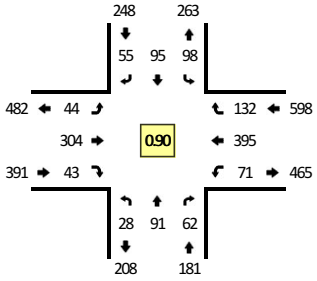
Type of peak hour being reported: Intersection Peak

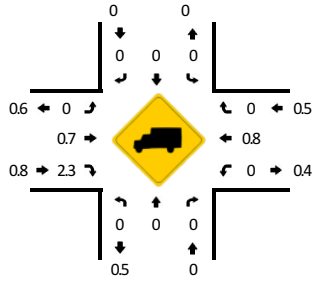
Method for determining peak hour: Total Entering Volume

LOCATION: Hayden Pkwy -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

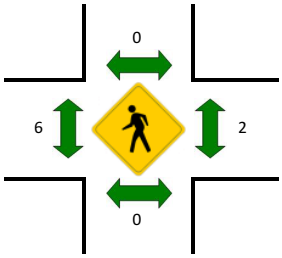
QC JOB #: 16723540
DATE: Thu, Oct 24 2024

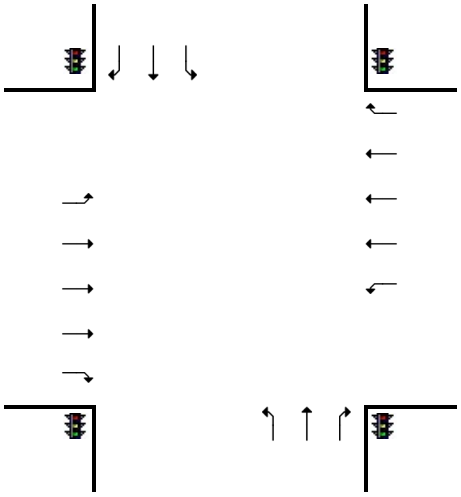
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

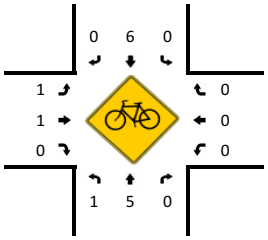


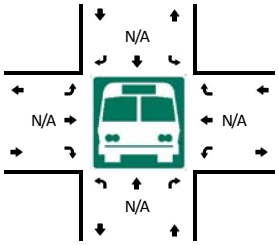


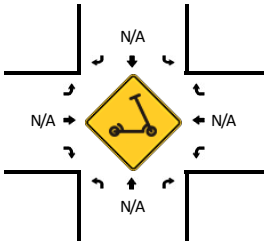
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Hayden Pkwy (Northbound)				Hayden Pkwy (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	4	12	0	12	5	8	0	2	32	6	0	4	37	11	0	135	
4:05 PM	3	4	3	0	10	2	1	0	3	27	2	0	4	31	14	0	104	
4:10 PM	2	6	6	0	4	5	2	0	2	28	3	0	9	27	10	0	104	
4:15 PM	4	4	6	0	4	7	1	0	3	14	1	0	7	26	13	1	91	
4:20 PM	2	6	7	0	12	4	1	0	4	23	5	0	12	34	14	1	125	
4:25 PM	2	5	6	0	9	9	4	0	2	16	2	0	6	26	12	1	100	
4:30 PM	1	0	5	0	7	5	6	0	8	21	1	1	8	38	8	0	109	
4:35 PM	1	5	4	0	3	0	4	0	4	26	1	0	8	20	8	0	84	
4:40 PM	1	5	1	0	11	8	5	0	5	21	3	0	4	45	18	1	128	
4:45 PM	3	2	6	0	6	8	4	0	2	27	1	0	6	19	13	0	97	
4:50 PM	3	3	6	0	9	3	4	0	3	16	3	0	10	28	5	0	93	
4:55 PM	2	3	5	0	9	9	6	0	3	24	1	1	7	19	13	2	104	1274
5:00 PM	0	7	5	0	5	7	3	0	1	31	3	0	4	31	5	0	102	1241
5:05 PM	2	6	4	0	11	6	6	0	6	24	0	0	11	38	8	0	122	1259
5:10 PM	0	9	2	0	7	11	6	0	5	25	2	1	4	26	6	0	104	1259
5:15 PM	1	3	5	0	7	4	9	0	4	35	6	0	7	47	11	0	139	1307
5:20 PM	2	9	5	0	5	14	5	0	0	18	2	0	7	27	13	0	107	1289
5:25 PM	5	2	9	0	12	6	3	0	0	15	4	0	6	20	11	0	93	1282
5:30 PM	0	6	4	0	9	16	3	0	4	37	8	1	5	38	12	0	143	1316
5:35 PM	5	15	7	0	12	11	6	0	5	22	4	1	4	24	10	0	126	1358
5:40 PM	3	10	8	0	11	7	3	0	3	24	4	0	2	36	14	0	125	1355
5:45 PM	4	12	3	0	8	6	2	0	4	27	3	0	9	41	16	0	135	1393
5:50 PM	3	6	4	0	7	4	4	0	4	25	3	0	5	32	10	1	108	1408
5:55 PM	3	6	6	0	4	3	5	0	4	21	4	1	6	35	16	0	114	1418

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	32	124	76	0	128	136	48	0	48	332	64	8	44	392	144	0	1576
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Buses																	
Pedestrians		0				0				16				0			16
Bicycles	0	0	0		0	12	0		4	4	0		0	0	0		20
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

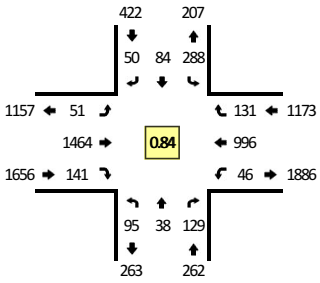
Type of peak hour being reported: Intersection Peak

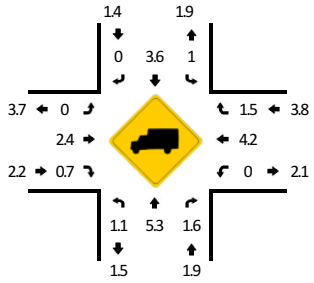
Method for determining peak hour: Total Entering Volume

LOCATION: Diamond Creek Blvd/Prairie Woods Wy -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

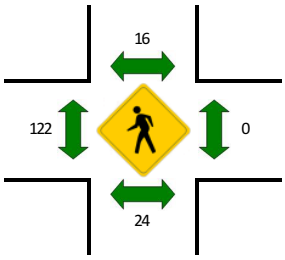
QC JOB #: 16723541
DATE: Thu, Oct 24 2024

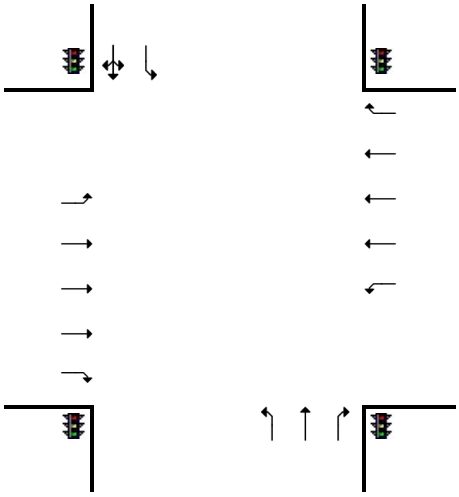
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

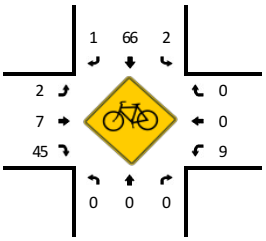


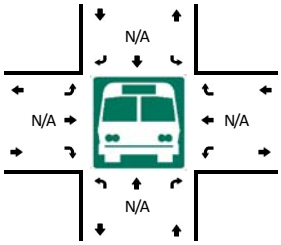


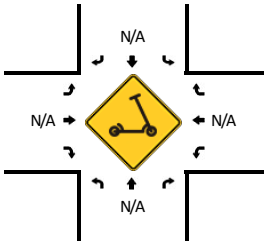
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Diamond Creek Blvd/Prairie Woods Wy (Northbound)				Diamond Creek Blvd/Prairie Woods Wy (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	3	0	9	1	0	0	0	86	1	0	0	59	6	0	165	
7:05 AM	1	0	4	0	19	3	1	0	2	66	1	0	3	53	4	1	158	
7:10 AM	2	0	2	0	7	0	1	0	0	101	3	0	2	69	5	0	192	
7:15 AM	0	0	0	0	19	1	0	0	1	95	4	0	3	52	6	0	181	
7:20 AM	1	1	4	0	14	3	3	0	5	153	11	0	2	58	3	0	258	
7:25 AM	8	1	3	0	32	4	1	0	2	102	9	0	5	45	5	0	217	
7:30 AM	5	2	6	0	20	7	2	0	7	138	15	0	9	69	7	1	288	
7:35 AM	4	5	13	0	24	13	1	0	4	106	24	4	5	66	7	2	278	
7:40 AM	3	1	8	0	33	16	10	0	4	112	19	4	3	72	5	0	290	
7:45 AM	10	2	18	0	24	8	9	1	2	143	13	2	5	106	10	0	353	
7:50 AM	15	5	24	0	24	11	6	1	0	135	19	1	5	87	11	2	346	
7:55 AM	18	8	26	0	35	15	5	1	0	108	20	3	1	90	10	1	341	3067
8:00 AM	13	10	16	0	27	4	5	0	1	103	16	0	5	75	10	0	285	3187
8:05 AM	19	1	8	0	16	5	2	0	4	174	5	1	3	116	17	0	371	3400
8:10 AM	3	1	4	0	22	4	3	0	3	122	4	1	0	83	13	0	263	3471
8:15 AM	2	1	2	0	23	0	3	0	4	90	3	0	0	57	12	1	198	3488
8:20 AM	0	1	3	0	18	0	3	0	3	135	1	0	1	80	13	1	259	3489
8:25 AM	3	1	1	0	19	1	1	0	3	98	2	0	1	95	16	0	241	3513
8:30 AM	2	0	3	0	14	0	2	0	3	105	2	0	1	78	13	1	224	3449
8:35 AM	1	0	2	0	16	1	3	1	2	134	0	0	1	76	16	0	253	3424
8:40 AM	0	0	3	0	19	1	3	0	2	159	1	0	0	68	7	0	263	3397
8:45 AM	2	1	2	0	17	0	2	0	2	104	0	1	1	87	9	0	228	3272
8:50 AM	0	0	1	0	14	0	2	0	1	128	2	0	1	65	11	0	225	3151
8:55 AM	0	0	3	0	10	2	1	0	3	96	0	0	1	65	8	1	190	3000

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	172	60	272	0	332	136	80	12	8	1544	208	24	44	1132	124	12	4160
Heavy Trucks	0	4	8		8	4	0		0	36	0		0	36	8		104
Buses																	
Pedestrians		68				48				264				0			380
Bicycles	0	0	0		0	108	0		4	8	136		20	0	0		276
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Diamond Creek Blvd/Prairie Woods Wy -- Blue Oaks Blvd

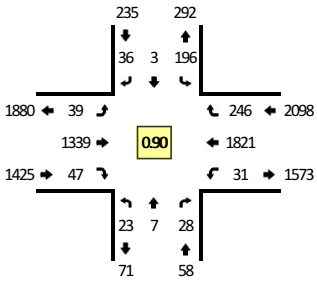
CITY/STATE: Roseville, CA

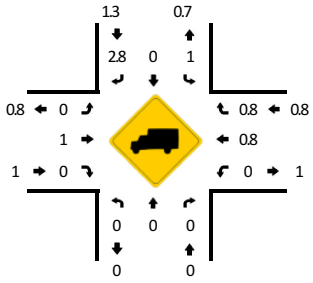
QC JOB #: 16723542

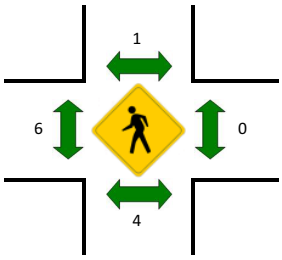
DATE: Thu, Oct 24 2024

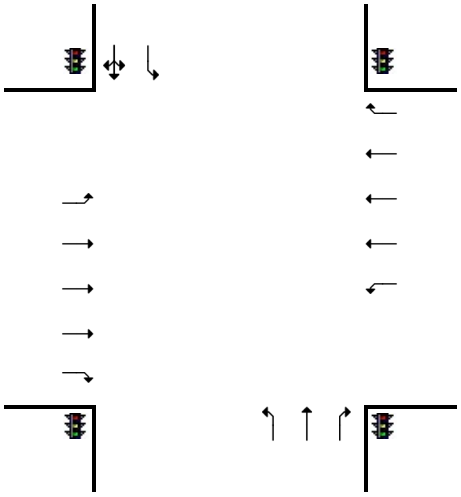
Peak-Hour: 5:00 PM -- 6:00 PM

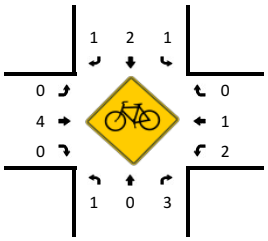
Peak 15-Min: 5:10 PM -- 5:25 PM

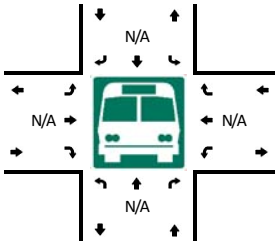


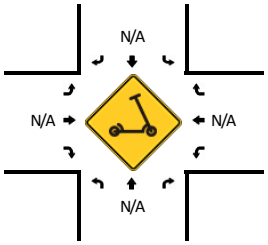












5-Min Count Period Beginning At	Diamond Creek Blvd/Prairie Woods Wy (Northbound)				Diamond Creek Blvd/Prairie Woods Wy (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	1	4	0	12	0	3	0	5	118	2	0	1	144	9	0	299	
4:05 PM	2	0	4	0	12	1	3	0	4	121	5	0	2	147	23	1	325	
4:10 PM	4	1	1	0	18	0	9	0	2	130	3	0	2	124	16	0	310	
4:15 PM	1	2	0	0	18	0	1	0	3	83	4	0	0	175	17	0	304	
4:20 PM	1	1	4	0	8	1	2	0	4	99	1	0	3	132	20	1	277	
4:25 PM	2	0	2	0	16	1	6	0	2	91	2	0	1	151	14	0	288	
4:30 PM	1	3	0	0	19	1	2	0	4	101	4	1	2	138	24	1	301	
4:35 PM	3	1	1	0	14	1	1	0	1	108	2	0	1	126	13	2	274	
4:40 PM	1	2	1	0	13	0	2	0	2	96	1	0	1	164	25	0	308	
4:45 PM	2	0	1	0	11	0	3	0	0	118	3	0	2	144	24	0	308	
4:50 PM	4	1	2	0	10	1	4	0	3	88	4	0	0	153	18	0	288	
4:55 PM	2	1	1	0	16	1	2	0	1	73	0	0	0	125	11	1	234	3516
5:00 PM	0	0	3	0	14	0	2	0	2	119	2	0	1	185	22	2	352	3569
5:05 PM	1	0	4	0	20	0	1	0	3	88	5	0	0	120	17	0	259	3503
5:10 PM	0	2	2	0	10	0	3	0	2	152	6	0	2	196	20	1	396	3589
5:15 PM	5	0	0	0	22	0	8	0	6	131	7	0	2	136	24	1	342	3627
5:20 PM	3	1	2	0	15	0	5	0	5	89	4	0	0	178	25	0	327	3677
5:25 PM	2	0	4	0	21	0	2	0	6	98	4	0	5	107	16	1	266	3655
5:30 PM	2	0	4	0	17	2	2	0	3	119	4	0	4	163	21	1	342	3696
5:35 PM	6	2	4	0	25	1	2	0	0	104	10	0	1	134	20	0	309	3731
5:40 PM	3	0	3	0	9	0	2	0	5	132	2	0	2	187	25	0	370	3793
5:45 PM	0	0	0	0	13	0	6	0	3	107	1	0	1	139	13	1	284	3769
5:50 PM	1	1	2	0	10	0	2	0	0	116	1	0	1	154	23	2	313	3794
5:55 PM	0	1	0	0	20	0	1	0	4	84	1	0	2	122	20	1	256	3816

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	32	12	16	0	188	0	64	0	52	1488	68	0	16	2040	276	8	4260
Heavy Trucks	0	0	0		0	0	4		0	20	0		0	8	0		32
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	4		0	0	0		0	0	0		0	0	0		4
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

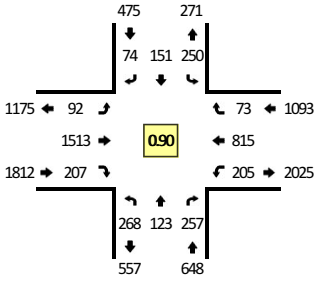
Type of peak hour being reported: Intersection Peak

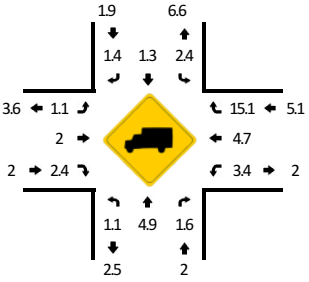
Method for determining peak hour: Total Entering Volume

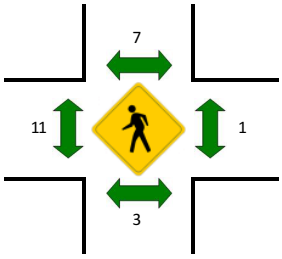
LOCATION: Woodcreek Oaks Blvd -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

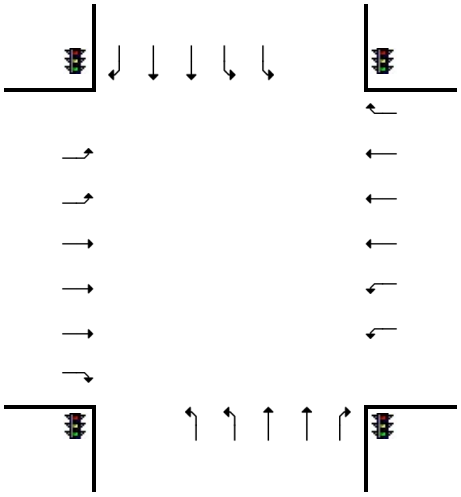
QC JOB #: 16723543
DATE: Thu, Oct 24 2024

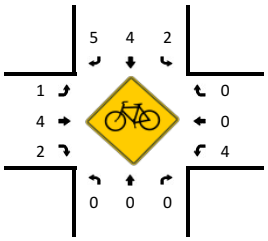
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

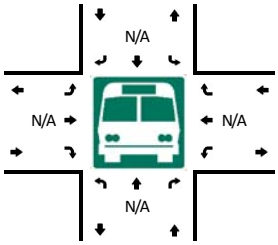


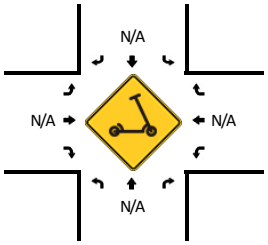












5-Min Count Period Beginning At	Woodcreek Oaks Blvd (Northbound)				Woodcreek Oaks Blvd (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	17	2	13	0	16	3	3	0	1	89	3	1	7	51	9	0	215	
7:05 AM	18	4	11	0	22	2	4	0	3	79	8	0	16	37	5	1	210	
7:10 AM	13	2	16	0	13	4	3	0	1	107	3	0	2	58	2	0	224	
7:15 AM	13	2	17	0	23	4	3	0	3	89	3	0	13	43	4	0	217	
7:20 AM	10	4	10	0	14	8	2	0	8	173	11	0	8	56	10	2	316	
7:25 AM	13	16	30	0	35	2	6	0	10	94	17	2	14	41	8	2	290	
7:30 AM	11	13	20	0	16	10	2	0	9	125	19	1	16	63	7	0	312	
7:35 AM	27	2	25	0	35	7	5	0	8	104	21	1	17	47	7	0	306	
7:40 AM	19	10	19	0	21	13	18	0	3	143	24	1	21	62	6	0	360	
7:45 AM	32	12	28	0	23	34	6	0	3	119	13	2	11	67	7	0	357	
7:50 AM	17	10	21	0	19	18	8	0	5	165	20	5	17	70	4	0	379	
7:55 AM	35	19	36	0	32	17	6	0	9	108	29	2	17	69	4	1	384	3570
8:00 AM	24	9	20	0	13	4	8	0	5	128	21	2	11	68	11	0	324	3679
8:05 AM	28	11	22	0	23	20	4	0	8	156	21	1	7	76	5	0	382	3851
8:10 AM	20	8	9	0	14	9	7	0	7	149	12	0	26	78	4	2	345	3972
8:15 AM	14	9	19	0	14	16	3	1	6	87	10	2	16	62	8	1	268	4023
8:20 AM	18	4	19	0	14	3	4	0	6	141	12	1	21	70	5	0	318	4025
8:25 AM	23	16	19	0	25	0	3	0	5	88	5	0	19	83	5	2	293	4028
8:30 AM	15	8	23	0	6	1	2	0	8	125	4	1	14	72	9	2	290	4006
8:35 AM	24	1	25	0	22	3	1	0	4	127	12	2	15	71	6	0	313	4013
8:40 AM	18	4	24	0	11	0	1	0	1	161	6	2	16	66	8	0	318	3971
8:45 AM	21	1	29	0	19	4	2	0	3	116	10	1	8	65	3	2	284	3898
8:50 AM	8	5	19	0	11	3	4	0	3	134	8	0	9	59	4	2	269	3788
8:55 AM	17	6	18	0	17	2	0	0	6	87	3	1	16	53	2	1	229	3633

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	336	164	340	0	296	276	80	0	68	1568	248	36	180	824	60	4	4480
Heavy Trucks	8	0	0		4	4	0		0	28	12		8	36	20		120
Buses																	
Pedestrians		0				8				12				0			20
Bicycles	0	0	0		0	0	8		0	0	4		12	0	0		24
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

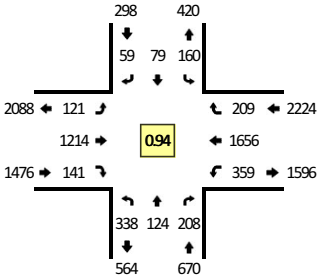
Type of peak hour being reported: Intersection Peak

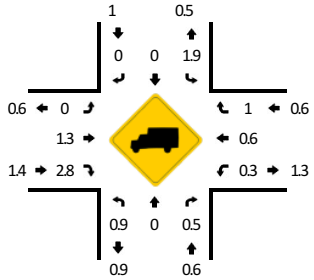
Method for determining peak hour: Total Entering Volume

LOCATION: Woodcreek Oaks Blvd -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

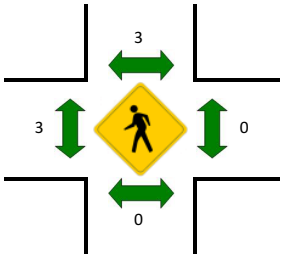
QC JOB #: 16723544
DATE: Thu, Oct 24 2024

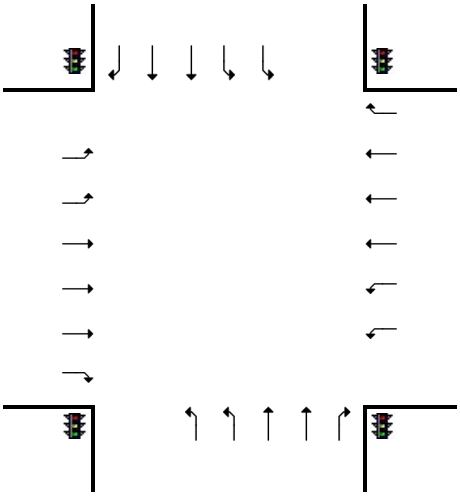
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:10 PM -- 5:25 PM

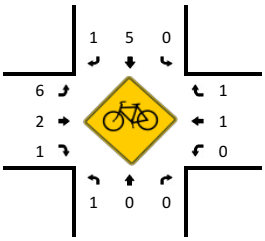


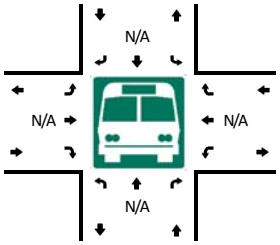


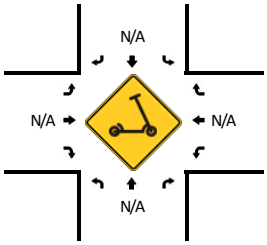
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Woodcreek Oaks Blvd (Northbound)				Woodcreek Oaks Blvd (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	12	10	19	0	12	8	2	0	6	82	9	1	42	166	21	3	393	
4:05 PM	33	6	18	0	11	8	4	0	12	123	13	3	29	129	18	0	407	
4:10 PM	35	15	16	0	13	6	7	0	6	100	12	6	11	111	16	1	355	
4:15 PM	18	12	18	0	5	9	1	0	10	106	14	3	38	167	18	1	420	
4:20 PM	29	7	16	0	13	8	5	1	6	84	13	4	31	91	7	0	315	
4:25 PM	21	9	12	0	3	9	5	0	7	71	13	2	41	142	16	0	351	
4:30 PM	33	2	10	0	19	8	6	0	5	108	10	3	30	118	11	2	365	
4:35 PM	14	13	16	0	11	8	2	0	11	96	20	5	26	132	9	0	363	
4:40 PM	28	11	16	0	9	8	4	0	6	107	13	3	29	145	23	3	405	
4:45 PM	24	6	19	0	14	7	2	0	8	81	8	6	36	143	15	2	371	
4:50 PM	25	15	13	0	16	9	3	0	4	91	11	2	19	141	13	1	363	
4:55 PM	27	12	16	0	8	6	2	0	10	84	10	4	36	122	10	0	347	4455
5:00 PM	33	7	12	0	12	4	8	0	6	88	13	4	22	141	20	0	370	4432
5:05 PM	21	8	18	0	14	10	2	0	9	83	17	6	40	143	15	0	386	4411
5:10 PM	41	10	19	0	14	8	7	0	12	112	14	2	24	145	17	0	425	4481
5:15 PM	27	12	17	0	12	4	3	0	14	118	13	6	32	123	18	3	402	4463
5:20 PM	35	7	14	0	10	8	8	0	3	119	9	2	22	151	23	0	411	4559
5:25 PM	27	13	18	0	14	8	6	0	9	67	13	4	29	103	19	0	330	4538
5:30 PM	18	6	18	0	20	8	8	1	2	103	11	4	23	166	17	1	406	4579
5:35 PM	20	7	16	0	11	6	4	0	9	134	12	0	38	154	13	1	425	4641
5:40 PM	38	9	20	0	14	9	3	0	4	101	11	1	24	146	14	4	398	4634
5:45 PM	20	11	15	0	15	5	4	0	7	86	8	3	35	108	18	3	338	4601
5:50 PM	31	21	21	0	16	6	4	0	5	114	14	1	22	152	16	2	425	4663
5:55 PM	27	13	20	0	7	3	2	0	6	89	6	2	33	124	19	1	352	4668

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	412	116	200	0	144	80	72	0	116	1396	144	40	312	1676	232	12	4952
Heavy Trucks	0	0	0		0	0	0		0	16	0		0	8	0		24
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	16	0		4	0	0		0	0	0		20
Scooters																	

Comments:

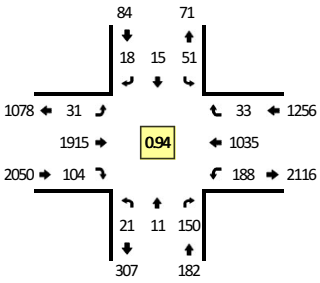
Report generated on 11/5/2024 3:38 PM

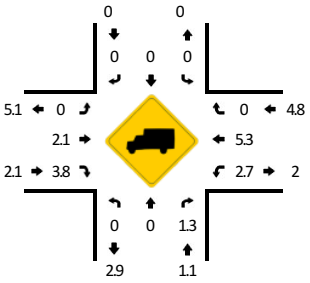
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

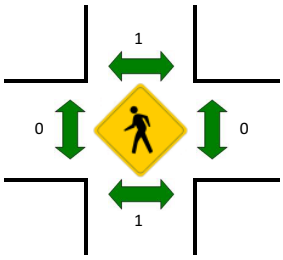
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

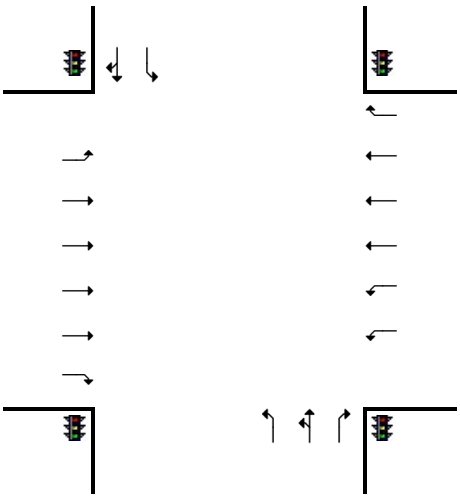
LOCATION: Walgreens Dwy/Roseville Pkwy -- Blue Oaks Blvd | **QC JOB #:** 16723545
CITY/STATE: Roseville, CA | **DATE:** Thu, Oct 24 2024

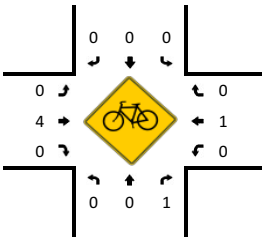
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

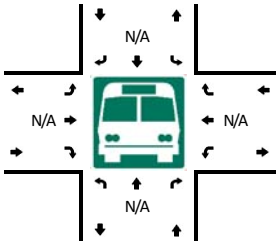


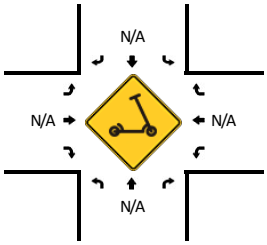












5-Min Count Period Beginning At	Walgreens Dwy/Roseville Pkwy (Northbound)				Walgreens Dwy/Roseville Pkwy (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	0	10	0	3	0	1	0	0	114	6	0	16	67	2	0	220	
7:05 AM	0	0	8	0	1	1	1	0	2	113	9	0	6	65	1	0	207	
7:10 AM	2	0	10	0	2	1	3	0	2	121	3	0	10	53	2	0	209	
7:15 AM	1	1	14	0	2	0	1	0	2	118	10	2	8	55	0	0	214	
7:20 AM	0	0	8	0	4	0	2	0	1	151	8	0	16	72	4	0	266	
7:25 AM	1	1	10	0	4	0	2	0	0	180	10	0	9	66	1	0	284	
7:30 AM	2	0	9	0	2	0	0	0	2	140	6	0	7	84	1	0	253	
7:35 AM	0	0	17	0	1	0	1	0	2	171	7	0	7	66	0	0	272	
7:40 AM	2	0	14	0	4	0	0	0	5	126	9	0	22	96	3	0	281	
7:45 AM	1	0	15	0	1	2	2	0	4	209	9	0	15	78	5	0	341	
7:50 AM	0	1	14	0	3	2	1	0	2	135	10	1	18	86	0	0	273	
7:55 AM	1	1	14	0	2	0	2	0	5	210	11	0	8	84	3	0	341	3161
8:00 AM	2	0	13	0	8	2	1	0	2	116	11	1	13	81	7	0	257	3198
8:05 AM	1	3	11	0	1	0	0	0	2	214	11	1	15	83	3	0	345	3336
8:10 AM	4	0	11	0	4	0	2	0	2	148	7	0	18	95	3	0	294	3421
8:15 AM	2	0	9	0	0	2	3	0	3	124	8	1	14	85	3	0	254	3461
8:20 AM	5	1	13	0	9	2	3	0	2	116	10	0	21	84	3	0	269	3464
8:25 AM	0	0	11	0	8	0	0	0	2	170	5	0	18	96	3	0	313	3493
8:30 AM	2	2	13	0	10	2	0	0	0	113	9	0	18	96	1	0	266	3506
8:35 AM	0	2	14	0	0	2	3	0	2	175	6	0	13	89	1	0	307	3541
8:40 AM	3	1	12	0	5	1	1	0	1	185	7	0	17	78	1	0	312	3572
8:45 AM	0	0	13	0	3	0	1	0	4	145	4	1	14	76	4	0	265	3496
8:50 AM	2	0	15	0	2	0	0	0	1	116	9	0	15	66	0	0	226	3449
8:55 AM	0	0	6	0	2	1	0	0	2	156	5	0	20	84	1	0	277	3385

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	8	172	0	24	16	20	0	44	2216	120	4	164	992	32	0	3820
Heavy Trucks	0	0	8		0	0	0		0	36	8		4	68	0		124
Buses																	
Pedestrians		0				4				0				0			4
Bicycles	0	0	4		0	0	0		0	4	0		0	4	0		12
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

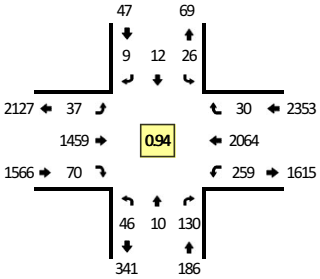
Type of peak hour being reported: Intersection Peak

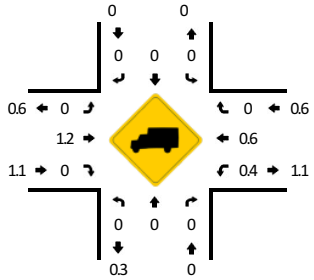
Method for determining peak hour: Total Entering Volume

LOCATION: Walgreens Dwy/Roseville Pkwy -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

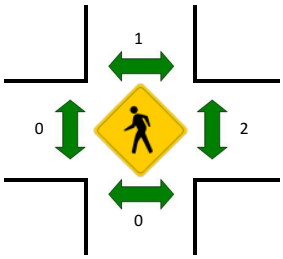
QC JOB #: 16723546
DATE: Thu, Oct 24 2024

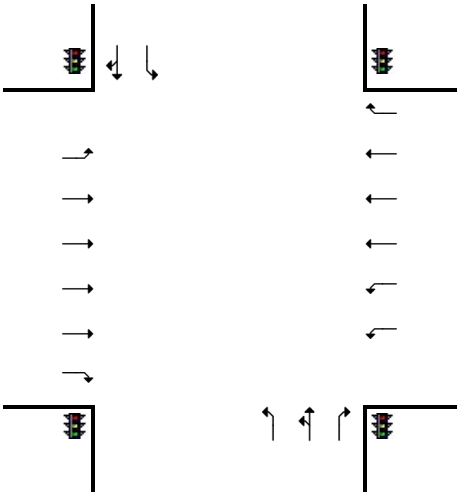
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:35 PM -- 5:50 PM

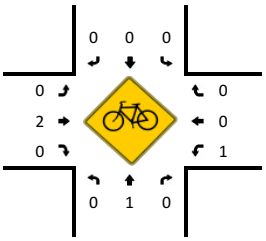


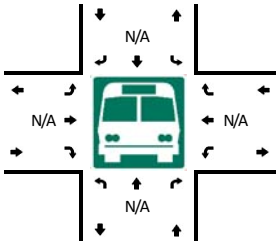


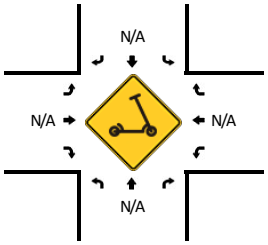
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Walgreens Dwy/Roseville Pkwy (Northbound)				Walgreens Dwy/Roseville Pkwy (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	4	0	12	0	4	3	1	0	7	114	6	0	13	160	3	0	327	
4:05 PM	3	0	9	0	4	0	1	0	1	139	6	0	38	197	4	0	402	
4:10 PM	2	0	14	0	1	2	2	0	3	134	2	0	17	157	4	0	338	
4:15 PM	1	0	14	0	2	1	3	0	0	109	1	2	24	192	3	0	352	
4:20 PM	7	0	13	0	0	1	1	0	2	107	12	1	21	115	2	1	283	
4:25 PM	6	1	8	0	2	0	1	0	0	78	5	0	30	190	2	0	323	
4:30 PM	3	1	6	0	4	3	1	0	4	108	6	0	23	137	1	0	297	
4:35 PM	3	1	11	0	3	0	2	0	1	110	2	0	24	173	5	0	335	
4:40 PM	5	1	5	0	0	1	3	0	4	132	8	0	20	179	2	0	360	
4:45 PM	3	0	7	0	0	1	1	0	1	99	5	0	23	197	0	0	337	
4:50 PM	1	1	6	0	1	0	3	0	1	93	10	3	20	168	3	0	310	
4:55 PM	1	2	10	0	1	1	0	0	3	88	4	0	33	158	0	0	301	3965
5:00 PM	4	0	9	0	3	0	1	0	1	105	7	0	13	189	2	1	335	3973
5:05 PM	5	1	14	0	4	1	1	0	0	106	7	1	32	183	1	0	356	3927
5:10 PM	5	0	11	0	2	2	1	1	1	139	3	0	15	178	3	0	361	3950
5:15 PM	3	3	13	0	3	0	0	0	3	134	5	3	27	153	2	0	349	3947
5:20 PM	4	0	12	0	1	0	1	0	5	128	9	1	15	165	2	0	343	4007
5:25 PM	5	0	7	0	1	2	0	0	3	87	6	1	22	165	4	0	303	3987
5:30 PM	1	0	7	0	2	2	1	0	1	125	4	0	16	195	4	0	358	4048
5:35 PM	2	1	11	0	0	0	0	0	1	142	6	1	29	190	1	0	384	4097
5:40 PM	4	2	13	0	4	1	0	0	5	126	7	2	16	156	4	0	340	4077
5:45 PM	7	1	14	0	2	0	1	0	2	123	8	0	21	203	3	0	385	4125
5:50 PM	3	2	10	0	2	3	2	0	4	127	6	0	26	145	2	0	332	4147
5:55 PM	2	0	9	1	1	1	1	0	2	117	2	0	26	142	2	0	306	4152

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	52	16	152	0	24	4	4	0	32	1564	84	12	264	2196	32	0	4436
Heavy Trucks	0	0	0		0	0	0		0	20	0		0	16	0		36
Buses																	
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

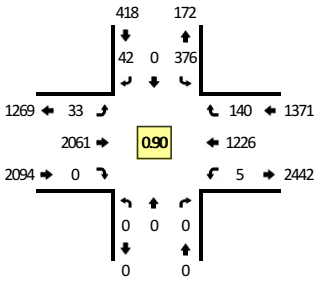
Type of peak hour being reported: Intersection Peak

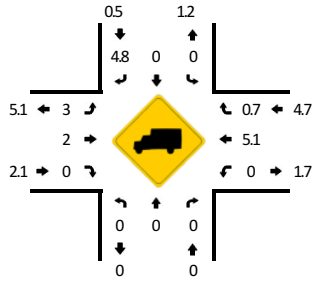
Method for determining peak hour: Total Entering Volume

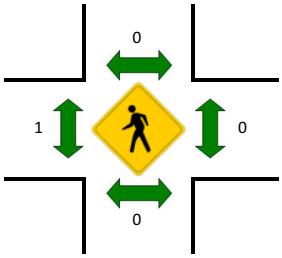
LOCATION: New Meadow Dr -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

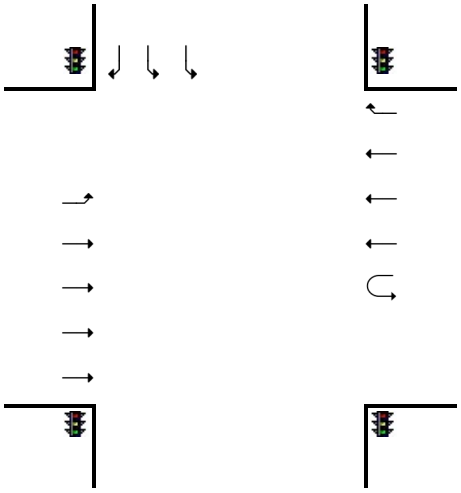
QC JOB #: 16723547
DATE: Thu, Oct 24 2024

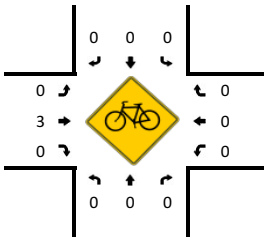
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

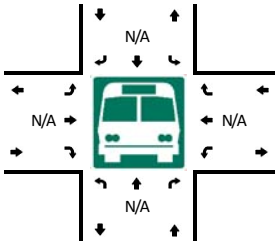


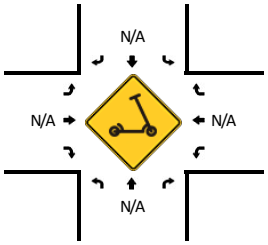












5-Min Count Period Beginning At	New Meadow Dr (Northbound)				New Meadow Dr (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	24	0	1	0	1	102	0	0	0	64	3	0	195	
7:05 AM	0	0	0	0	19	0	4	0	1	146	0	0	0	84	2	0	256	
7:10 AM	0	0	0	0	33	0	2	0	0	118	0	0	0	63	5	0	221	
7:15 AM	0	0	0	0	16	0	3	0	0	147	0	0	0	72	4	0	242	
7:20 AM	0	0	0	0	36	0	4	0	0	137	0	0	0	75	6	0	258	
7:25 AM	0	0	0	0	34	0	7	0	1	217	0	0	0	79	11	1	350	
7:30 AM	0	0	0	0	41	0	3	0	2	140	0	0	0	79	7	0	272	
7:35 AM	0	0	0	0	27	0	1	0	2	196	0	0	0	84	9	0	319	
7:40 AM	0	0	0	0	28	0	6	0	3	145	0	0	0	101	9	0	292	
7:45 AM	0	0	0	0	44	0	1	0	3	216	0	0	0	109	12	1	386	
7:50 AM	0	0	0	0	69	0	3	0	3	145	0	0	0	89	13	0	322	
7:55 AM	0	0	0	0	28	0	7	0	3	225	0	1	0	101	8	1	374	3487
8:00 AM	0	0	0	0	31	0	2	0	4	128	0	0	0	93	14	0	272	3564
8:05 AM	0	0	0	0	41	0	6	0	2	220	0	0	0	112	7	0	388	3696
8:10 AM	0	0	0	0	46	0	8	0	1	154	0	0	0	81	14	0	304	3779
8:15 AM	0	0	0	0	21	0	4	0	0	149	0	0	0	112	15	0	301	3838
8:20 AM	0	0	0	0	23	0	3	0	3	137	0	0	0	112	9	0	287	3867
8:25 AM	0	0	0	0	12	0	2	0	5	177	0	0	0	113	8	0	317	3834
8:30 AM	0	0	0	0	23	0	2	0	3	135	0	0	0	107	14	0	284	3846
8:35 AM	0	0	0	0	19	0	2	0	1	185	0	0	0	107	14	0	328	3855
8:40 AM	0	0	0	0	19	0	2	0	4	190	0	0	0	90	12	3	320	3883
8:45 AM	0	0	0	0	12	0	2	0	3	174	0	0	0	102	5	0	298	3795
8:50 AM	0	0	0	0	26	0	3	0	0	136	0	0	0	76	12	4	257	3730
8:55 AM	0	0	0	0	11	0	1	0	0	165	0	0	0	97	3	0	277	3633

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	564	0	44	0	36	2344	0	4	0	1196	132	8	4328
Heavy Trucks	0	0	0		0	0	0		0	44	0		0	76	0		120
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	8	0		0	0	0		8
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

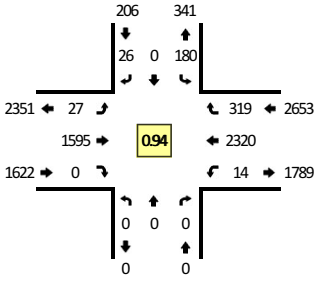
Type of peak hour being reported: Intersection Peak

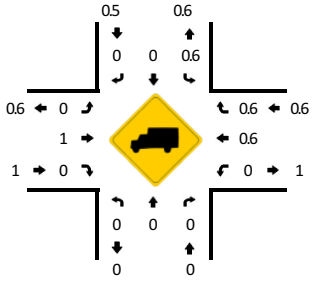
Method for determining peak hour: Total Entering Volume

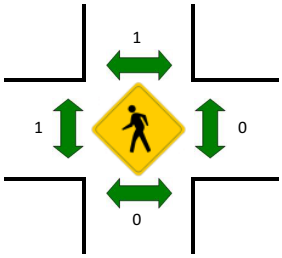
LOCATION: New Meadow Dr -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

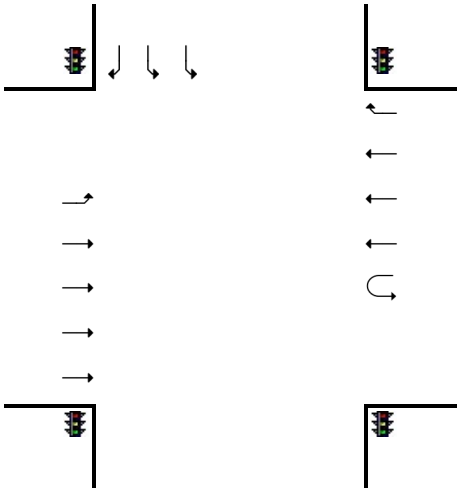
QC JOB #: 16723548
DATE: Thu, Oct 24 2024

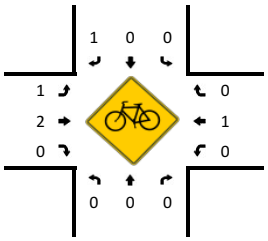
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:35 PM -- 5:50 PM

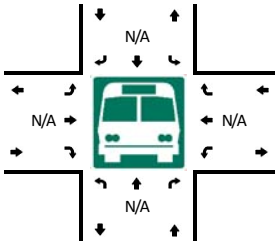


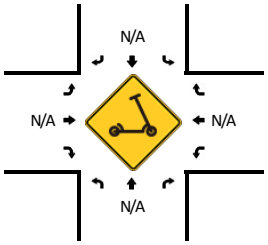












5-Min Count Period Beginning At	New Meadow Dr (Northbound)				New Meadow Dr (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	18	0	6	0	1	151	0	1	0	185	26	2	390	
4:05 PM	0	0	0	0	14	0	4	0	3	140	0	0	0	213	21	0	395	
4:10 PM	0	0	0	0	17	0	2	0	2	153	0	0	0	195	24	1	394	
4:15 PM	0	0	0	0	16	0	3	0	2	124	0	0	0	207	13	1	366	
4:20 PM	0	0	0	0	17	0	3	0	1	111	0	1	0	162	25	2	322	
4:25 PM	0	0	0	0	16	0	3	0	5	93	0	0	0	195	26	0	338	
4:30 PM	0	0	0	0	16	0	4	0	1	92	0	0	0	180	14	1	308	
4:35 PM	0	0	0	0	16	0	6	0	0	139	0	1	0	174	17	2	355	
4:40 PM	0	0	0	0	15	0	2	0	0	147	0	0	0	200	26	1	391	
4:45 PM	0	0	0	0	21	0	5	0	1	106	0	0	0	220	17	0	370	
4:50 PM	0	0	0	0	14	0	5	0	1	91	0	0	0	188	18	0	317	
4:55 PM	0	0	0	0	14	0	2	0	2	92	0	0	0	189	16	0	315	4261
5:00 PM	0	0	0	0	15	0	4	0	2	118	0	0	0	188	23	2	352	4223
5:05 PM	0	0	0	0	16	0	1	0	0	121	0	0	0	234	19	2	393	4221
5:10 PM	0	0	0	0	16	0	1	0	0	143	0	1	0	183	31	1	376	4203
5:15 PM	0	0	0	0	27	0	3	0	4	169	0	0	0	188	29	2	422	4259
5:20 PM	0	0	0	0	11	0	1	0	0	130	0	0	0	187	27	2	358	4295
5:25 PM	0	0	0	0	17	0	1	0	1	99	0	2	0	197	33	0	350	4307
5:30 PM	0	0	0	0	17	0	4	0	1	123	0	0	0	205	20	0	370	4369
5:35 PM	0	0	0	0	14	0	1	0	1	169	0	1	0	214	27	1	428	4442
5:40 PM	0	0	0	0	13	0	2	0	2	128	0	0	0	179	28	2	354	4405
5:45 PM	0	0	0	0	8	0	4	0	4	144	0	1	0	226	25	1	413	4448
5:50 PM	0	0	0	0	13	0	2	0	3	136	0	0	0	166	24	1	345	4476
5:55 PM	0	0	0	0	13	0	2	0	4	115	0	0	0	153	33	0	320	4481

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	140	0	28	0	28	1764	0	8	0	2476	320	16	4780
Heavy Trucks	0	0	0		0	0	0		0	28	0		0	16	0		44
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

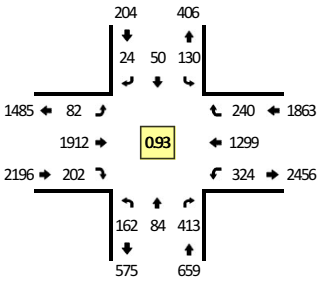
Type of peak hour being reported: Intersection Peak

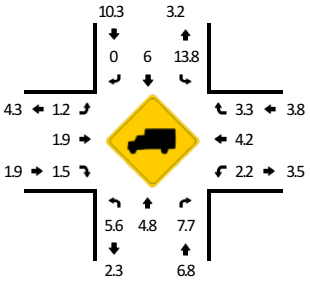
Method for determining peak hour: Total Entering Volume

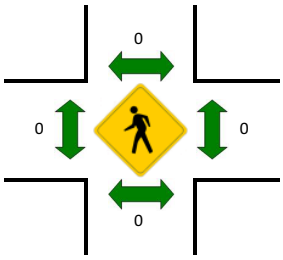
LOCATION: Foothill Blvd -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

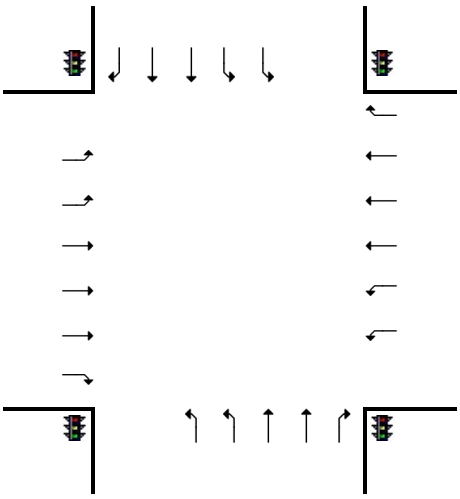
QC JOB #: 16723549
DATE: Thu, Oct 24 2024

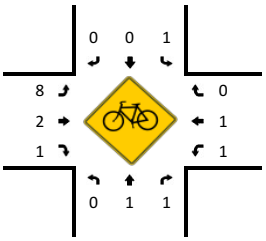
Peak-Hour: 7:40 AM -- 8:40 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

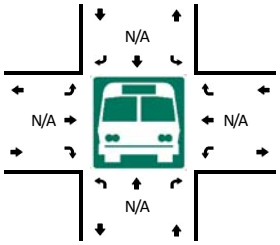


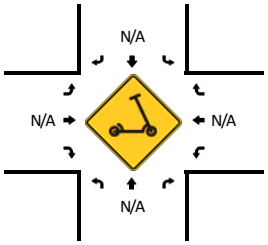












5-Min Count Period Beginning At	Foothill Blvd (Northbound)				Foothill Blvd (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	11	4	15	0	8	0	0	0	6	88	9	0	9	62	13	0	225	
7:05 AM	4	2	7	0	4	2	2	0	5	162	13	0	6	82	15	0	304	
7:10 AM	8	8	18	0	10	4	7	0	4	104	6	0	18	48	11	0	246	
7:15 AM	2	4	22	0	8	3	2	0	2	163	10	0	13	85	5	1	320	
7:20 AM	15	11	25	0	13	7	4	0	5	137	14	0	7	63	17	1	319	
7:25 AM	10	6	27	0	2	2	3	0	3	210	20	0	22	94	10	1	410	
7:30 AM	8	5	23	0	14	6	3	0	5	161	15	0	19	70	14	0	343	
7:35 AM	8	2	39	0	8	2	1	0	3	189	14	0	13	101	11	0	391	
7:40 AM	13	7	32	0	13	9	1	0	2	157	16	0	24	95	18	0	387	
7:45 AM	12	1	34	0	3	4	0	0	9	183	15	0	31	140	27	0	459	
7:50 AM	11	10	46	0	16	3	1	0	5	162	20	0	31	84	23	0	412	
7:55 AM	9	6	44	0	12	3	1	0	12	174	24	0	23	112	32	0	452	4268
8:00 AM	17	13	36	0	12	4	5	0	8	156	16	0	22	82	17	0	388	4431
8:05 AM	10	6	41	0	7	3	3	0	2	194	24	0	34	116	19	0	459	4586
8:10 AM	17	11	38	0	12	6	5	0	17	157	16	0	29	82	18	0	408	4748
8:15 AM	13	7	29	0	11	2	0	0	4	175	18	0	25	134	18	0	436	4864
8:20 AM	11	6	28	0	17	6	3	0	4	118	10	0	22	91	8	0	324	4869
8:25 AM	10	4	27	0	7	4	3	0	12	157	19	0	35	136	23	0	437	4896
8:30 AM	25	6	30	0	11	2	0	0	3	129	13	0	21	98	19	1	358	4911
8:35 AM	14	7	28	0	9	4	2	0	4	150	11	0	26	129	18	0	402	4922
8:40 AM	14	2	27	0	19	8	3	0	5	155	16	0	21	84	19	1	374	4909
8:45 AM	13	7	31	0	11	3	7	0	12	185	16	0	25	114	17	2	443	4893
8:50 AM	16	10	23	0	19	8	6	0	7	108	22	0	14	77	27	0	337	4818
8:55 AM	6	7	18	0	14	3	4	0	13	168	15	0	22	91	23	1	385	4751

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	128	68	496	0	124	40	8	0	104	2076	236	0	340	1344	328	0	5292
Heavy Trucks	20	8	28		16	8	0		4	36	4		4	68	8		204
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	4	4		0	0	0		4	8	0		4	0	0		24
Scooters																	

Comments:

Report generated on 11/5/2024 3:38 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

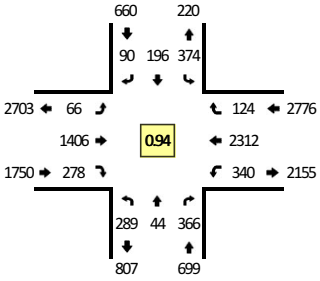
Type of peak hour being reported: Intersection Peak

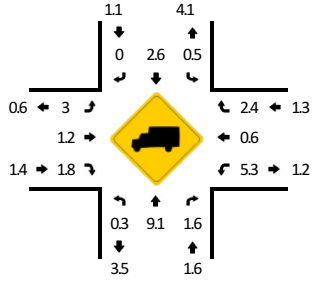
Method for determining peak hour: Total Entering Volume

LOCATION: Foothill Blvd -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

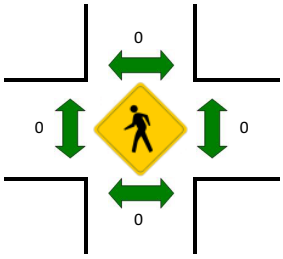
QC JOB #: 16723550
DATE: Thu, Oct 24 2024

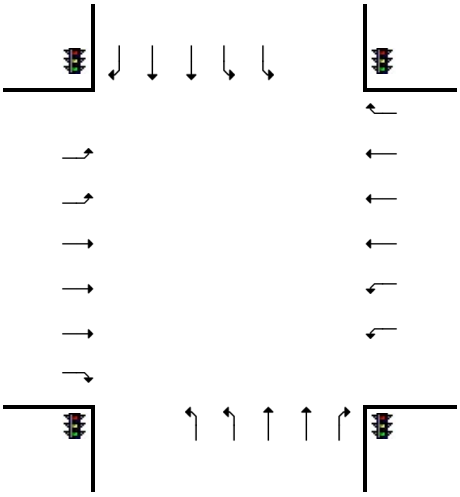
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:05 PM -- 5:20 PM

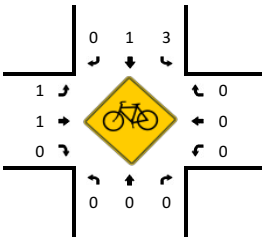


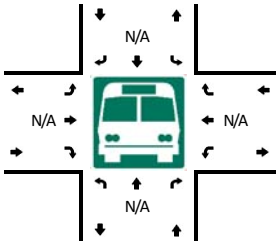


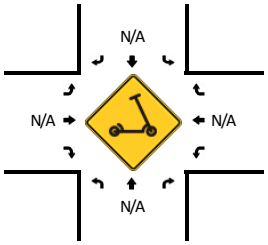
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Foothill Blvd (Northbound)				Foothill Blvd (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	15	4	21	0	28	20	13	0	4	124	12	1	30	187	15	3	477	
4:05 PM	34	3	28	0	38	17	11	1	1	146	14	1	19	195	12	0	520	
4:10 PM	24	6	24	0	29	29	9	0	3	83	19	1	39	168	13	1	448	
4:15 PM	14	8	29	0	18	12	11	0	3	73	37	0	31	197	7	0	440	
4:20 PM	16	5	25	0	26	16	6	0	8	67	30	6	37	172	11	0	425	
4:25 PM	28	7	31	0	24	15	5	0	5	78	30	3	24	187	11	2	450	
4:30 PM	15	2	29	1	17	23	13	0	7	90	27	0	30	132	12	0	398	
4:35 PM	18	3	31	0	11	25	12	0	5	78	41	1	28	184	1	0	438	
4:40 PM	22	6	31	0	36	22	7	0	5	52	43	2	40	180	7	1	454	
4:45 PM	27	0	31	0	33	18	4	0	3	107	38	0	25	212	6	1	505	
4:50 PM	15	4	28	0	15	16	6	0	2	90	27	1	31	160	8	0	403	
4:55 PM	31	1	14	0	29	10	7	0	5	169	21	1	36	208	9	3	544	5502
5:00 PM	15	5	44	0	32	23	9	0	1	93	15	2	25	168	8	2	442	5467
5:05 PM	33	4	27	0	52	27	8	0	2	115	19	1	22	220	9	1	540	5487
5:10 PM	24	6	33	0	31	26	12	0	4	100	28	1	39	163	9	1	477	5516
5:15 PM	34	2	37	0	27	15	3	0	4	148	26	2	26	210	16	1	551	5627
5:20 PM	21	7	25	0	13	15	6	0	9	140	23	2	22	177	20	0	480	5682
5:25 PM	30	4	30	0	19	3	7	0	6	96	17	0	19	220	11	0	462	5694
5:30 PM	14	4	25	0	31	12	6	0	10	106	14	1	30	187	14	0	454	5750
5:35 PM	27	2	36	2	48	13	12	0	1	130	24	1	23	204	9	0	532	5844
5:40 PM	16	5	36	0	44	18	10	0	5	112	26	2	33	183	5	0	495	5885
5:45 PM	21	0	31	0	16	2	8	0	1	136	9	1	27	223	8	1	484	5864
5:50 PM	11	2	36	1	12	10	3	0	3	102	13	2	20	158	4	0	377	5838
5:55 PM	33	3	33	0	23	11	4	0	1	162	18	0	23	218	7	0	536	5830

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	364	48	388	0	440	272	92	0	40	1452	292	16	348	2372	136	12	6272
Heavy Trucks	0	0	4		0	0	0		0	4	4		16	4	0		32
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		8	0	0		0	4	0		0	0	0		12
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

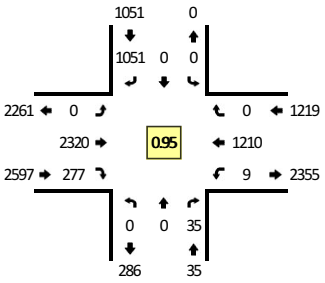
Type of peak hour being reported: Intersection Peak

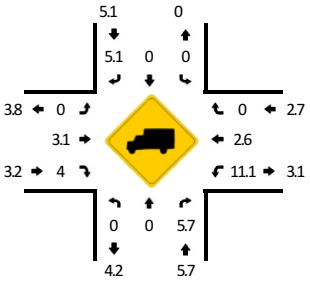
Method for determining peak hour: Total Entering Volume

LOCATION: Fidelity Wy -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

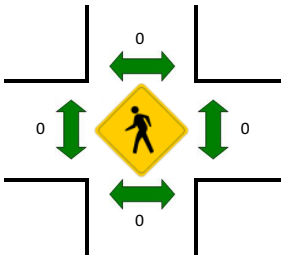
QC JOB #: 16723551
DATE: Thu, Oct 24 2024

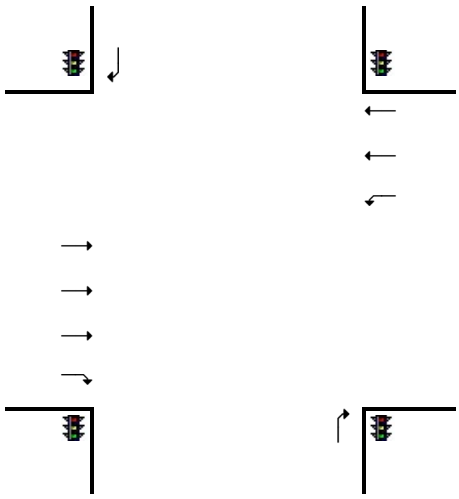
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 7:50 AM -- 8:05 AM

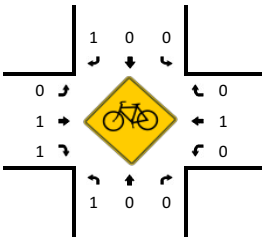


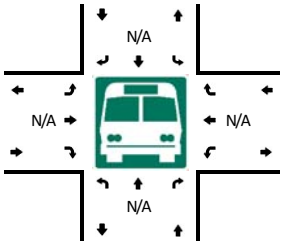


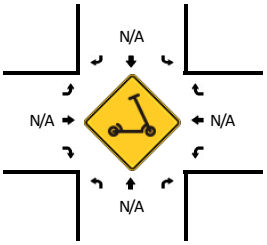
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Fidelity Wy (Northbound)				Fidelity Wy (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	2	0	0	0	70	0	0	114	5	0	0	56	0	0	247	
7:05 AM	0	0	0	0	0	0	59	0	0	137	8	0	1	65	0	0	270	
7:10 AM	0	0	4	0	0	0	53	0	0	155	11	0	0	49	0	0	272	
7:15 AM	0	0	0	0	0	0	65	0	0	134	9	0	0	50	0	0	258	
7:20 AM	0	0	1	0	0	0	79	0	0	185	16	0	0	52	0	0	333	
7:25 AM	0	0	3	0	0	0	60	0	0	192	16	0	1	80	0	0	352	
7:30 AM	0	0	0	0	0	0	81	0	0	218	16	0	0	62	0	0	377	
7:35 AM	0	0	1	0	0	0	77	0	0	196	26	0	0	86	0	0	386	
7:40 AM	0	0	5	0	0	0	106	0	0	200	26	0	0	88	0	0	425	
7:45 AM	0	0	5	0	0	0	91	0	0	179	18	0	0	111	0	0	404	
7:50 AM	0	0	0	0	0	0	99	0	0	223	34	0	1	99	0	0	456	
7:55 AM	0	0	1	0	0	0	84	0	0	193	30	0	1	104	0	0	413	4193
8:00 AM	0	0	4	0	0	0	95	0	0	207	26	0	1	90	0	0	423	4369
8:05 AM	0	0	4	0	0	0	83	0	0	195	21	0	0	102	0	0	405	4504
8:10 AM	0	0	4	0	0	0	84	0	0	216	26	0	1	92	0	0	423	4655
8:15 AM	0	0	4	0	0	0	58	0	0	191	27	0	1	117	0	0	398	4795
8:20 AM	0	0	1	0	0	0	86	0	0	175	14	0	0	110	0	0	386	4848
8:25 AM	0	0	5	0	0	0	90	0	0	167	14	0	0	106	0	0	382	4878
8:30 AM	0	0	1	0	0	0	98	0	0	178	15	0	4	105	0	0	401	4902
8:35 AM	0	0	2	0	0	0	95	0	0	143	17	0	1	87	0	0	345	4861
8:40 AM	0	0	2	0	0	0	85	0	0	191	30	0	0	79	0	0	387	4823
8:45 AM	0	0	3	0	0	0	85	0	0	191	20	0	0	77	0	0	376	4795
8:50 AM	0	0	3	0	0	0	95	0	0	142	13	0	1	82	0	0	336	4675
8:55 AM	0	0	6	0	0	0	61	0	0	182	22	0	0	70	0	0	341	4603

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	20	0	0	0	1112	0	0	2492	360	0	12	1172	0	0	5168
Heavy Trucks	0	0	0		0	0	48		0	64	8		0	40	0		160
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	4		0	0	0		4
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

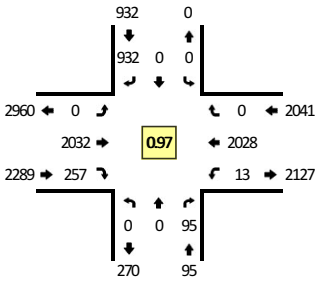
Type of peak hour being reported: Intersection Peak

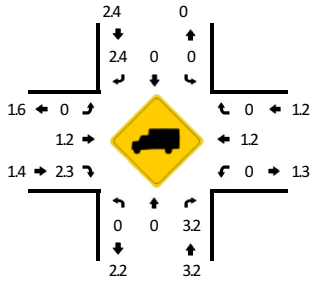
Method for determining peak hour: Total Entering Volume

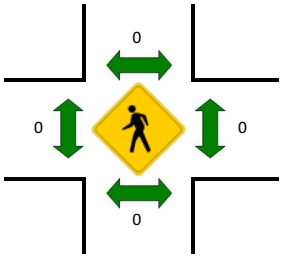
LOCATION: Fidelity Wy -- Blue Oaks Blvd
CITY/STATE: Roseville, CA

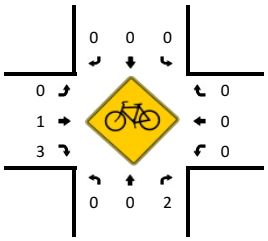
QC JOB #: 16723552
DATE: Thu, Oct 24 2024

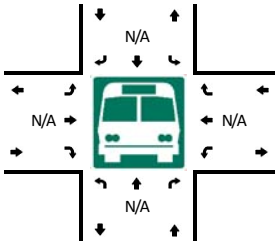
Peak-Hour: 4:55 PM -- 5:55 PM
Peak 15-Min: 4:55 PM -- 5:10 PM

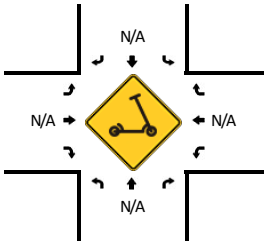












5-Min Count Period Beginning At	Fidelity Wy (Northbound)				Fidelity Wy (Southbound)				Blue Oaks Blvd (Eastbound)				Blue Oaks Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	10	0	0	0	90	0	0	94	32	0	0	168	0	0	394	
4:05 PM	0	0	8	0	0	0	76	0	0	103	54	0	0	181	0	0	422	
4:10 PM	0	0	3	0	0	0	76	0	0	89	45	0	0	152	0	0	365	
4:15 PM	0	0	3	0	0	0	92	0	0	85	26	0	0	178	0	0	384	
4:20 PM	0	0	10	0	0	0	103	0	0	80	36	0	1	144	0	0	374	
4:25 PM	0	0	6	0	0	0	80	0	0	109	32	0	1	179	0	0	407	
4:30 PM	0	0	5	0	0	0	62	0	0	74	49	0	0	135	0	0	325	
4:35 PM	0	0	4	0	0	0	67	0	0	83	40	0	0	137	0	0	331	
4:40 PM	0	0	4	0	0	0	92	0	0	98	42	0	2	151	0	0	389	
4:45 PM	0	0	5	0	0	0	114	0	0	140	31	0	3	132	0	0	425	
4:50 PM	0	0	5	0	0	0	84	0	0	161	47	0	0	140	0	0	437	
4:55 PM	0	0	5	0	0	0	78	0	0	177	39	0	0	177	0	0	476	4729
5:00 PM	0	0	6	0	0	0	87	0	0	178	39	0	0	157	0	0	467	4802
5:05 PM	0	0	14	0	0	0	77	0	0	157	23	0	1	166	0	0	438	4818
5:10 PM	0	0	14	0	0	0	73	0	0	187	17	0	3	155	0	0	449	4902
5:15 PM	0	0	4	0	0	0	81	0	0	176	17	0	1	183	0	0	462	4980
5:20 PM	0	0	5	0	0	0	65	0	0	175	30	0	1	172	0	0	448	5054
5:25 PM	0	0	5	0	0	0	68	0	0	152	12	0	0	182	0	0	419	5066
5:30 PM	0	0	13	0	0	0	60	0	0	134	17	0	1	191	0	0	416	5157
5:35 PM	0	0	14	0	0	0	75	0	0	186	8	0	2	153	0	0	438	5264
5:40 PM	0	0	6	0	0	0	65	0	0	195	20	0	1	173	0	0	460	5335
5:45 PM	0	0	6	0	0	0	85	0	0	157	21	0	1	173	0	0	443	5353
5:50 PM	0	0	3	0	0	0	118	0	0	158	14	0	2	146	0	0	441	5357
5:55 PM	0	0	4	0	0	0	91	0	0	170	17	0	0	121	0	0	403	5284

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	100	0	0	0	968	0	0	2048	404	0	4	2000	0	0	5524
Heavy Trucks	0	0	8		0	0	32		0	36	20		0	36	0		132
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	4		0	0	0		4
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

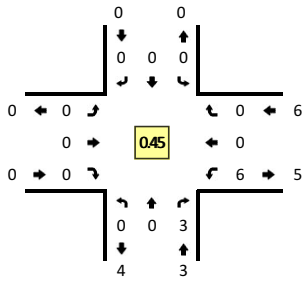
Type of peak hour being reported: Intersection Peak

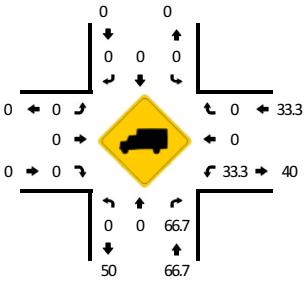
Method for determining peak hour: Total Entering Volume

LOCATION: Santucci Blvd -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

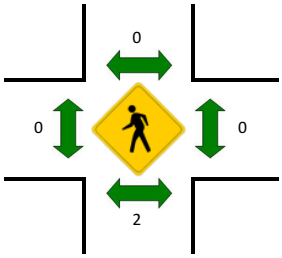
QC JOB #: 16723553
DATE: Thu, Oct 24 2024

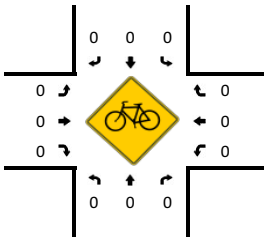
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:05 AM -- 7:20 AM

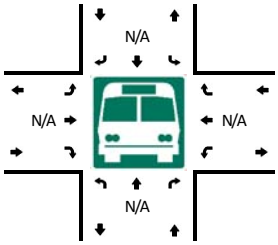


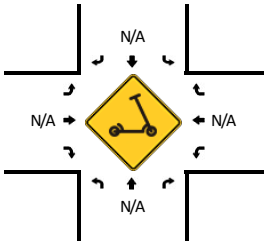


TRUE DATA TO IMPROVE MOBILITY









5-Min Count Period Beginning At	Santucci Blvd (Northbound)				Santucci Blvd (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
7:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	9
8:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:20 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5
8:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	4	0	0	0	0	0	0	0	0	0	8	0	0	8	20
Heavy Trucks	0	0	0		0	0	0		0	0	0		4	0	0		4
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

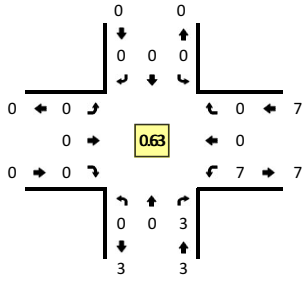
Type of peak hour being reported: Intersection Peak

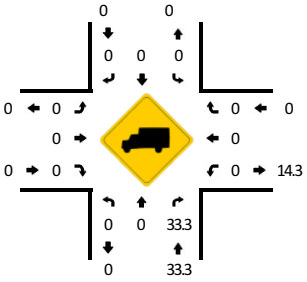
Method for determining peak hour: Total Entering Volume

LOCATION: Santucci Blvd -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

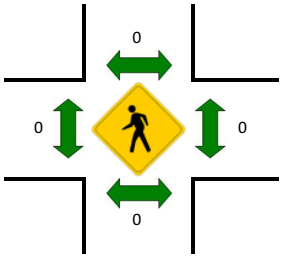
QC JOB #: 16723554
DATE: Thu, Oct 24 2024

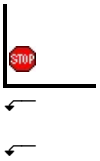
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:15 PM -- 4:30 PM

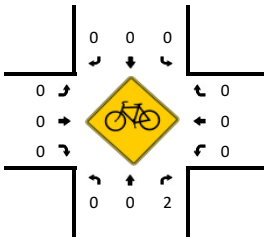


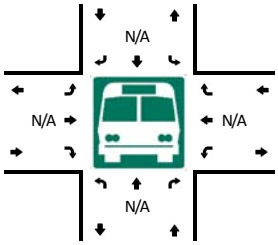


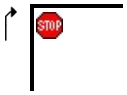
TRUE DATA TO IMPROVE MOBILITY

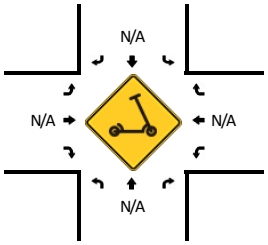












5-Min Count Period Beginning At	Santucci Blvd (Northbound)				Santucci Blvd (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2	4	
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:50 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	3	
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
5:05 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	9
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	10
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	7
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
5:50 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	6

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	4	0	0	0	0	0	0	0	0	0	4	0	0	8	16
Heavy Trucks	0	0	4		0	0	0		0	0	0		0	0	0		4
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

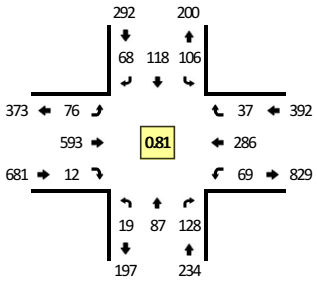
Type of peak hour being reported: Intersection Peak

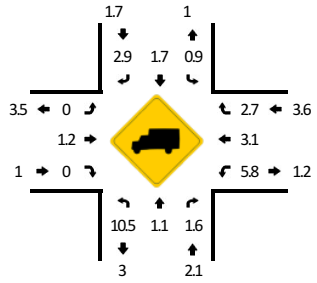
Method for determining peak hour: Total Entering Volume

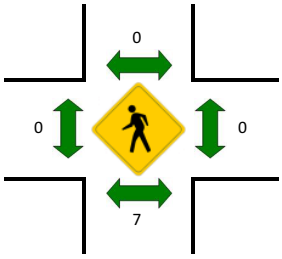
LOCATION: Market St -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

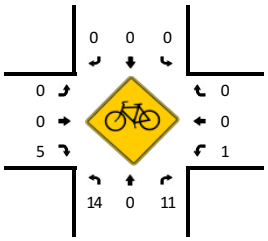
QC JOB #: 16723555
DATE: Wed, Oct 23 2024

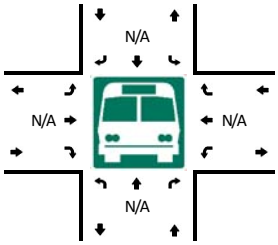
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:35 AM -- 7:50 AM

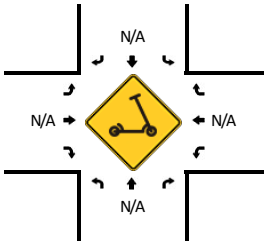












5-Min Count Period Beginning At	Market St (Northbound)				Market St (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	3	2	0	9	10	4	0	0	28	0	0	2	10	1	0	71	
7:05 AM	1	2	6	0	2	2	1	0	2	41	0	0	3	31	5	0	96	
7:10 AM	1	3	5	0	13	2	2	0	5	27	0	1	1	14	3	0	77	
7:15 AM	1	10	3	0	7	5	4	0	6	45	2	0	7	28	6	0	124	
7:20 AM	1	5	9	0	10	8	2	0	9	47	0	0	2	23	3	0	119	
7:25 AM	1	12	12	0	13	7	7	0	16	53	0	0	3	33	7	0	164	
7:30 AM	2	9	17	0	10	10	5	0	5	52	0	0	1	17	3	2	133	
7:35 AM	3	17	22	0	12	11	8	0	6	64	2	0	8	18	5	0	176	
7:40 AM	5	4	16	0	10	10	2	0	10	71	1	0	8	29	2	0	168	
7:45 AM	1	7	8	0	6	16	3	0	10	59	1	0	14	23	2	0	150	
7:50 AM	2	4	12	0	4	15	7	0	4	40	2	0	5	23	1	0	119	
7:55 AM	0	8	11	0	11	6	7	0	5	41	0	0	9	23	0	0	121	1518
8:00 AM	1	3	10	0	10	11	14	0	3	35	1	0	6	29	2	0	125	1572
8:05 AM	2	2	6	0	9	13	6	0	1	42	0	0	3	18	2	0	104	1580
8:10 AM	0	6	2	0	4	6	3	0	1	44	3	0	1	22	4	0	96	1599
8:15 AM	0	4	3	0	6	5	3	0	3	31	1	0	2	16	2	0	76	1551
8:20 AM	0	4	9	0	4	1	2	0	0	37	0	0	5	17	1	0	80	1512
8:25 AM	1	2	6	0	7	5	0	0	1	34	0	0	3	29	3	0	91	1439
8:30 AM	1	2	6	0	6	4	3	0	0	36	0	0	3	26	4	0	91	1397
8:35 AM	0	4	6	0	5	2	5	0	0	37	0	0	2	16	3	0	80	1301
8:40 AM	0	1	8	0	9	4	3	0	2	36	0	0	2	18	2	0	85	1218
8:45 AM	0	3	4	0	2	3	1	0	4	46	1	0	0	20	7	0	91	1159
8:50 AM	1	5	6	0	5	3	5	0	3	40	1	0	1	8	1	0	79	1119
8:55 AM	1	6	4	0	8	5	4	0	2	28	0	0	3	24	4	0	89	1087

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	36	112	184	0	112	148	52	0	104	776	16	0	120	280	36	0	1976
Heavy Trucks	0	0	0		0	0	0		0	0	0		4	16	0		20
Buses																	
Pedestrians		16				0				0				0			16
Bicycles	32	0	28		0	0	0		0	0	4		4	0	0		68
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

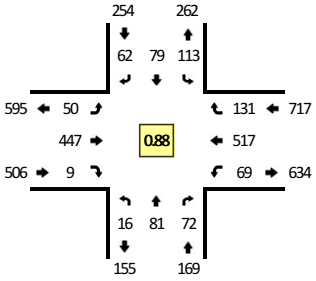
Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

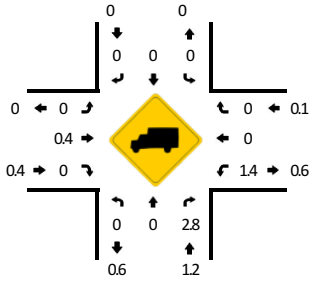
LOCATION: Market St -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

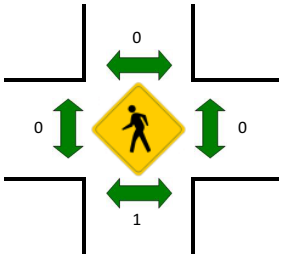
QC JOB #: 16723556
DATE: Wed, Oct 23 2024

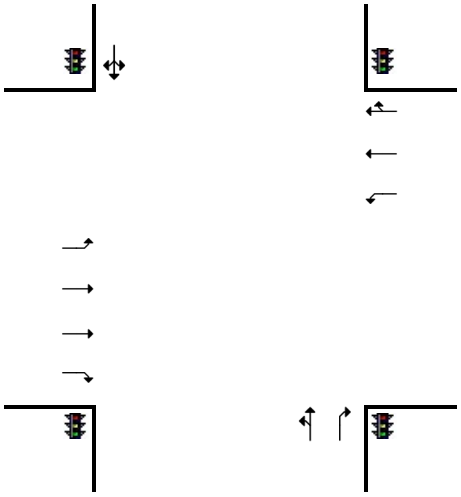
Peak-Hour: 4:55 PM -- 5:55 PM
Peak 15-Min: 5:35 PM -- 5:50 PM

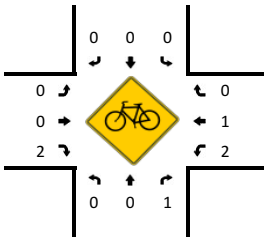


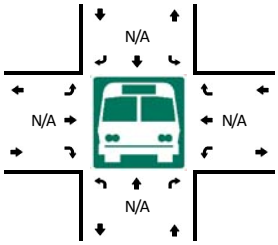
TRUE DATA TO IMPROVE MOBILITY

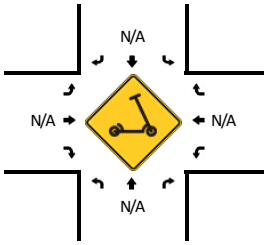












5-Min Count Period Beginning At	Market St (Northbound)				Market St (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	6	3	0	10	3	2	0	1	43	0	0	8	28	9	0	114	
4:05 PM	4	7	8	0	9	4	1	0	4	37	0	0	5	39	5	0	123	
4:10 PM	1	4	3	0	7	3	5	0	5	41	1	0	6	51	8	0	135	
4:15 PM	0	5	6	0	10	4	4	0	4	34	1	0	8	36	11	0	123	
4:20 PM	0	8	4	0	4	4	2	0	5	31	0	0	4	30	9	0	101	
4:25 PM	1	2	8	0	3	2	4	0	4	28	2	0	10	39	9	0	112	
4:30 PM	1	9	9	0	8	8	5	0	4	34	2	0	6	32	16	0	134	
4:35 PM	1	10	7	0	10	5	6	0	7	38	2	0	10	44	10	0	150	
4:40 PM	0	10	10	0	5	9	6	0	2	24	2	0	7	44	13	1	133	
4:45 PM	0	9	9	0	9	4	3	0	6	35	0	1	10	46	4	0	136	
4:50 PM	0	4	7	0	5	4	4	0	3	32	0	0	6	28	7	0	100	
4:55 PM	1	6	3	0	9	3	4	0	1	48	2	0	3	51	14	0	145	1506
5:00 PM	0	5	9	0	11	5	2	0	4	38	2	0	2	35	10	0	123	1515
5:05 PM	0	1	6	0	7	10	5	0	4	43	0	0	9	33	8	0	126	1518
5:10 PM	0	6	1	0	6	6	8	0	1	27	1	0	7	34	8	0	105	1488
5:15 PM	3	4	9	0	6	4	5	0	1	44	0	0	3	36	8	1	124	1489
5:20 PM	1	6	5	0	6	7	2	0	7	31	1	0	9	51	14	0	140	1528
5:25 PM	4	13	4	0	6	4	4	0	8	39	1	0	2	40	12	1	138	1554
5:30 PM	0	8	8	0	16	7	2	0	7	33	0	0	6	47	10	0	144	1564
5:35 PM	2	8	7	0	7	10	11	0	5	46	1	0	0	56	15	0	168	1582
5:40 PM	1	7	10	0	18	13	6	0	2	30	0	0	7	47	8	0	149	1598
5:45 PM	4	8	4	0	11	8	4	0	9	34	0	0	9	51	9	0	151	1613
5:50 PM	0	9	6	0	10	2	9	0	1	34	1	0	10	36	15	0	133	1646
5:55 PM	0	13	6	0	7	3	7	0	1	27	0	1	3	46	14	0	128	1629

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	28	92	84	0	144	124	84	0	64	440	4	0	64	616	128	0	1872
Heavy Trucks	0	0	8		0	0	0		0	0	0		0	0	0		8
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	4		0	0	0		0	0	0		4	0	0		8
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

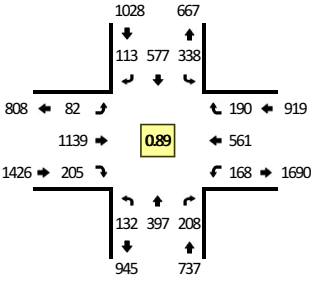
Type of peak hour being reported: Intersection Peak

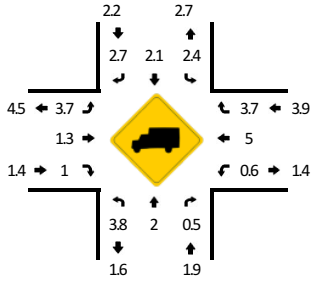
Method for determining peak hour: Total Entering Volume

LOCATION: Woodcreek Oaks Blvd -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

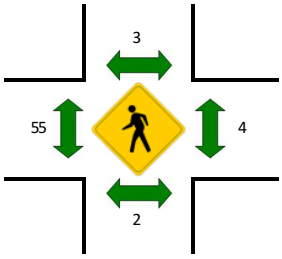
QC JOB #: 16723557
DATE: Thu, Oct 24 2024

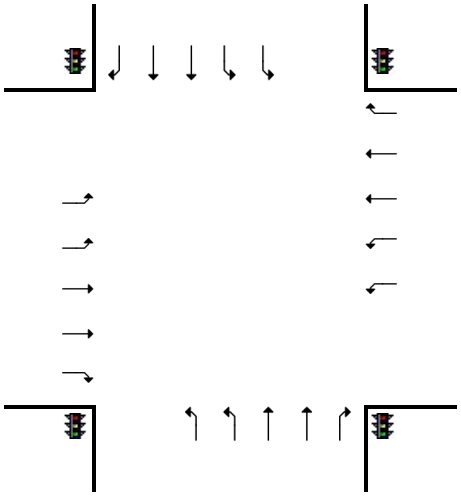
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

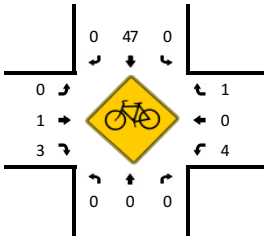


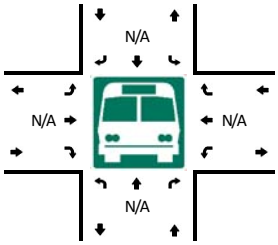


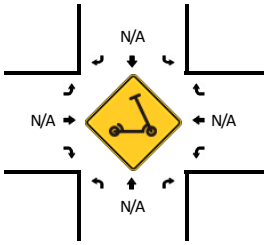
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Woodcreek Oaks Blvd (Northbound)				Woodcreek Oaks Blvd (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	4	6	12	0	10	15	6	0	4	70	3	0	4	38	2	0	174	
7:05 AM	4	12	7	0	16	13	11	0	1	60	4	0	3	34	5	0	170	
7:10 AM	7	7	14	0	24	19	8	0	3	41	9	0	10	31	6	1	180	
7:15 AM	2	7	12	0	17	13	5	0	5	108	6	0	2	27	8	0	212	
7:20 AM	1	4	11	0	14	14	7	1	5	64	9	0	10	34	12	1	187	
7:25 AM	5	12	9	0	7	17	5	0	16	117	11	0	6	40	14	1	260	
7:30 AM	8	8	12	0	15	18	9	0	3	95	4	0	9	37	8	1	227	
7:35 AM	8	19	12	0	28	41	8	0	5	116	18	0	5	41	9	1	311	
7:40 AM	9	20	23	0	27	42	8	0	10	91	13	0	10	46	11	1	311	
7:45 AM	6	31	31	0	36	42	13	0	5	98	20	0	8	36	9	1	336	
7:50 AM	9	30	18	0	21	36	9	0	9	118	13	0	14	67	18	0	362	
7:55 AM	10	27	9	0	25	31	10	0	15	98	23	0	11	51	17	0	327	3057
8:00 AM	11	29	15	0	22	40	10	0	5	114	12	0	15	54	10	2	339	3222
8:05 AM	13	31	22	0	34	52	14	0	7	103	16	0	12	43	16	0	363	3415
8:10 AM	11	25	9	0	13	53	6	0	10	97	16	0	23	37	17	0	317	3552
8:15 AM	15	47	18	0	27	63	10	0	6	69	31	0	22	53	28	0	389	3729
8:20 AM	15	58	17	0	34	90	4	0	1	79	23	1	21	38	31	0	412	3954
8:25 AM	13	46	16	0	37	52	12	0	4	92	14	1	11	45	17	0	360	4054
8:30 AM	12	34	18	0	34	35	9	0	3	64	6	0	11	50	7	0	283	4110
8:35 AM	5	21	15	0	30	23	14	0	6	124	10	0	3	37	11	0	299	4098
8:40 AM	3	7	14	0	16	18	1	0	1	126	8	0	4	52	9	0	259	4046
8:45 AM	8	8	19	0	17	15	7	0	4	88	9	0	11	44	6	2	238	3948
8:50 AM	13	19	12	0	8	11	7	0	3	69	6	1	5	44	7	0	205	3791
8:55 AM	8	12	16	0	11	14	7	0	7	91	11	3	2	49	8	0	239	3703

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	172	604	204	0	392	820	104	0	44	960	272	8	216	544	304	0	4644
Heavy Trucks	8	12	0		8	20	4		4	8	4		0	44	12		124
Buses																	
Pedestrians		0				0				116				12			128
Bicycles	0	0	0		0	60	0		0	0	12		0	0	0		72
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

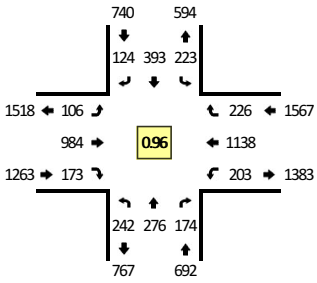
Type of peak hour being reported: Intersection Peak

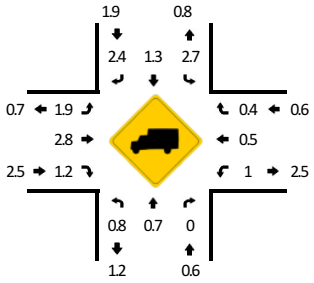
Method for determining peak hour: Total Entering Volume

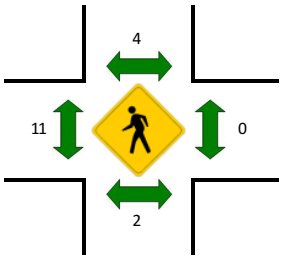
LOCATION: Woodcreek Oaks Blvd -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

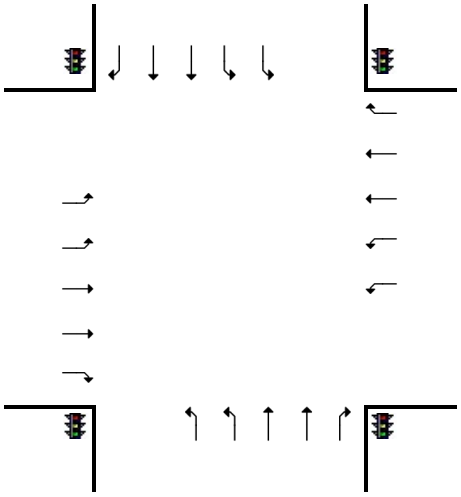
QC JOB #: 16723558
DATE: Thu, Oct 24 2024

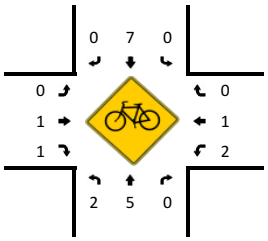
Peak-Hour: 4:05 PM -- 5:05 PM
Peak 15-Min: 4:10 PM -- 4:25 PM

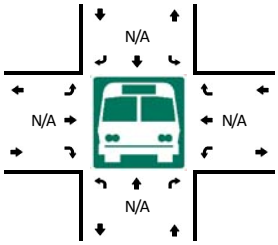


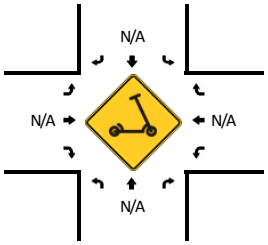












5-Min Count Period Beginning At	Woodcreek Oaks Blvd (Northbound)				Woodcreek Oaks Blvd (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	13	20	13	0	21	22	5	0	11	70	19	1	14	101	9	1	320	
4:05 PM	23	21	10	0	13	28	15	0	6	75	19	1	20	96	20	0	347	
4:10 PM	20	32	21	0	16	36	6	0	6	76	13	2	19	119	20	0	386	
4:15 PM	25	23	18	0	17	23	11	0	13	80	14	0	19	92	25	0	360	
4:20 PM	23	26	13	0	12	44	11	0	8	79	22	2	21	88	17	1	367	
4:25 PM	17	23	12	0	23	40	16	0	8	94	12	2	17	84	21	0	369	
4:30 PM	20	23	11	0	14	27	8	0	8	90	19	1	17	105	13	0	356	
4:35 PM	14	21	14	0	23	30	8	0	9	82	15	1	16	99	12	0	344	
4:40 PM	23	23	19	0	16	28	6	0	3	82	8	2	19	89	20	1	339	
4:45 PM	28	28	12	0	23	33	13	0	11	73	8	0	15	80	18	0	342	
4:50 PM	16	20	14	0	30	42	4	0	5	84	14	2	13	76	20	0	340	
4:55 PM	14	9	14	0	15	24	15	0	9	100	15	1	13	112	17	0	358	4228
5:00 PM	19	27	16	0	21	38	11	0	6	69	14	0	12	98	23	0	354	4262
5:05 PM	17	27	9	0	15	27	17	0	7	68	16	0	18	93	22	1	337	4252
5:10 PM	11	27	6	0	24	39	8	0	4	82	9	0	15	101	23	0	349	4215
5:15 PM	23	50	9	0	19	26	14	0	8	81	23	1	11	93	20	1	379	4234
5:20 PM	26	32	12	0	18	31	8	0	9	77	15	0	18	84	17	1	348	4215
5:25 PM	11	25	10	0	23	30	11	0	12	81	8	0	14	97	14	0	336	4182
5:30 PM	12	29	16	0	15	33	12	0	9	60	5	2	18	98	25	0	334	4160
5:35 PM	26	29	18	0	14	28	14	0	10	72	15	0	12	94	24	1	357	4173
5:40 PM	21	23	21	0	19	28	16	0	7	88	17	3	16	113	14	0	386	4220
5:45 PM	16	30	22	0	10	25	11	0	12	80	7	1	25	119	17	0	375	4253
5:50 PM	18	29	19	0	6	17	9	0	8	66	8	1	20	86	19	1	307	4220
5:55 PM	23	16	15	0	18	40	9	0	11	72	12	5	12	85	20	0	338	4200

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	272	324	208	0	180	412	112	0	108	940	196	16	236	1196	248	4	4452
Heavy Trucks	4	4	0		8	12	4		0	32	4		0	12	0		80
Buses																	
Pedestrians		0				0				8				0			8
Bicycles	4	12	0		0	4	0		0	0	4		0	0	0		24
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

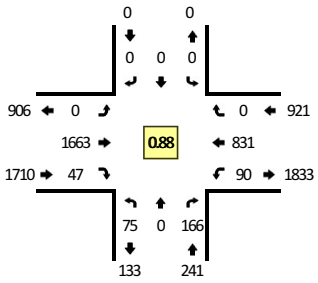
Type of peak hour being reported: Intersection Peak

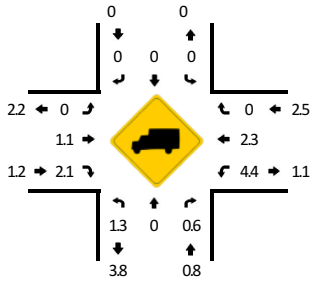
Method for determining peak hour: Total Entering Volume

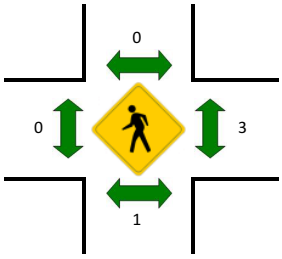
LOCATION: Country Club Dr -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

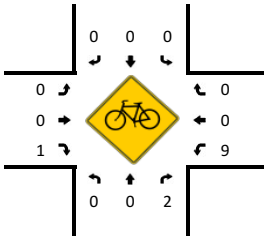
QC JOB #: 16723559
DATE: Thu, Oct 24 2024

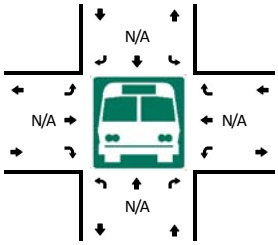
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

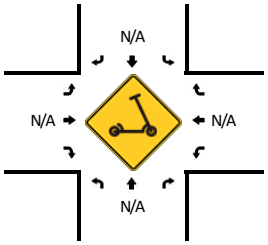












5-Min Count Period Beginning At	Country Club Dr (Northbound)				Country Club Dr (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	0	5	0	0	0	0	0	0	82	3	0	3	31	0	1	126	
7:05 AM	3	0	9	0	0	0	0	0	0	81	0	0	1	41	0	0	135	
7:10 AM	0	0	7	0	0	0	0	0	0	84	1	0	3	44	0	2	141	
7:15 AM	0	0	12	0	0	0	0	0	0	123	1	0	5	45	0	0	186	
7:20 AM	2	0	7	0	0	0	0	0	0	83	0	0	7	49	0	0	148	
7:25 AM	2	0	13	0	0	0	0	0	0	135	5	0	2	53	0	4	214	
7:30 AM	5	0	11	0	0	0	0	0	0	111	2	0	2	42	0	1	174	
7:35 AM	2	0	10	0	0	0	0	0	0	148	6	0	4	59	0	1	230	
7:40 AM	3	0	26	0	0	0	0	0	0	129	1	0	13	62	0	0	234	
7:45 AM	8	0	12	0	0	0	0	0	0	156	7	0	11	65	0	0	259	
7:50 AM	12	0	21	0	0	0	0	0	0	141	2	0	17	72	0	0	265	
7:55 AM	11	0	15	0	0	0	0	0	0	164	6	0	5	89	0	0	290	2402
8:00 AM	8	0	11	0	0	0	0	0	0	134	3	0	5	48	0	0	209	2485
8:05 AM	4	0	13	0	0	0	0	0	0	159	2	0	2	78	0	1	259	2609
8:10 AM	10	0	15	0	0	0	0	0	0	104	2	0	11	57	0	1	200	2668
8:15 AM	2	0	8	0	0	0	0	0	0	154	6	0	4	100	0	0	274	2756
8:20 AM	8	0	13	0	0	0	0	0	0	103	8	0	6	75	0	0	213	2821
8:25 AM	4	0	11	0	0	0	0	0	0	153	4	0	4	67	0	1	244	2851
8:30 AM	3	0	11	0	0	0	0	0	0	118	0	0	4	59	0	0	195	2872
8:35 AM	2	0	10	0	0	0	0	0	0	156	1	0	3	49	0	1	222	2864
8:40 AM	4	0	9	0	0	0	0	0	0	152	2	0	5	60	0	0	232	2862
8:45 AM	1	0	11	0	0	0	0	0	0	139	1	0	2	61	0	0	215	2818
8:50 AM	3	0	14	0	0	0	0	0	0	104	2	0	9	51	0	1	184	2737
8:55 AM	2	0	14	0	0	0	0	0	0	119	1	0	2	65	0	1	204	2651

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	124	0	192	0	0	0	0	0	0	1844	60	0	132	904	0	0	3256
Heavy Trucks	0	0	4		0	0	0		0	16	4		0	28	0		52
Buses																	
Pedestrians		0				0				0				4			4
Bicycles	0	0	8		0	0	0		0	0	0		12	0	0		20
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

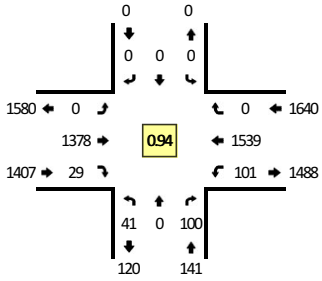
Type of peak hour being reported: Intersection Peak

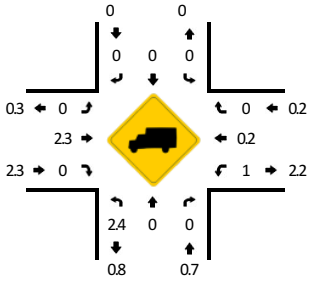
Method for determining peak hour: Total Entering Volume

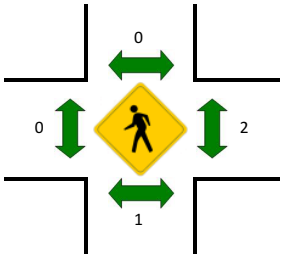
LOCATION: Country Club Dr -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

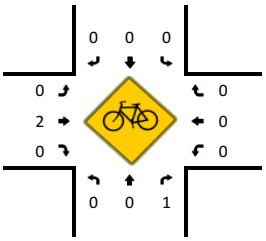
QC JOB #: 16723560
DATE: Thu, Oct 24 2024

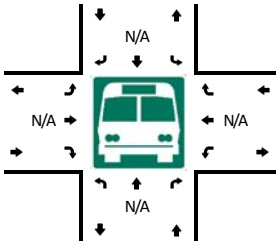
Peak-Hour: 4:05 PM -- 5:05 PM
Peak 15-Min: 4:05 PM -- 4:20 PM

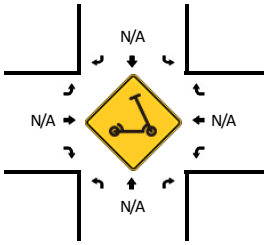












5-Min Count Period Beginning At	Country Club Dr (Northbound)				Country Club Dr (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	0	11	0	0	0	0	0	0	102	1	0	13	115	0	1	245	
4:05 PM	6	0	9	0	0	0	0	0	0	102	2	0	4	146	0	1	270	
4:10 PM	6	0	6	0	0	0	0	0	0	113	1	0	12	141	0	0	279	
4:15 PM	6	0	6	0	0	0	0	0	0	141	0	0	9	135	0	2	299	
4:20 PM	5	0	10	0	0	0	0	0	0	95	2	0	11	113	0	1	237	
4:25 PM	2	0	9	0	0	0	0	0	0	107	5	0	7	142	0	0	272	
4:30 PM	3	0	9	0	0	0	0	0	0	108	3	0	6	124	0	1	254	
4:35 PM	3	0	10	0	0	0	0	0	0	116	2	0	6	120	0	1	258	
4:40 PM	0	0	8	0	0	0	0	0	0	122	3	0	9	106	0	1	249	
4:45 PM	1	0	8	0	0	0	0	0	0	124	5	0	5	132	0	1	276	
4:50 PM	3	0	10	0	0	0	0	0	0	115	0	0	10	117	0	0	255	
4:55 PM	2	0	6	0	0	0	0	0	0	111	4	0	6	135	0	2	266	3160
5:00 PM	4	0	9	0	0	0	0	0	0	124	2	0	6	128	0	0	273	3188
5:05 PM	6	0	6	0	0	0	0	0	0	105	0	0	13	126	0	0	256	3174
5:10 PM	2	0	6	0	0	0	0	0	0	116	3	0	8	123	0	0	258	3153
5:15 PM	3	0	12	0	0	0	0	0	0	123	1	0	4	131	0	0	274	3128
5:20 PM	2	0	8	0	0	0	0	0	0	77	1	0	11	120	0	1	220	3111
5:25 PM	7	0	16	0	0	0	0	0	0	143	1	0	6	121	0	0	294	3133
5:30 PM	2	0	16	0	0	0	0	0	0	85	4	0	7	153	0	1	268	3147
5:35 PM	3	0	14	0	0	0	0	0	0	93	0	0	7	147	0	1	265	3154
5:40 PM	4	0	10	0	0	0	0	0	0	111	2	0	14	131	0	2	274	3179
5:45 PM	2	0	5	0	0	0	0	0	0	114	0	0	8	127	0	0	256	3159
5:50 PM	0	0	11	0	0	0	0	0	0	110	2	0	12	133	0	1	269	3173
5:55 PM	3	0	6	0	0	0	0	0	0	98	1	0	6	128	0	0	242	3149

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	72	0	84	0	0	0	0	0	0	1424	12	0	100	1688	0	12	3392
Heavy Trucks	0	0	0		0	0	0		0	48	0		0	8	0		56
Buses																	
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

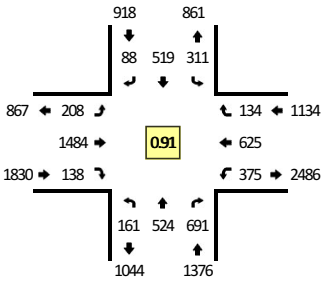
Type of peak hour being reported: Intersection Peak

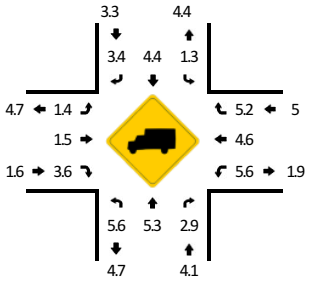
Method for determining peak hour: Total Entering Volume

LOCATION: Foothill Blvd -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

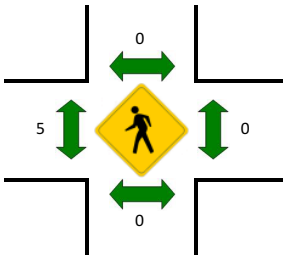
QC JOB #: 16723561
DATE: Thu, Oct 24 2024

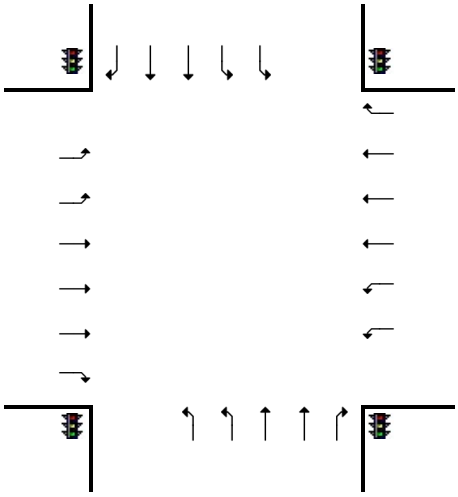
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

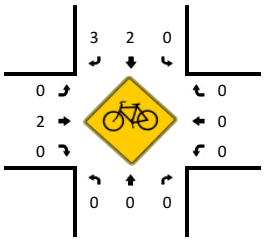


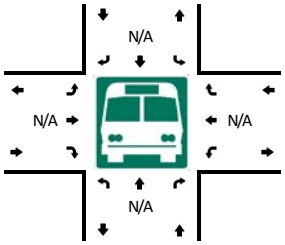


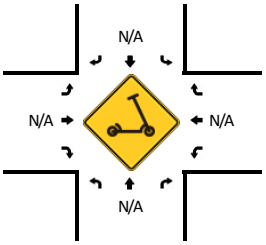
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Foothill Blvd (Northbound)				Foothill Blvd (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	6	27	30	0	12	23	1	0	3	44	10	0	25	32	9	0	222	
7:05 AM	5	24	35	1	9	33	2	0	9	100	7	0	7	30	6	0	268	
7:10 AM	6	17	44	1	10	22	7	0	8	98	13	0	26	46	5	0	303	
7:15 AM	13	56	37	1	12	37	3	0	9	94	11	1	25	37	4	0	340	
7:20 AM	12	28	68	2	22	23	7	0	9	101	6	1	23	47	6	1	356	
7:25 AM	10	35	38	3	16	50	3	1	14	100	6	1	15	37	6	0	335	
7:30 AM	7	27	67	0	12	31	9	0	12	90	5	1	44	46	7	0	358	
7:35 AM	11	40	73	0	26	48	1	0	21	130	8	0	23	29	5	0	415	
7:40 AM	8	40	66	0	10	36	8	1	17	126	15	0	33	68	17	0	445	
7:45 AM	6	40	63	1	34	52	9	1	33	124	5	0	27	48	8	1	452	
7:50 AM	16	60	62	3	18	37	9	0	13	125	13	0	46	65	17	0	484	
7:55 AM	17	66	55	1	31	54	4	0	21	138	15	0	35	62	13	0	512	4490
8:00 AM	5	44	49	0	20	34	7	0	15	126	10	1	28	54	11	0	404	4672
8:05 AM	20	47	50	1	40	53	9	0	24	128	10	0	30	41	10	0	463	4867
8:10 AM	9	39	59	1	29	55	17	0	14	126	7	0	33	63	8	0	460	5024
8:15 AM	16	40	53	1	33	55	9	0	14	124	12	1	31	47	8	0	444	5128
8:20 AM	11	37	63	3	24	23	5	0	10	93	15	5	29	63	14	0	395	5167
8:25 AM	9	37	41	2	25	45	5	1	10	124	15	0	21	38	9	0	382	5214
8:30 AM	18	34	57	2	18	27	5	0	8	120	13	1	36	47	14	2	402	5258
8:35 AM	14	37	52	3	16	41	2	0	12	114	12	2	15	38	11	1	370	5213
8:40 AM	8	23	49	3	9	27	12	0	8	133	15	1	31	54	11	0	384	5152
8:45 AM	8	30	47	4	25	52	5	0	17	132	11	2	22	41	11	0	407	5107
8:50 AM	9	35	42	2	10	25	8	0	8	109	11	1	30	60	9	1	360	4983
8:55 AM	14	30	49	3	29	43	3	0	16	94	7	0	8	41	13	0	350	4821

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	156	664	720	20	332	572	88	4	268	1548	132	0	432	700	152	4	5792
Heavy Trucks	4	20	8		4	16	4		4	24	0		24	36	4		148
Buses																	
Pedestrians		0				0				8				0			8
Bicycles	0	0	0		0	4	0		0	0	0		0	0	0		4
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

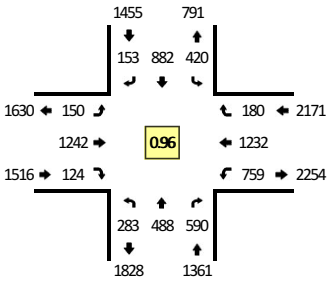
Type of peak hour being reported: Intersection Peak

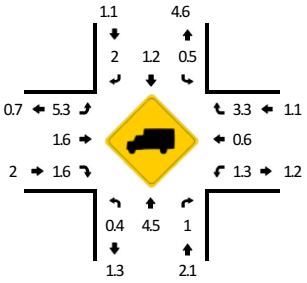
Method for determining peak hour: Total Entering Volume

LOCATION: Foothill Blvd -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

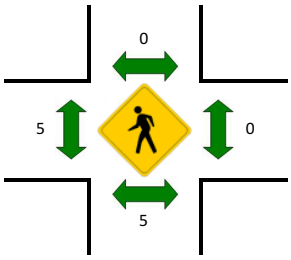
QC JOB #: 16723562
DATE: Thu, Oct 24 2024

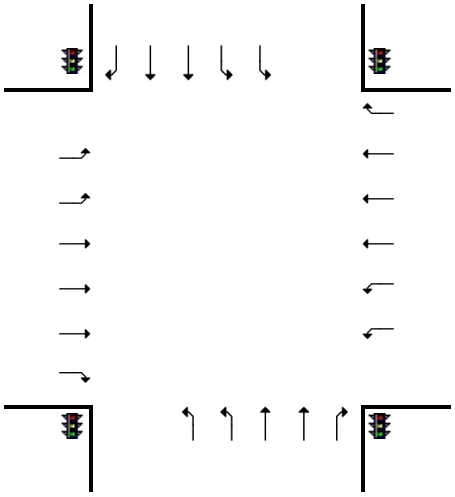
Peak-Hour: 4:25 PM -- 5:25 PM
Peak 15-Min: 4:40 PM -- 4:55 PM

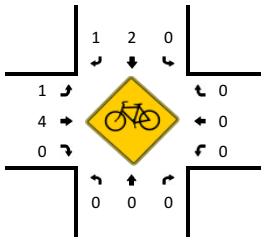


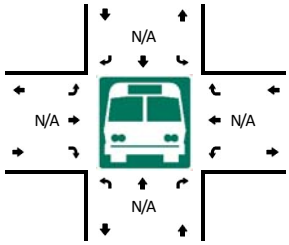


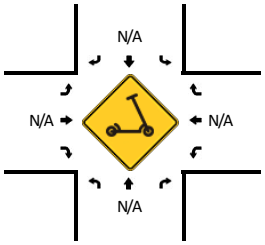
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Foothill Blvd (Northbound)				Foothill Blvd (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	13	23	31	6	12	48	10	0	7	104	11	0	66	118	12	0	461	
4:05 PM	26	45	50	5	21	73	9	0	18	84	12	4	46	94	19	0	506	
4:10 PM	17	32	41	2	17	62	17	0	3	82	16	1	70	141	20	1	522	
4:15 PM	20	39	43	5	37	64	17	0	9	116	13	3	57	88	18	0	529	
4:20 PM	16	24	37	4	30	55	18	0	7	108	6	1	85	130	15	0	536	
4:25 PM	22	39	47	4	54	79	12	0	12	88	11	4	51	89	15	0	527	
4:30 PM	16	19	36	4	32	56	17	0	7	112	15	3	75	115	13	0	520	
4:35 PM	20	51	46	7	54	75	9	0	7	102	8	0	52	85	10	0	526	
4:40 PM	13	30	51	7	36	59	8	0	3	120	11	3	77	132	9	0	559	
4:45 PM	13	32	67	4	44	70	13	0	18	119	10	2	57	92	18	0	559	
4:50 PM	22	60	52	4	40	94	10	0	14	102	12	3	53	95	12	1	574	
4:55 PM	20	42	50	4	35	55	6	0	13	99	8	0	62	103	15	1	513	6332
5:00 PM	17	34	47	10	28	77	17	1	10	98	11	0	57	106	8	0	521	6392
5:05 PM	18	55	48	7	19	80	20	0	12	107	11	4	61	104	21	1	568	6454
5:10 PM	16	41	43	8	27	86	12	0	10	96	13	3	68	99	17	0	539	6471
5:15 PM	21	42	48	5	28	79	15	0	4	106	6	3	65	106	16	0	544	6486
5:20 PM	19	43	55	2	22	72	14	0	12	93	8	3	78	106	26	0	553	6503
5:25 PM	19	43	42	5	22	48	11	0	12	99	5	1	73	122	15	0	517	6493
5:30 PM	18	40	42	2	15	40	7	0	11	100	6	5	71	119	18	2	496	6469
5:35 PM	17	45	38	9	20	48	13	0	8	93	17	3	74	124	18	0	527	6470
5:40 PM	18	43	44	2	13	62	14	0	7	109	9	1	68	122	24	1	537	6448
5:45 PM	12	27	43	3	24	52	7	0	14	109	10	3	70	113	20	0	507	6396
5:50 PM	26	43	36	4	16	32	12	0	16	90	7	2	69	116	20	2	491	6313
5:55 PM	29	34	46	6	13	39	9	0	15	78	11	2	48	103	23	0	456	6256

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	192	488	680	60	480	892	124	0	140	1364	132	32	748	1276	156	4	6768
Heavy Trucks	0	28	4		4	0	4		4	24	4		4	8	0		84
Buses																	
Pedestrians		4				0				4				0			8
Bicycles	0	0	0		0	4	0		0	0	0		0	0	0		4
Scooters																	

Comments:

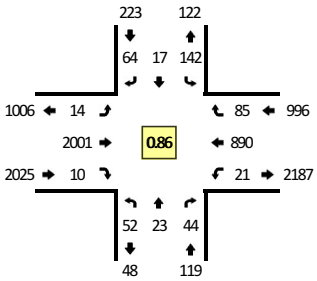
Report generated on 11/5/2024 3:39 PM

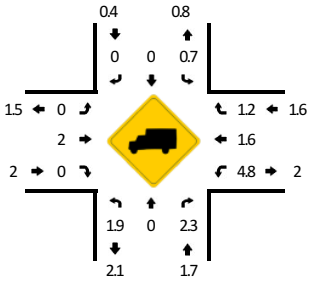
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

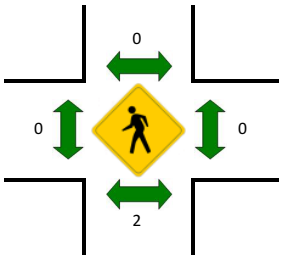
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

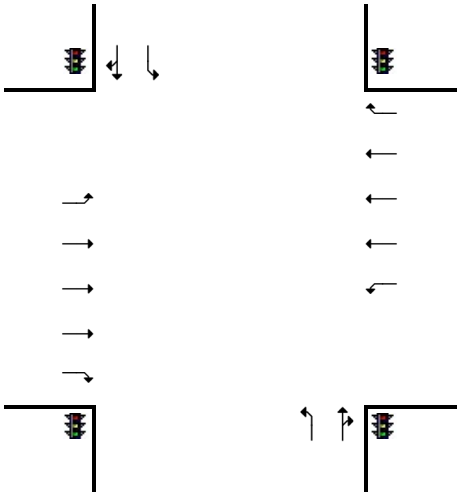
LOCATION: Hallissy Dr/Gold Coast Dr -- Pleasant Grove Blvd | **QC JOB #:** 16723563
CITY/STATE: Roseville, CA | **DATE:** Thu, Oct 24 2024

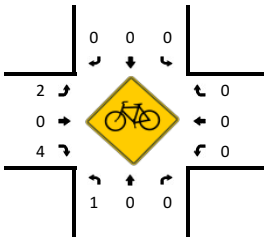
Peak-Hour: 7:40 AM -- 8:40 AM
Peak 15-Min: 7:40 AM -- 7:55 AM

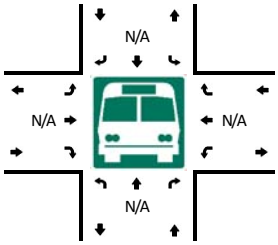


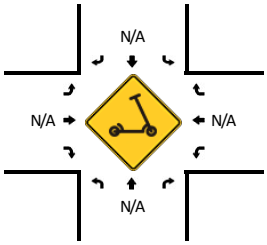












5-Min Count Period Beginning At	Hallissy Dr/Gold Coast Dr (Northbound)				Hallissy Dr/Gold Coast Dr (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	0	5	0	4	0	0	0	0	85	0	0	0	53	0	0	148	
7:05 AM	1	0	4	0	6	0	0	0	0	91	1	0	0	51	2	0	156	
7:10 AM	2	0	5	0	3	1	0	0	0	111	1	0	0	43	2	0	168	
7:15 AM	4	1	2	0	5	0	0	0	1	106	1	0	1	66	4	0	191	
7:20 AM	2	0	3	0	5	0	0	0	1	141	1	0	0	46	4	0	203	
7:25 AM	4	1	2	0	10	1	3	0	2	117	0	0	0	69	11	0	220	
7:30 AM	10	2	4	0	12	0	3	0	4	153	2	0	2	55	9	0	256	
7:35 AM	3	6	6	0	12	1	5	0	1	109	2	0	2	65	12	0	224	
7:40 AM	7	4	8	0	11	1	6	0	2	192	0	0	2	71	21	0	325	
7:45 AM	8	8	4	0	22	5	16	0	1	119	1	0	1	96	15	0	296	
7:50 AM	9	2	10	0	13	1	11	0	4	204	1	0	1	85	10	0	351	
7:55 AM	6	3	3	0	25	8	9	0	2	157	2	0	0	63	10	0	288	2826
8:00 AM	2	2	5	0	21	1	9	0	1	185	1	0	2	78	6	0	313	2991
8:05 AM	6	1	2	0	15	0	6	0	1	142	1	0	2	66	7	0	249	3084
8:10 AM	3	1	3	0	10	0	1	0	0	187	1	0	2	86	4	0	298	3214
8:15 AM	2	0	3	0	4	0	2	0	1	139	1	0	2	73	2	0	229	3252
8:20 AM	2	0	2	0	3	0	0	0	1	191	0	0	2	61	1	0	263	3312
8:25 AM	3	0	1	0	4	0	2	0	1	138	1	0	5	81	7	0	243	3335
8:30 AM	1	0	1	0	5	0	0	0	0	205	1	0	2	64	1	0	280	3359
8:35 AM	3	2	2	0	9	1	2	0	0	142	0	0	0	66	1	0	228	3363
8:40 AM	1	0	2	0	2	0	1	0	0	203	1	1	2	67	4	0	284	3322
8:45 AM	2	0	1	0	3	0	0	0	0	163	1	0	1	93	3	0	267	3293
8:50 AM	0	1	0	0	1	0	0	0	3	182	1	0	0	59	3	0	250	3192
8:55 AM	3	1	3	0	3	0	3	0	0	108	0	0	1	83	3	0	208	3112

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	96	56	88	0	184	28	132	0	28	2060	8	0	16	1008	184	0	3888
Heavy Trucks	4	0	4		0	0	0		0	40	0		0	12	4		64
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	4	0	0		0	0	0		8	0	0		0	0	0		12
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

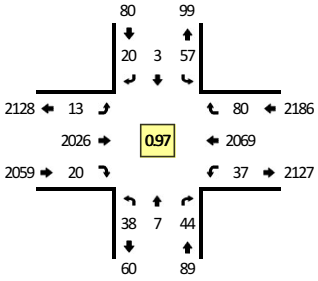
Type of peak hour being reported: Intersection Peak

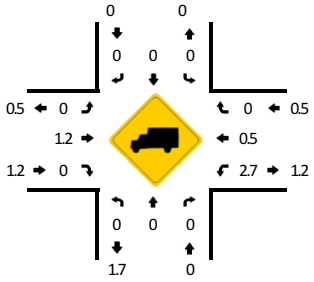
Method for determining peak hour: Total Entering Volume

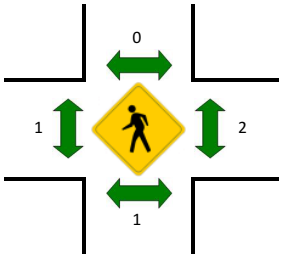
LOCATION: Hallissy Dr/Gold Coast Dr -- Pleasant Grove Blvd
CITY/STATE: Roseville, CA

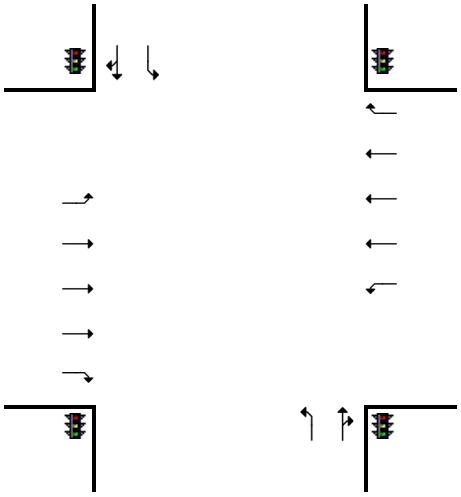
QC JOB #: 16723564
DATE: Thu, Oct 24 2024

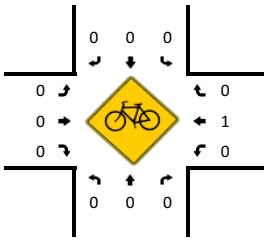
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:15 PM -- 4:30 PM

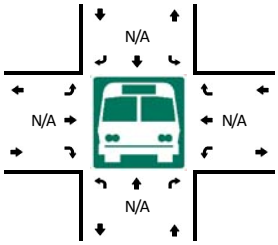


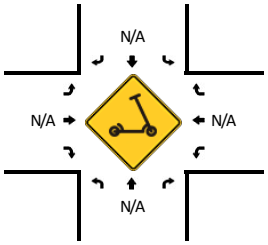












5-Min Count Period Beginning At	Hallissy Dr/Gold Coast Dr (Northbound)				Hallissy Dr/Gold Coast Dr (Southbound)				Pleasant Grove Blvd (Eastbound)				Pleasant Grove Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	0	1	0	5	1	2	0	1	113	2	0	1	178	4	0	311	
4:05 PM	2	0	6	0	2	0	3	0	2	193	4	0	2	136	3	0	353	
4:10 PM	3	1	3	0	6	0	1	1	1	169	1	0	2	162	6	0	356	
4:15 PM	7	0	4	0	6	1	2	0	2	139	2	1	2	171	6	0	343	
4:20 PM	2	1	3	0	3	0	0	0	0	172	2	0	5	214	8	0	410	
4:25 PM	5	0	2	0	5	0	0	0	0	171	2	0	2	196	5	0	388	
4:30 PM	1	0	6	0	4	0	0	0	0	194	2	0	2	125	3	0	337	
4:35 PM	6	0	3	0	8	0	3	0	1	173	0	0	8	164	7	0	373	
4:40 PM	3	1	4	0	4	0	1	0	0	191	0	0	0	149	8	0	361	
4:45 PM	5	1	5	0	9	1	3	0	1	146	2	0	2	176	7	0	358	
4:50 PM	2	0	4	0	3	1	2	0	3	167	2	0	3	162	10	0	359	
4:55 PM	1	3	2	0	4	0	5	0	1	181	3	0	4	164	10	0	378	4327
5:00 PM	2	1	3	0	3	0	0	0	1	170	0	0	3	165	3	0	351	4367
5:05 PM	3	0	4	0	1	0	3	0	1	171	3	0	4	189	6	0	385	4399
5:10 PM	1	0	4	0	7	0	1	0	2	151	2	0	2	194	7	0	371	4414
5:15 PM	10	1	2	0	9	1	1	0	0	141	0	0	3	155	10	0	333	4404
5:20 PM	2	0	3	0	4	0	1	0	0	201	0	0	4	181	11	0	407	4401
5:25 PM	8	0	6	0	7	0	4	0	1	141	1	1	1	157	6	0	333	4346
5:30 PM	2	1	6	0	4	0	1	0	2	127	1	0	1	133	8	0	286	4295
5:35 PM	8	0	10	0	5	0	1	0	0	162	1	0	3	173	9	0	372	4294
5:40 PM	3	0	2	0	3	1	2	0	1	143	0	0	2	181	9	0	347	4280
5:45 PM	2	2	4	0	11	0	2	0	2	123	2	0	0	128	7	0	283	4205
5:50 PM	3	1	7	0	5	3	1	0	2	152	1	1	3	174	9	0	362	4208
5:55 PM	0	1	4	0	9	1	5	0	1	160	0	1	3	176	16	0	377	4207

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	56	4	36	0	56	4	8	0	8	1928	24	4	36	2324	76	0	4564
Heavy Trucks	0	0	0		0	0	0		0	32	0		4	8	0		44
Buses																	
Pedestrians		0				0				4				8			12
Bicycles	0	0	0		0	0	0		0	0	0		0	4	0		4
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

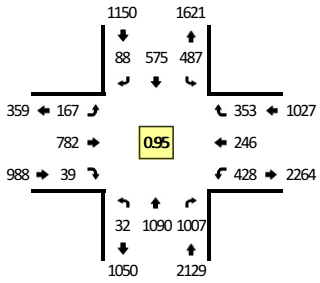
Type of peak hour being reported: Intersection Peak

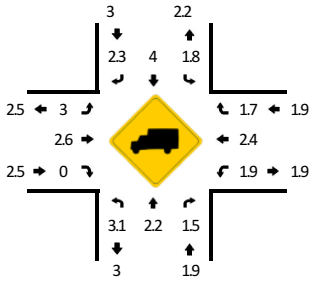
Method for determining peak hour: Total Entering Volume

LOCATION: Pleasant Grove Blvd -- Roseville Pkwy
CITY/STATE: Roseville, CA

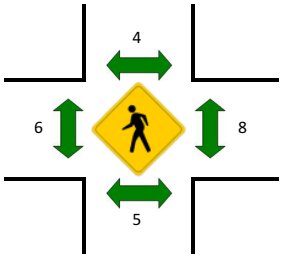
QC JOB #: 16723565
DATE: Thu, Oct 24 2024

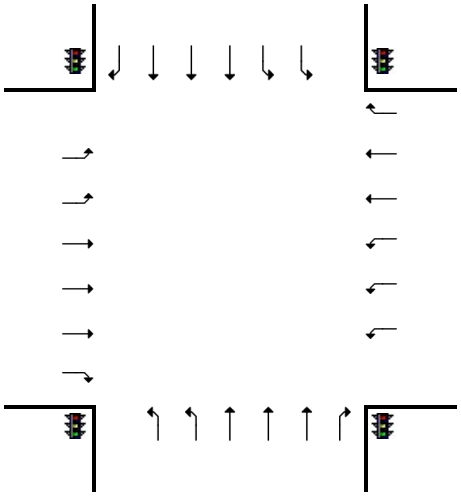
Peak-Hour: 7:40 AM -- 8:40 AM
Peak 15-Min: 7:40 AM -- 7:55 AM

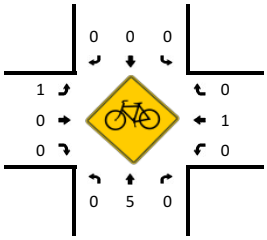


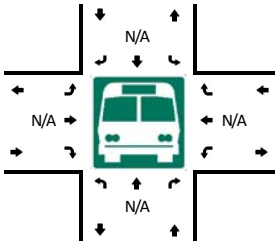


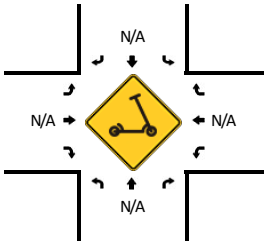
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Pleasant Grove Blvd (Northbound)				Pleasant Grove Blvd (Southbound)				Roseville Pkwy (Eastbound)				Roseville Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	48	45	1	26	35	2	0	13	28	0	1	15	8	17	0	239	
7:05 AM	0	45	46	1	26	34	5	0	4	23	0	0	17	11	15	0	227	
7:10 AM	1	55	57	1	28	37	1	1	8	53	0	0	18	11	18	0	289	
7:15 AM	0	67	45	0	39	41	5	0	4	23	0	0	19	9	13	0	265	
7:20 AM	0	56	67	1	24	24	4	1	10	58	3	1	30	15	16	0	310	
7:25 AM	0	69	65	1	47	51	1	0	7	45	3	0	26	18	25	1	359	
7:30 AM	4	83	55	1	42	34	4	0	6	66	5	0	24	19	22	2	367	
7:35 AM	3	69	74	1	43	41	14	1	17	73	8	3	39	14	25	0	425	
7:40 AM	1	75	76	1	27	56	8	1	21	74	12	1	40	26	34	3	456	
7:45 AM	1	78	78	2	55	75	9	2	14	50	9	0	53	14	27	0	467	
7:50 AM	1	115	72	2	26	37	7	0	24	83	2	0	38	28	34	0	469	
7:55 AM	1	93	92	1	34	29	7	2	23	48	1	2	35	27	30	0	425	4298
8:00 AM	4	116	92	0	45	52	8	3	15	61	1	0	35	17	31	0	480	4539
8:05 AM	0	67	103	1	39	42	4	1	13	52	5	0	32	19	35	0	413	4725
8:10 AM	3	97	98	1	40	50	7	0	12	88	1	1	34	18	26	0	476	4912
8:15 AM	1	82	77	0	55	52	6	0	4	53	4	0	36	23	31	0	424	5071
8:20 AM	5	89	89	0	33	37	9	2	8	85	1	0	39	21	23	0	441	5202
8:25 AM	2	100	60	1	35	62	8	1	8	55	1	0	22	14	25	0	394	5237
8:30 AM	0	84	86	1	31	35	5	1	12	84	2	0	26	21	34	0	422	5292
8:35 AM	2	94	84	1	52	48	10	2	9	49	0	0	35	18	23	0	427	5294
8:40 AM	2	87	86	0	35	44	4	0	13	59	2	3	38	23	36	1	433	5271
8:45 AM	1	90	82	1	55	66	10	2	3	47	0	0	25	14	30	0	426	5230
8:50 AM	4	98	75	2	26	46	11	1	19	74	2	3	28	16	35	1	441	5202
8:55 AM	1	85	48	0	58	60	6	1	11	28	0	0	29	9	29	0	365	5142

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	1072	904	20	432	672	96	12	236	828	92	4	524	272	380	12	5568
Heavy Trucks	0	32	4		4	28	0		16	8	0		12	12	12		128
Buses																	
Pedestrians		4				8				4				8			24
Bicycles	0	4	0		0	0	0		0	0	0		0	4	0		8
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

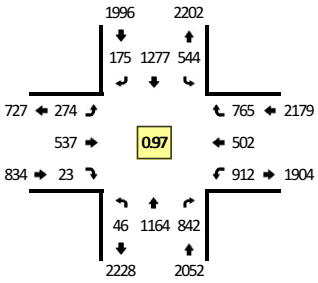
Type of peak hour being reported: Intersection Peak

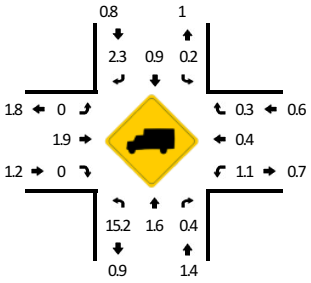
Method for determining peak hour: Total Entering Volume

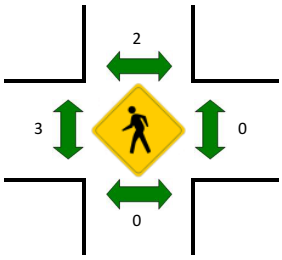
LOCATION: Pleasant Grove Blvd -- Roseville Pkwy
CITY/STATE: Roseville, CA

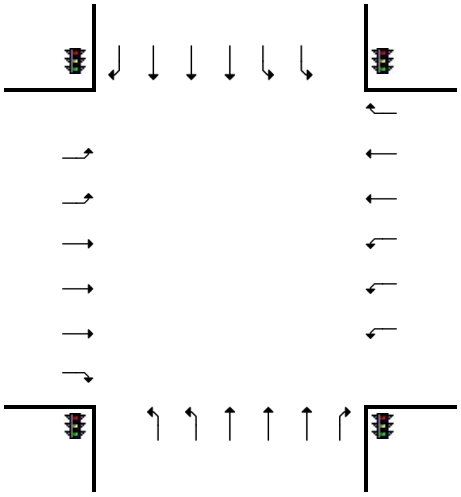
QC JOB #: 16723566
DATE: Thu, Oct 24 2024

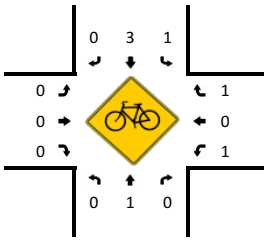
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:15 PM -- 4:30 PM

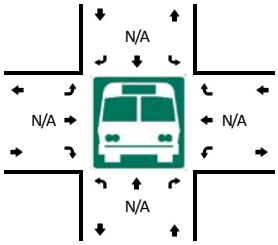


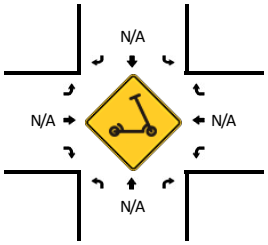












5-Min Count Period Beginning At	Pleasant Grove Blvd (Northbound)				Pleasant Grove Blvd (Southbound)				Roseville Pkwy (Eastbound)				Roseville Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	78	62	1	34	89	18	3	26	53	1	1	61	45	51	0	525	
4:05 PM	2	98	56	1	48	109	17	0	14	47	4	0	71	35	63	0	565	
4:10 PM	2	97	65	3	36	75	26	0	31	65	8	0	80	46	70	0	604	
4:15 PM	2	91	65	0	64	160	13	3	19	46	3	0	67	36	70	1	640	
4:20 PM	3	96	52	1	30	87	13	4	33	59	0	0	99	45	63	0	585	
4:25 PM	2	102	73	1	49	131	14	2	21	36	1	2	73	44	45	0	596	
4:30 PM	3	107	93	2	36	52	9	2	28	55	1	3	86	46	59	0	582	
4:35 PM	0	91	60	3	53	118	8	4	17	30	2	4	68	43	62	1	564	
4:40 PM	1	105	78	5	29	73	19	0	35	55	3	0	86	45	58	1	593	
4:45 PM	2	116	85	2	33	131	12	1	18	52	3	1	50	22	58	1	587	
4:50 PM	3	94	62	2	42	126	19	0	7	33	3	2	81	38	67	0	579	
4:55 PM	3	100	69	0	33	74	12	2	16	37	1	3	70	53	63	0	536	6956
5:00 PM	2	91	64	3	44	99	19	2	21	48	3	3	57	40	74	1	571	7002
5:05 PM	1	85	76	0	49	118	17	1	17	39	1	4	81	41	74	0	604	7041
5:10 PM	3	86	65	2	58	108	20	3	17	47	2	3	89	49	72	0	624	7061
5:15 PM	1	90	68	0	52	108	12	3	14	34	3	2	86	70	68	0	611	7032
5:20 PM	2	86	80	1	49	97	14	2	18	67	0	2	64	55	67	0	604	7051
5:25 PM	6	81	68	0	55	90	9	1	23	41	3	0	88	59	66	0	590	7045
5:30 PM	1	81	55	4	59	110	21	3	11	43	3	2	58	38	61	0	550	7013
5:35 PM	2	73	67	2	48	100	11	4	16	38	1	1	90	52	57	0	562	7011
5:40 PM	0	82	69	3	58	117	14	1	13	36	3	5	59	33	47	1	541	6959
5:45 PM	2	74	64	0	44	82	24	4	16	42	2	3	72	43	70	0	542	6914
5:50 PM	0	83	79	0	53	110	10	3	10	29	2	1	92	44	70	0	586	6921
5:55 PM	1	81	52	1	52	99	16	3	13	31	2	1	83	44	45	0	524	6909

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	28	1156	760	8	572	1512	160	36	292	564	16	8	956	500	712	4	7284
Heavy Trucks	12	20	0		4	8	4		0	12	0		4	4	0		68
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		4	4	0		0	0	0		4	0	4		16
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

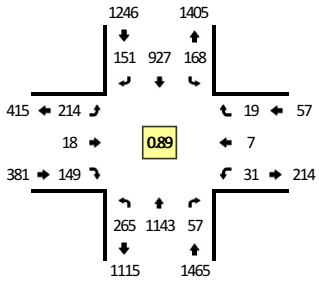
Type of peak hour being reported: Intersection Peak

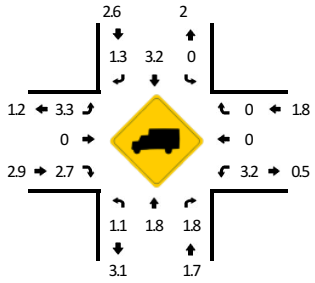
Method for determining peak hour: Total Entering Volume

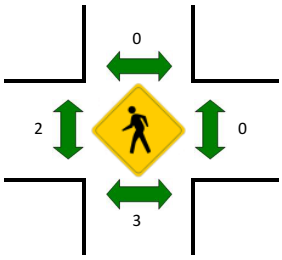
LOCATION: Pleasant Grove Blvd -- Highland Pointe Dr
CITY/STATE: Roseville, CA

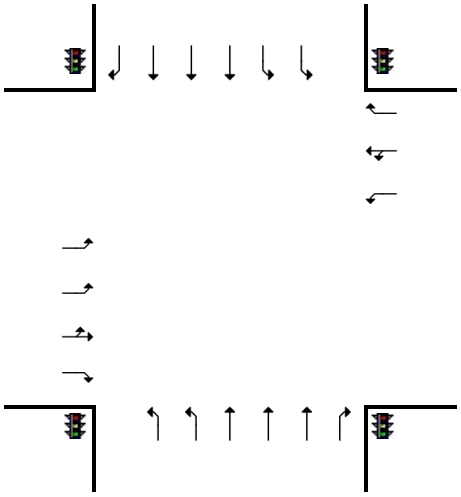
QC JOB #: 16723567
DATE: Thu, Oct 24 2024

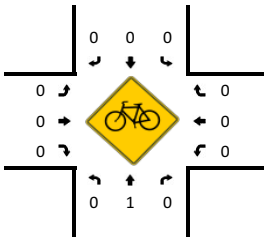
Peak-Hour: 8:00 AM -- 9:00 AM
Peak 15-Min: 8:35 AM -- 8:50 AM

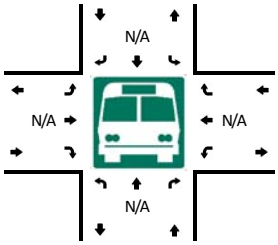


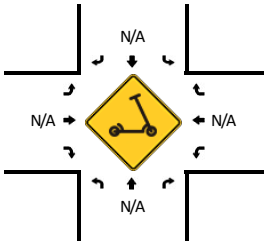












5-Min Count Period Beginning At	Pleasant Grove Blvd (Northbound)				Pleasant Grove Blvd (Southbound)				Highland Pointe Dr (Eastbound)				Highland Pointe Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	6	82	3	0	1	40	5	0	17	0	14	0	0	0	2	0	170	
7:05 AM	10	39	1	1	3	52	4	1	12	2	6	0	2	0	0	0	133	
7:10 AM	9	73	2	0	3	57	6	2	18	1	16	0	4	0	1	0	192	
7:15 AM	5	67	5	0	5	65	6	2	14	1	5	0	2	0	3	0	180	
7:20 AM	9	79	2	0	1	47	8	0	13	0	9	0	3	1	1	0	173	
7:25 AM	17	68	1	0	4	72	2	1	12	0	10	0	1	0	1	0	189	
7:30 AM	15	85	1	1	7	61	6	0	17	1	8	0	1	0	0	0	203	
7:35 AM	4	104	2	0	8	94	7	1	10	1	3	0	2	0	2	0	238	
7:40 AM	16	99	2	2	6	67	4	1	17	2	5	0	5	1	0	0	227	
7:45 AM	8	116	8	1	9	110	14	1	6	0	6	0	2	0	1	0	282	
7:50 AM	30	134	5	1	13	66	3	0	16	2	5	0	1	0	2	0	278	
7:55 AM	12	118	12	2	11	75	10	0	17	0	9	0	1	0	1	0	268	2533
8:00 AM	19	124	4	0	19	75	16	1	13	1	8	0	1	0	1	0	282	2645
8:05 AM	14	87	7	1	11	76	9	3	6	3	11	0	3	0	2	0	233	2745
8:10 AM	24	82	5	0	6	74	13	3	22	1	5	0	4	0	3	0	242	2795
8:15 AM	19	81	6	0	11	90	13	3	19	1	9	0	2	1	0	0	255	2870
8:20 AM	20	100	6	2	9	56	8	1	19	3	15	0	5	0	2	0	246	2943
8:25 AM	14	88	7	0	15	70	19	3	10	0	18	0	2	1	1	0	248	3002
8:30 AM	9	79	3	0	11	61	7	1	20	1	11	0	2	2	1	0	208	3007
8:35 AM	34	120	3	2	12	96	18	4	17	0	11	0	1	0	2	0	320	3089
8:40 AM	16	78	2	0	14	70	21	1	20	2	19	0	4	0	2	0	249	3111
8:45 AM	33	111	5	2	12	96	14	2	26	3	10	0	2	0	0	0	316	3145
8:50 AM	18	100	4	1	13	82	3	4	29	2	10	0	4	1	4	0	275	3142
8:55 AM	37	93	5	0	6	81	10	3	13	1	22	0	1	2	1	0	275	3149

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	332	1236	40	16	152	1048	212	28	252	20	160	0	28	0	16	0	3540
Heavy Trucks	8	28	0		0	36	4		4	0	0		4	0	0		84
Buses																	
Pedestrians		4				0				4				0			8
Bicycles	0	4	0		0	0	0		0	0	0		0	0	0		4
Scooters																	

Comments:

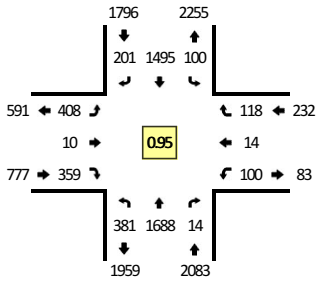
Report generated on 11/5/2024 3:39 PM

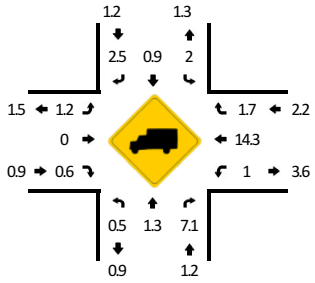
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

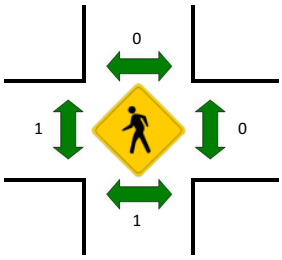
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

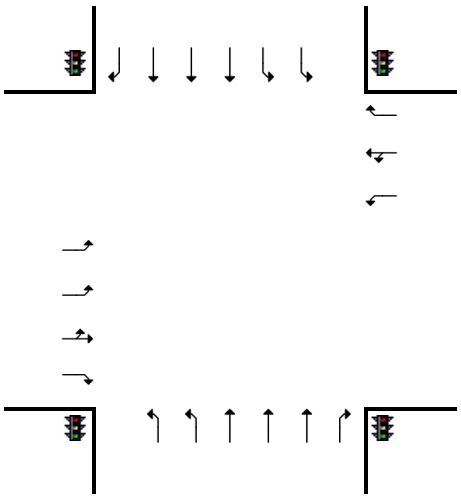
LOCATION: Pleasant Grove Blvd -- Highland Pointe Dr | **QC JOB #:** 16723568
CITY/STATE: Roseville, CA | **DATE:** Thu, Oct 24 2024

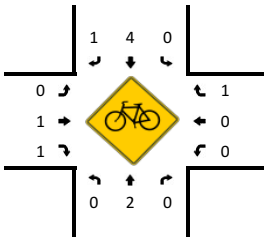
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:15 PM -- 4:30 PM

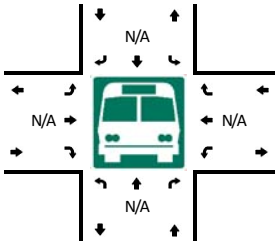


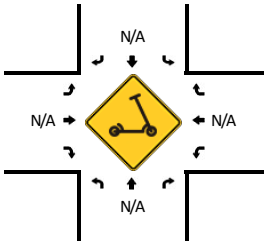












5-Min Count Period Beginning At	Pleasant Grove Blvd (Northbound)				Pleasant Grove Blvd (Southbound)				Highland Pointe Dr (Eastbound)				Highland Pointe Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	33	131	2	1	7	124	12	6	42	1	26	0	9	1	7	0	402	
4:05 PM	38	118	3	2	2	161	14	1	40	1	25	0	11	1	18	0	435	
4:10 PM	25	114	5	1	9	107	13	1	48	1	42	0	11	1	9	0	387	
4:15 PM	40	164	4	0	2	128	15	1	27	0	45	0	6	2	11	0	445	
4:20 PM	31	122	1	0	5	148	12	3	45	0	30	0	6	1	8	0	412	
4:25 PM	36	180	1	2	4	129	20	2	30	1	19	0	6	1	5	0	436	
4:30 PM	25	103	0	0	5	100	14	8	34	0	20	0	9	0	11	0	329	
4:35 PM	40	154	0	1	3	121	17	4	39	0	30	0	7	0	6	0	422	
4:40 PM	33	117	0	0	6	103	21	4	45	0	32	0	7	0	8	0	376	
4:45 PM	27	132	1	1	7	115	12	3	29	0	27	0	6	2	6	0	368	
4:50 PM	37	147	2	0	4	142	18	2	24	1	30	0	6	1	8	0	422	
4:55 PM	25	142	0	1	4	129	22	2	36	2	24	0	10	1	10	0	408	4842
5:00 PM	35	142	1	0	7	113	14	4	35	2	32	0	6	2	16	0	409	4849
5:05 PM	24	148	2	0	9	139	18	4	30	1	31	0	18	3	15	0	442	4856
5:10 PM	23	137	2	0	3	128	18	4	34	3	39	0	13	1	14	0	419	4888
5:15 PM	33	124	0	4	3	138	19	1	39	1	23	0	11	2	12	0	410	4853
5:20 PM	34	115	3	2	6	125	11	4	37	0	28	0	5	0	9	0	379	4820
5:25 PM	39	119	1	1	9	128	20	3	40	0	23	0	10	2	3	0	398	4782
5:30 PM	30	119	1	2	4	134	12	4	46	2	32	0	8	2	12	0	408	4861
5:35 PM	35	94	0	2	1	130	15	2	36	4	27	0	6	0	8	0	360	4799
5:40 PM	32	99	2	1	5	111	20	8	33	1	32	0	5	1	6	0	356	4779
5:45 PM	33	120	2	1	4	141	18	3	41	0	26	0	8	4	7	0	408	4819
5:50 PM	30	117	3	1	7	128	16	5	47	2	37	0	2	0	2	0	397	4794
5:55 PM	32	83	0	0	9	134	17	3	34	0	34	0	6	4	4	0	360	4746

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	428	1864	24	8	44	1620	188	24	408	4	376	0	72	16	96	0	5172
Heavy Trucks	8	32	0		4	12	0		8	0	4		0	4	0		72
Buses																	
Pedestrians		4				0				4				0			8
Bicycles	0	8	0		0	8	4		0	0	4		0	0	0		24
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

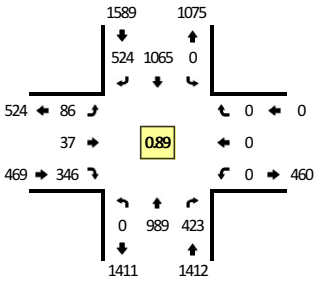
Type of peak hour being reported: Intersection Peak

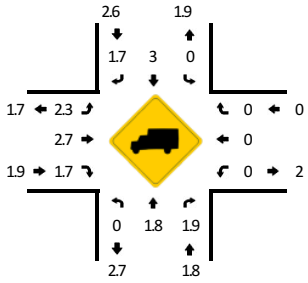
Method for determining peak hour: Total Entering Volume

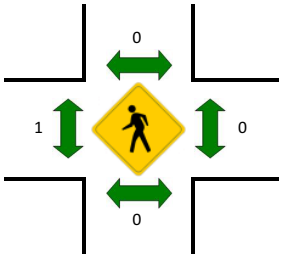
LOCATION: Pleasant Grove Blvd -- SR 65 SB Ramps
CITY/STATE: Roseville, CA

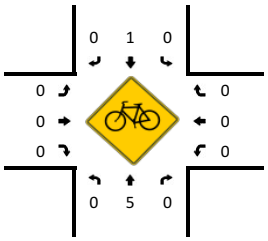
QC JOB #: 16723569
DATE: Thu, Oct 24 2024

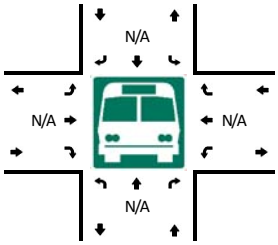
Peak-Hour: 7:55 AM -- 8:55 AM
Peak 15-Min: 8:35 AM -- 8:50 AM

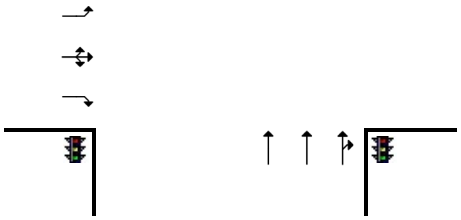


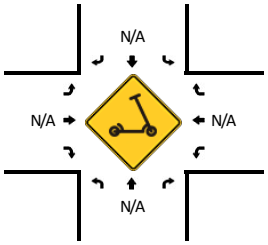












5-Min Count Period Beginning At	Pleasant Grove Blvd (Northbound)				Pleasant Grove Blvd (Southbound)				SR 65 SB Ramps (Eastbound)				SR 65 SB Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	46	52	0	0	29	15	0	4	1	20	0	0	0	0	0	167	
7:05 AM	0	28	33	0	0	48	40	0	3	4	12	0	0	0	0	0	168	
7:10 AM	0	43	36	0	0	53	29	0	7	4	27	0	0	0	0	0	199	
7:15 AM	0	57	48	0	0	57	36	0	5	3	20	0	0	0	0	0	226	
7:20 AM	0	46	32	0	0	38	24	0	6	6	24	0	0	0	0	0	176	
7:25 AM	0	50	47	0	0	56	41	0	3	3	29	0	0	0	0	0	229	
7:30 AM	0	52	38	0	0	61	38	0	6	6	26	0	0	0	0	0	227	
7:35 AM	0	58	51	0	0	85	47	0	5	2	28	0	0	0	0	0	276	
7:40 AM	0	60	46	0	0	82	34	0	4	2	18	0	0	0	0	0	246	
7:45 AM	0	88	51	0	0	107	46	0	4	1	22	0	0	0	0	0	319	
7:50 AM	0	102	29	0	0	72	46	0	11	7	21	0	0	0	0	0	288	
7:55 AM	0	103	33	0	0	89	36	0	3	2	24	0	0	0	0	0	290	2811
8:00 AM	0	86	36	0	0	85	34	0	12	3	31	0	0	0	0	0	287	2931
8:05 AM	0	71	10	0	0	83	47	0	5	5	29	0	0	0	0	0	250	3013
8:10 AM	0	68	27	0	0	74	44	0	5	8	23	0	0	0	0	0	249	3063
8:15 AM	0	78	37	0	0	103	49	0	7	2	21	0	0	0	0	0	297	3134
8:20 AM	0	60	34	0	0	66	48	0	5	2	27	0	0	0	0	0	242	3200
8:25 AM	0	96	42	0	0	90	51	0	10	4	28	0	0	0	0	0	321	3292
8:30 AM	0	75	32	0	0	76	39	0	7	5	28	0	0	0	0	0	262	3327
8:35 AM	0	106	41	0	0	110	52	0	4	2	41	0	0	0	0	0	356	3407
8:40 AM	0	59	43	0	0	100	41	0	8	2	31	0	0	0	0	0	284	3445
8:45 AM	0	96	50	0	0	103	52	0	7	0	32	0	0	0	0	0	340	3466
8:50 AM	0	91	38	0	0	86	31	0	13	2	31	0	0	0	0	0	292	3470
8:55 AM	0	95	31	0	0	75	31	0	12	0	22	0	0	0	0	0	266	3446

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	1044	536	0	0	1252	580	0	76	16	416	0	0	0	0	0	3920
Heavy Trucks	0	20	8		0	44	16		0	4	8		0	0	0		100
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	4	0		0	0	0		0	0	0		0	0	0		4
Scooters																	

Comments:

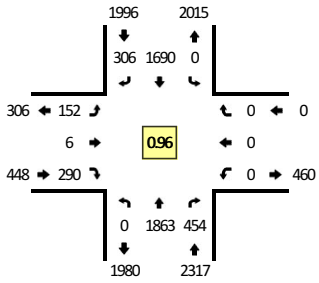
Report generated on 11/5/2024 3:39 PM

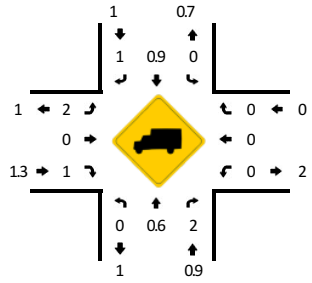
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

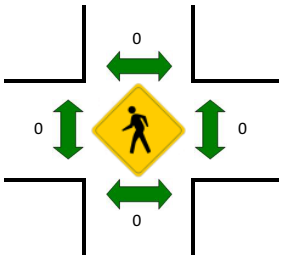
LOCATION: Pleasant Grove Blvd -- SR 65 SB Ramps | **QC JOB #:** 16723570
CITY/STATE: Roseville, CA | **DATE:** Thu, Oct 24 2024

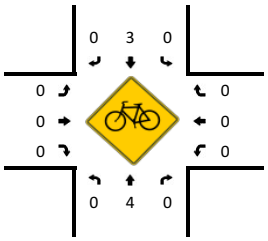
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:15 PM -- 4:30 PM

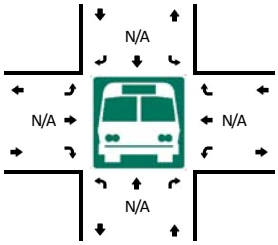


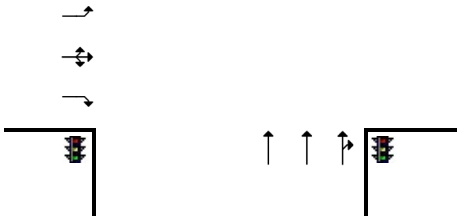


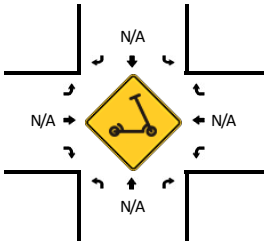
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Pleasant Grove Blvd (Northbound)				Pleasant Grove Blvd (Southbound)				SR 65 SB Ramps (Eastbound)				SR 65 SB Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	137	33	0	0	132	22	0	29	2	26	0	0	0	0	0	381	
4:05 PM	0	149	48	0	0	138	24	1	16	1	29	0	0	0	0	0	406	
4:10 PM	0	133	35	0	0	140	26	0	24	4	24	0	0	0	0	0	386	
4:15 PM	0	146	44	0	0	163	37	0	11	2	28	0	0	0	0	0	431	
4:20 PM	0	173	22	0	0	127	11	0	20	2	24	0	0	0	0	0	379	
4:25 PM	0	196	36	0	0	122	27	0	14	1	29	0	0	0	0	0	425	
4:30 PM	0	124	29	0	0	129	28	0	18	0	25	0	0	0	0	0	353	
4:35 PM	0	165	49	0	0	133	26	0	11	0	26	0	0	0	0	0	410	
4:40 PM	0	141	38	0	0	143	15	0	6	0	19	0	0	0	0	0	362	
4:45 PM	0	151	27	0	0	152	37	0	17	0	15	0	0	0	0	0	399	
4:50 PM	0	165	32	0	0	129	24	0	10	0	26	0	0	0	0	0	386	
4:55 PM	0	156	38	0	0	151	26	0	8	0	22	0	0	0	0	0	401	4719
5:00 PM	0	139	51	0	0	137	25	0	17	0	23	0	0	0	0	0	392	4730
5:05 PM	0	151	54	0	0	162	32	0	11	0	21	0	0	0	0	0	431	4755
5:10 PM	0	156	34	0	0	142	18	0	9	1	32	0	0	0	0	0	392	4761
5:15 PM	0	152	39	0	0	150	35	0	17	0	22	0	0	0	0	0	415	4745
5:20 PM	0	133	32	0	0	129	20	0	21	3	28	0	0	0	0	0	366	4732
5:25 PM	0	143	31	0	0	156	34	0	10	1	29	0	0	0	0	0	404	4711
5:30 PM	0	127	31	0	0	106	15	0	23	2	48	0	0	0	0	0	352	4710
5:35 PM	0	150	22	0	0	156	28	0	6	0	25	0	0	0	0	0	387	4687
5:40 PM	0	120	28	0	0	119	22	0	12	1	41	0	0	0	0	0	343	4668
5:45 PM	0	142	32	0	0	150	36	0	9	2	39	0	0	0	0	0	410	4679
5:50 PM	0	146	25	0	0	114	25	0	11	0	49	0	0	0	0	0	370	4663
5:55 PM	0	101	24	0	0	153	23	0	7	1	24	0	0	0	0	0	333	4595

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	2060	408	0	0	1648	300	0	180	20	324	0	0	0	0	0	4940
Heavy Trucks	0	16	16		0	8	4		0	0	8		0	0	0		52
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	8	0		0	4	0		0	0	0		0	0	0		12
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

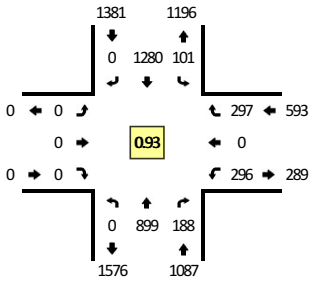
Type of peak hour being reported: Intersection Peak

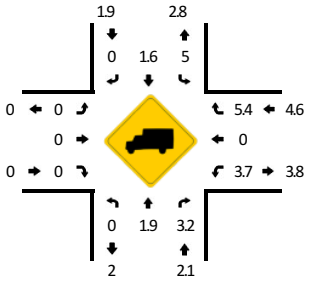
Method for determining peak hour: Total Entering Volume

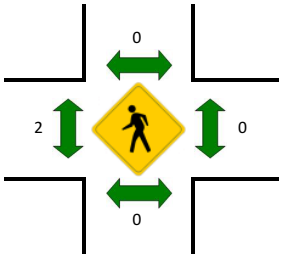
LOCATION: Pleasant Grove Blvd -- SR 65 NB Ramps
CITY/STATE: Roseville, CA

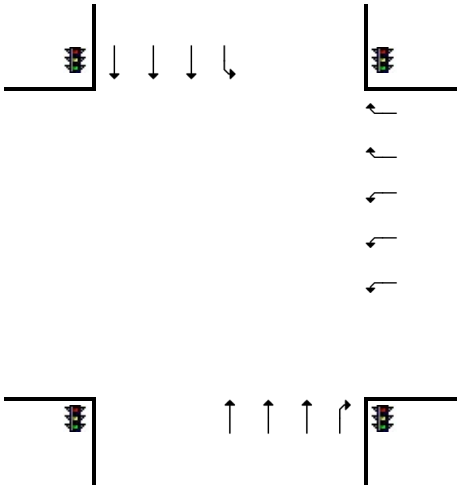
QC JOB #: 16723571
DATE: Thu, Oct 24 2024

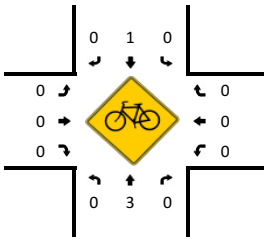
Peak-Hour: 7:55 AM -- 8:55 AM
Peak 15-Min: 8:25 AM -- 8:40 AM

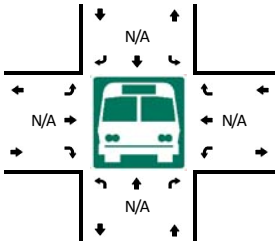


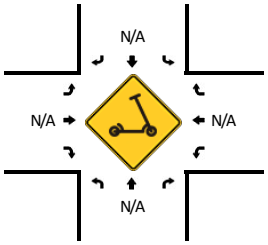












5-Min Count Period Beginning At	Pleasant Grove Blvd (Northbound)				Pleasant Grove Blvd (Southbound)				SR 65 NB Ramps (Eastbound)				SR 65 NB Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	33	15	0	5	47	0	0	0	0	0	0	10	0	15	0	125	
7:05 AM	0	24	8	0	1	70	0	0	0	0	0	0	11	0	13	0	127	
7:10 AM	0	28	13	0	4	58	0	0	0	0	0	0	19	0	14	0	136	
7:15 AM	0	48	24	0	3	79	0	0	0	0	0	0	11	0	18	0	183	
7:20 AM	0	34	10	0	8	49	0	0	0	0	0	0	15	0	18	0	134	
7:25 AM	0	47	12	0	10	82	0	0	0	0	0	0	12	0	16	0	179	
7:30 AM	0	43	13	0	10	84	0	0	0	0	0	0	16	0	26	0	192	
7:35 AM	0	52	11	0	9	107	0	0	0	0	0	0	19	0	20	0	218	
7:40 AM	0	46	18	0	12	88	0	0	0	0	0	0	29	0	23	0	216	
7:45 AM	0	80	15	0	5	126	0	0	0	0	0	0	18	0	21	0	265	
7:50 AM	0	80	19	0	12	94	0	0	0	0	0	0	23	0	23	0	251	
7:55 AM	0	89	19	0	5	106	0	0	0	0	0	0	21	0	12	0	252	2278
8:00 AM	0	79	15	0	12	88	0	0	0	0	0	0	31	0	17	0	242	2395
8:05 AM	0	64	18	0	2	122	0	0	0	0	0	0	15	0	23	0	244	2512
8:10 AM	0	57	15	0	11	94	0	0	0	0	0	0	20	0	24	0	221	2597
8:15 AM	0	80	17	0	5	128	0	0	0	0	0	0	13	0	19	0	262	2676
8:20 AM	0	51	11	0	14	98	0	0	0	0	0	0	32	0	20	0	226	2768
8:25 AM	0	88	19	0	12	104	0	0	0	0	0	0	13	0	35	0	271	2860
8:30 AM	0	61	9	0	15	107	0	0	0	0	0	0	28	0	32	0	252	2920
8:35 AM	0	100	23	0	4	118	0	0	0	0	0	0	25	0	34	0	304	3006
8:40 AM	0	53	11	0	7	108	0	0	0	0	0	0	44	0	24	0	247	3037
8:45 AM	0	78	16	0	11	121	0	0	0	0	0	0	21	0	26	0	273	3045
8:50 AM	0	99	15	0	3	86	0	0	0	0	0	0	33	0	31	0	267	3061
8:55 AM	0	98	15	0	11	76	0	0	0	0	0	0	25	0	26	0	251	3060

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	996	204	0	124	1316	0	0	0	0	0	0	264	0	404	0	3308
Heavy Trucks	0	8	12		4	12	0		0	0	0		8	0	24		68
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

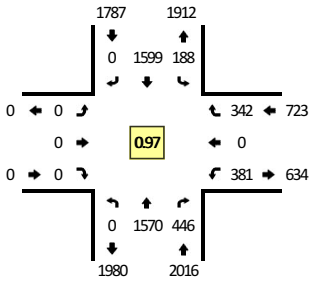
Type of peak hour being reported: Intersection Peak

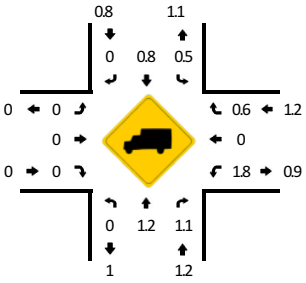
Method for determining peak hour: Total Entering Volume

LOCATION: Pleasant Grove Blvd -- SR 65 NB Ramps
CITY/STATE: Roseville, CA

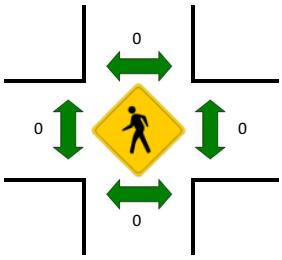
QC JOB #: 16723572
DATE: Thu, Oct 24 2024

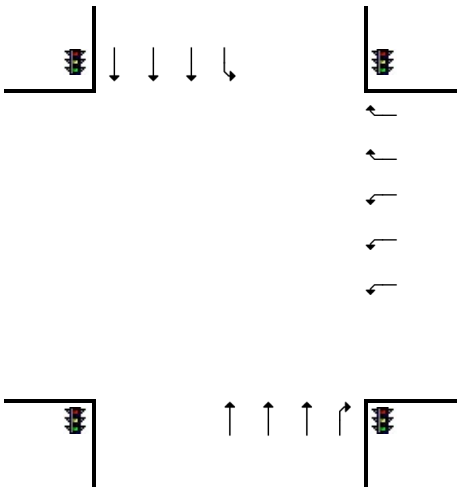
Peak-Hour: 4:10 PM -- 5:10 PM
Peak 15-Min: 4:15 PM -- 4:30 PM

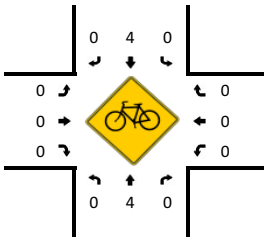


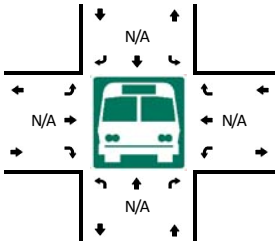


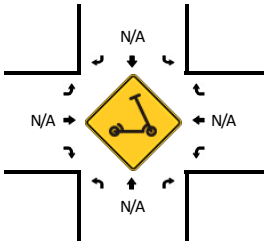
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Pleasant Grove Blvd (Northbound)				Pleasant Grove Blvd (Southbound)				SR 65 NB Ramps (Eastbound)				SR 65 NB Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	112	33	0	11	123	0	0	0	0	0	0	37	0	44	0	360	
4:05 PM	0	134	45	0	7	134	0	0	0	0	0	0	20	0	23	0	363	
4:10 PM	0	118	33	0	23	142	0	0	0	0	0	0	45	0	31	0	392	
4:15 PM	0	128	38	0	14	155	0	0	0	0	0	0	27	0	27	0	389	
4:20 PM	0	121	47	0	16	106	0	0	0	0	0	0	40	0	28	0	358	
4:25 PM	0	189	52	0	13	119	0	0	0	0	0	0	25	0	16	0	414	
4:30 PM	0	82	31	0	17	125	0	0	0	0	0	0	37	0	34	0	326	
4:35 PM	0	156	46	0	9	129	0	0	0	0	0	0	30	0	31	0	401	
4:40 PM	0	107	42	0	19	122	0	0	0	0	0	0	39	0	25	0	354	
4:45 PM	0	144	30	0	18	150	0	0	0	0	0	0	25	0	31	0	398	
4:50 PM	0	129	31	0	21	119	0	0	0	0	0	0	45	0	34	0	379	
4:55 PM	0	154	27	0	14	135	0	0	0	0	0	0	21	0	26	0	377	4511
5:00 PM	0	96	32	0	14	132	0	0	0	0	0	0	25	0	38	0	337	4488
5:05 PM	0	146	37	0	10	165	0	0	0	0	0	0	22	0	21	0	401	4526
5:10 PM	0	88	44	0	15	130	0	0	0	0	0	0	41	0	26	0	344	4478
5:15 PM	0	166	41	0	16	156	0	0	0	0	0	0	18	0	23	1	421	4510
5:20 PM	0	118	35	0	12	135	0	0	0	0	0	0	32	0	33	0	365	4517
5:25 PM	0	126	32	0	15	144	0	0	0	0	0	0	30	0	25	0	372	4475
5:30 PM	0	91	32	0	18	106	0	0	0	0	0	0	24	0	35	0	306	4455
5:35 PM	0	150	36	0	9	150	0	0	0	0	0	0	24	0	21	0	390	4444
5:40 PM	0	84	32	0	13	112	0	0	0	0	0	0	39	0	32	0	312	4402
5:45 PM	0	132	39	0	14	148	0	0	0	0	0	0	26	0	16	0	375	4379
5:50 PM	0	89	30	0	21	113	0	0	0	0	0	0	32	0	29	0	314	4314
5:55 PM	0	120	32	0	13	136	0	0	0	0	0	0	28	0	32	0	361	4298

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	1752	548	0	172	1520	0	0	0	0	0	0	368	0	284	0	4644
Heavy Trucks	0	16	4		4	4	0		0	0	0		8	0	4		40
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	8	0		0	4	0		0	0	0		0	0	0		12
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

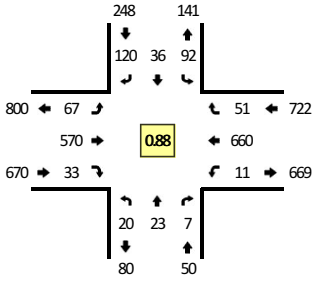
Type of peak hour being reported: Intersection Peak

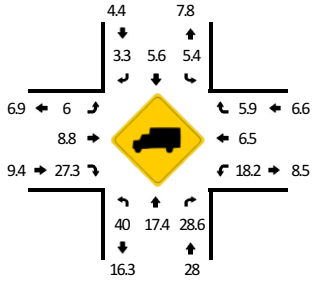
Method for determining peak hour: Total Entering Volume

LOCATION: Market St/Stargazer Dr -- Baseline Rd
CITY/STATE: Roseville, CA

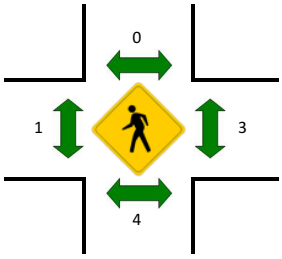
QC JOB #: 16723573
DATE: Wed, Oct 23 2024

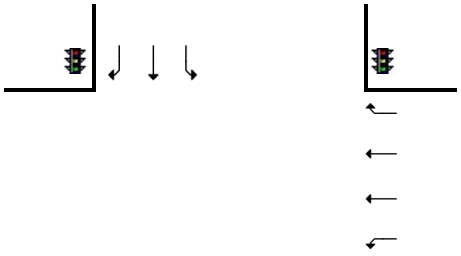
Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:35 AM -- 7:50 AM

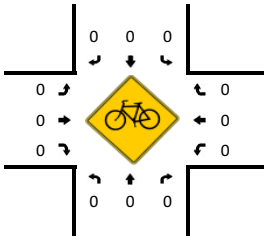


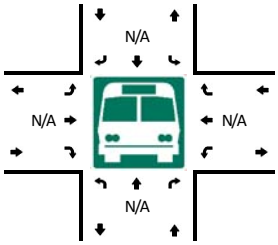


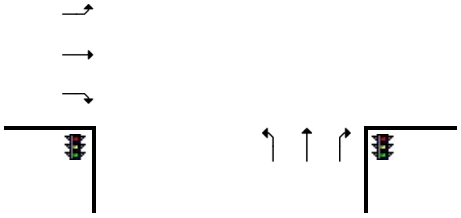
TRUE DATA TO IMPROVE MOBILITY

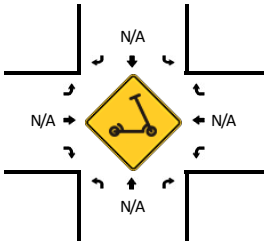












5-Min Count Period Beginning At	Market St/Stargazer Dr (Northbound)				Market St/Stargazer Dr (Southbound)				Baseline Rd (Eastbound)				Baseline Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	4	0	0	9	1	12	0	7	32	3	0	0	64	3	0	137	
7:05 AM	2	4	0	0	6	3	9	0	10	30	6	0	2	67	2	0	141	
7:10 AM	2	1	0	1	2	2	8	0	7	33	5	0	2	72	4	0	139	
7:15 AM	2	2	1	0	3	4	7	0	7	22	4	0	1	40	4	0	97	
7:20 AM	0	4	1	0	5	6	11	0	7	49	6	0	3	45	2	0	139	
7:25 AM	2	1	0	0	5	1	10	0	8	43	3	0	0	50	2	0	125	
7:30 AM	3	1	2	0	9	5	14	0	7	34	3	0	0	43	5	0	126	
7:35 AM	1	2	0	0	11	1	10	0	7	70	7	0	4	60	5	0	178	
7:40 AM	2	2	0	0	15	3	17	0	9	47	4	0	0	55	4	0	158	
7:45 AM	2	0	0	0	6	2	6	0	3	53	2	0	0	65	3	0	142	
7:50 AM	2	3	0	0	10	3	7	0	4	46	3	0	0	62	3	0	143	
7:55 AM	4	0	2	0	9	0	4	0	6	45	1	0	0	62	7	0	140	1665
8:00 AM	0	5	0	0	7	6	7	0	1	31	1	0	2	61	3	0	124	1652
8:05 AM	2	1	0	0	3	0	14	0	6	65	3	0	1	54	5	0	154	1665
8:10 AM	0	2	0	0	4	5	8	0	6	41	0	0	1	45	2	0	114	1640
8:15 AM	2	2	2	0	8	4	12	0	3	46	0	0	0	58	10	0	147	1690
8:20 AM	0	4	0	0	8	1	5	0	4	53	0	0	0	46	7	0	128	1679
8:25 AM	0	4	2	0	7	4	4	0	5	48	2	0	0	36	4	0	116	1670
8:30 AM	3	0	1	0	1	3	6	0	0	41	3	0	0	36	5	0	99	1643
8:35 AM	1	0	1	0	10	0	6	0	5	37	0	0	0	41	4	0	105	1570
8:40 AM	2	3	1	0	11	2	4	0	2	40	1	0	2	58	4	0	130	1542
8:45 AM	0	4	0	0	5	3	8	0	4	55	2	0	1	35	7	0	124	1524
8:50 AM	1	1	0	0	3	4	4	0	3	48	4	0	1	53	8	0	130	1511
8:55 AM	2	3	2	0	7	1	5	0	6	27	1	0	1	32	3	0	90	1461

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	20	16	0	0	128	24	132	0	76	680	52	0	16	720	48	0	1912
Heavy Trucks	4	0	0		4	0	8		8	52	12		4	24	0		116
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

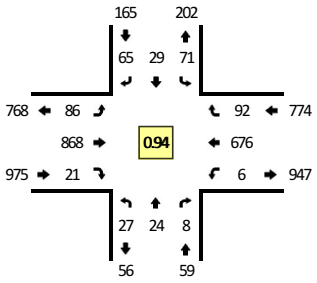
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

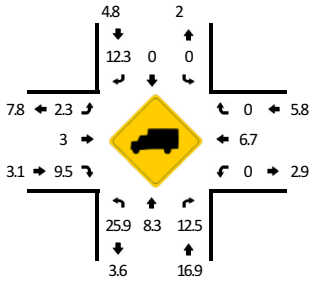
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

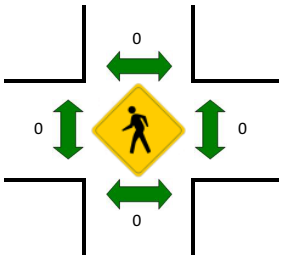
LOCATION: Market St/Stargazer Dr -- Baseline Rd
CITY/STATE: Roseville, CA

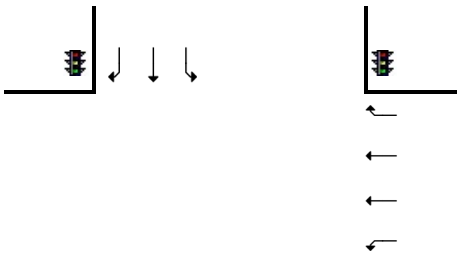
QC JOB #: 16723574
DATE: Wed, Oct 23 2024

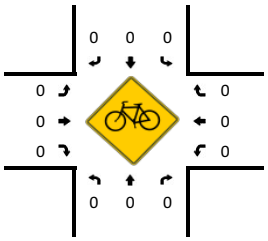
Peak-Hour: 4:25 PM -- 5:25 PM
Peak 15-Min: 4:45 PM -- 5:00 PM

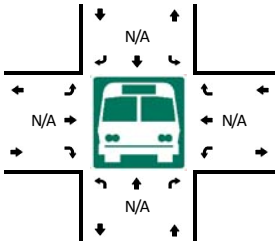


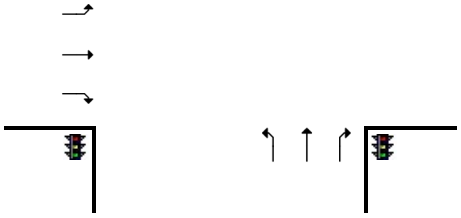


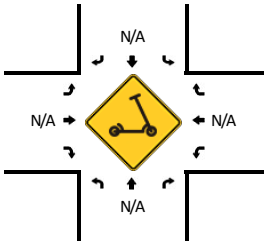












5-Min Count Period Beginning At	Market St/Stargazer Dr (Northbound)				Market St/Stargazer Dr (Southbound)				Baseline Rd (Eastbound)				Baseline Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	4	2	2	0	3	2	4	0	9	58	1	0	3	35	7	0	130	
4:05 PM	1	1	1	0	6	5	5	0	5	75	2	0	1	56	7	0	165	
4:10 PM	4	3	0	0	3	0	6	0	10	73	1	0	0	51	4	0	155	
4:15 PM	3	0	2	0	2	3	2	0	8	69	1	0	0	47	7	0	144	
4:20 PM	4	5	0	0	6	1	2	0	3	80	3	0	1	71	8	0	184	
4:25 PM	1	2	2	0	4	1	3	0	6	48	2	0	2	58	10	0	139	
4:30 PM	0	1	1	0	6	4	3	0	8	72	3	0	0	61	7	0	166	
4:35 PM	2	4	2	0	4	2	5	0	10	73	2	0	0	56	5	0	165	
4:40 PM	5	4	0	0	9	1	3	0	8	67	3	0	0	53	6	0	159	
4:45 PM	2	2	0	0	3	1	10	0	6	78	1	0	0	47	7	0	157	
4:50 PM	2	1	0	0	4	2	3	0	3	83	0	0	1	78	14	0	191	
4:55 PM	4	2	1	0	8	2	1	0	7	86	1	0	0	55	8	0	175	1930
5:00 PM	2	2	0	0	6	4	11	0	4	66	2	0	1	52	7	0	157	1957
5:05 PM	0	1	2	0	4	4	11	0	9	68	0	0	0	61	6	0	166	1958
5:10 PM	6	3	0	0	7	1	5	0	9	74	4	0	0	44	5	0	158	1961
5:15 PM	2	1	0	0	7	1	8	0	8	73	2	0	1	46	5	0	154	1971
5:20 PM	1	1	0	0	9	6	2	0	8	80	1	0	1	65	12	0	186	1973
5:25 PM	3	2	1	0	2	1	3	0	8	53	1	0	0	36	6	0	116	1950
5:30 PM	2	1	0	0	6	2	4	0	8	47	2	0	1	65	11	0	149	1933
5:35 PM	3	3	2	0	3	0	3	0	7	68	3	0	2	59	10	0	163	1931
5:40 PM	1	3	0	0	9	1	4	0	9	76	5	0	2	58	7	0	175	1947
5:45 PM	1	2	2	0	2	3	4	0	8	84	0	0	0	41	5	0	152	1942
5:50 PM	0	2	1	0	10	2	7	0	12	67	0	0	0	52	17	0	170	1921
5:55 PM	1	2	1	0	6	5	2	0	8	60	0	0	1	37	9	0	132	1878

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	32	20	4	0	60	20	56	0	64	988	8	0	4	720	116	0	2092
Heavy Trucks	12	0	0		0	0	4		0	36	0		0	64	0		116
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

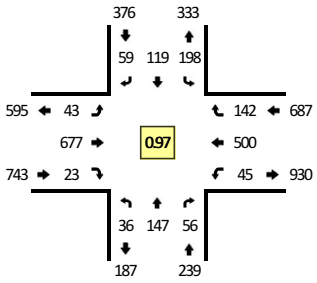
Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

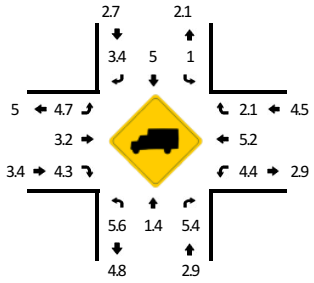
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

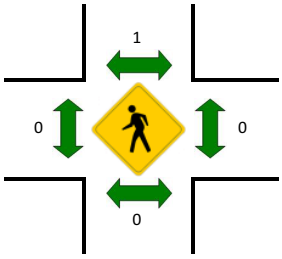
LOCATION: Woodcreek Oaks Blvd/Cook Riolo Rd -- Baseline Rd | **QC JOB #:** 16723575
CITY/STATE: Roseville, CA | **DATE:** Thu, Oct 24 2024

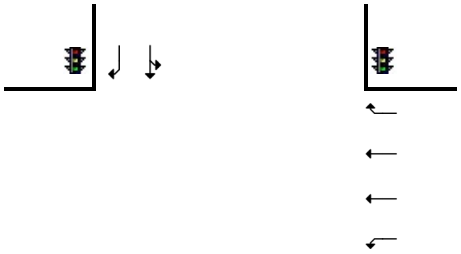
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

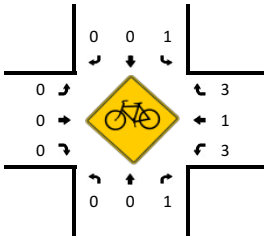


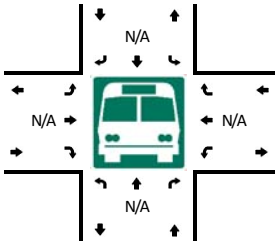
TRUE DATA TO IMPROVE MOBILITY

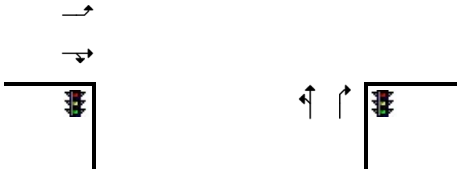


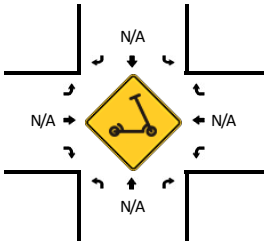












5-Min Count Period Beginning At	Woodcreek Oaks Blvd/Cook Riolo Rd (Northbound)				Woodcreek Oaks Blvd/Cook Riolo Rd (Southbound)				Baseline Rd (Eastbound)				Baseline Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	3	0	0	17	14	4	0	2	43	2	0	0	18	3	0	108	
7:05 AM	0	3	2	0	11	6	3	0	0	38	2	0	5	37	3	0	110	
7:10 AM	4	8	1	0	15	3	4	0	3	55	4	1	1	36	3	0	138	
7:15 AM	3	4	3	0	16	8	4	0	1	56	1	0	1	39	6	0	142	
7:20 AM	5	6	2	0	12	8	4	0	5	54	0	0	2	39	3	0	140	
7:25 AM	1	2	3	0	13	6	3	0	3	77	1	0	1	35	11	0	156	
7:30 AM	2	4	5	0	17	7	4	0	4	64	3	0	4	43	6	0	163	
7:35 AM	2	12	7	0	15	7	3	0	2	61	2	0	3	28	7	0	149	
7:40 AM	4	7	2	0	17	12	5	0	2	63	0	0	5	42	14	0	173	
7:45 AM	0	8	9	0	13	11	6	0	6	58	1	0	4	38	10	0	164	
7:50 AM	6	11	5	0	13	12	5	0	1	59	1	0	4	45	12	0	174	
7:55 AM	2	16	8	0	19	14	4	0	4	50	2	0	4	46	7	0	176	1793
8:00 AM	6	12	4	0	14	5	4	0	6	56	3	0	7	33	19	0	169	1854
8:05 AM	6	14	3	0	15	9	5	0	3	63	1	0	3	42	16	0	180	1924
8:10 AM	0	23	3	0	14	9	5	0	5	51	0	0	2	42	15	0	169	1955
8:15 AM	2	19	5	0	19	6	3	1	4	48	2	0	5	43	15	0	172	1985
8:20 AM	4	8	2	0	24	11	6	0	1	55	5	0	2	54	12	0	184	2029
8:25 AM	2	13	3	0	17	16	9	0	5	49	3	0	2	44	9	0	172	2045
8:30 AM	5	7	1	0	21	12	6	0	3	57	2	0	3	33	5	0	155	2037
8:35 AM	3	4	2	0	25	10	6	0	3	49	2	0	2	25	7	0	138	2026
8:40 AM	2	3	5	0	17	4	1	0	3	67	4	0	3	50	2	0	161	2014
8:45 AM	3	8	2	0	8	3	5	0	3	73	7	0	0	32	8	0	152	2002
8:50 AM	5	5	4	0	9	5	5	0	6	66	6	0	1	36	12	0	160	1988
8:55 AM	2	6	2	0	10	3	5	0	5	32	0	0	2	45	6	0	118	1930

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	32	160	40	0	240	132	72	4	40	608	40	0	36	564	144	0	2112
Heavy Trucks	4	8	4		4	0	0		4	24	4		0	28	0		80
Buses																	
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		4	4	4		12
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Woodcreek Oaks Blvd/Cook Riolo Rd -- Baseline Rd

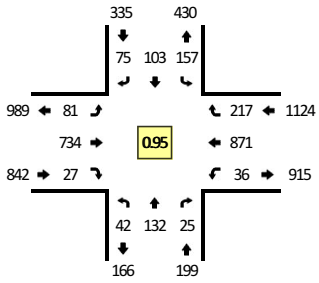
CITY/STATE: Roseville, CA

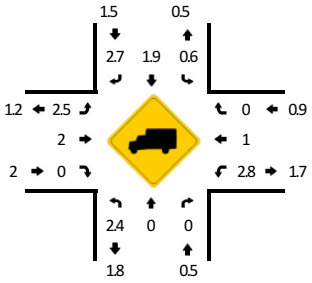
QC JOB #: 16723576

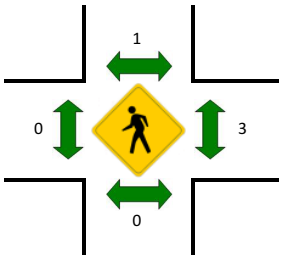
DATE: Thu, Oct 24 2024

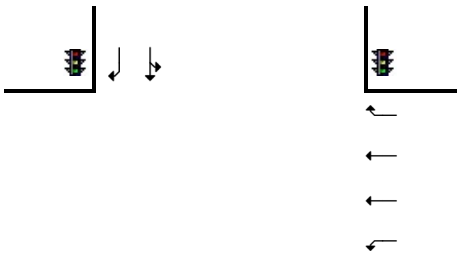
Peak-Hour: 4:50 PM -- 5:50 PM

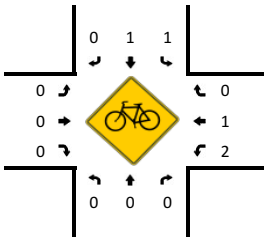
Peak 15-Min: 5:10 PM -- 5:25 PM

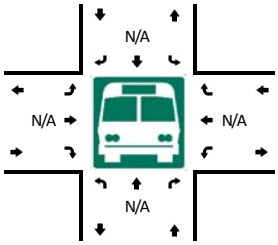


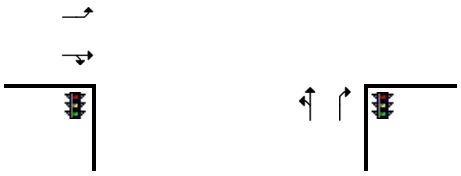


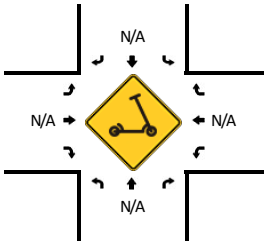












5-Min Count Period Beginning At	Woodcreek Oaks Blvd/Cook Riolo Rd (Northbound)				Woodcreek Oaks Blvd/Cook Riolo Rd (Southbound)				Baseline Rd (Eastbound)				Baseline Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	13	3	0	16	11	7	0	3	62	1	0	1	73	17	0	209	
4:05 PM	5	16	1	0	13	4	5	0	2	44	1	0	2	59	20	0	172	
4:10 PM	2	7	5	0	21	6	4	0	5	54	1	0	1	61	15	0	182	
4:15 PM	4	8	1	0	13	12	9	0	8	43	0	0	6	80	14	0	198	
4:20 PM	2	6	3	0	7	8	8	0	2	64	1	0	1	63	17	0	182	
4:25 PM	3	11	2	0	14	7	7	0	6	58	2	0	3	57	9	0	179	
4:30 PM	6	9	4	0	14	13	9	0	8	58	3	0	2	70	9	0	205	
4:35 PM	1	12	3	0	17	8	8	0	7	61	2	0	2	80	9	0	210	
4:40 PM	5	9	3	0	19	13	7	0	10	62	3	0	1	74	24	0	230	
4:45 PM	4	4	4	0	17	7	10	0	4	61	1	0	3	53	15	0	183	
4:50 PM	7	14	1	0	7	5	6	0	2	70	3	0	2	94	12	0	223	
4:55 PM	2	13	1	0	18	3	5	0	5	56	1	0	3	54	15	0	176	2349
5:00 PM	2	9	3	0	12	15	6	0	9	56	2	1	5	53	11	0	184	2324
5:05 PM	3	7	2	0	15	7	8	0	6	62	2	0	2	72	14	0	200	2352
5:10 PM	7	7	7	0	19	8	6	0	11	66	3	0	5	56	30	0	225	2395
5:15 PM	3	14	1	0	19	7	7	0	7	53	1	0	1	64	18	0	195	2392
5:20 PM	5	12	1	0	9	8	6	1	6	72	1	0	1	91	24	0	237	2447
5:25 PM	3	7	3	0	9	10	3	0	3	61	3	0	1	91	27	0	221	2489
5:30 PM	2	12	3	0	14	8	7	0	12	52	1	0	6	57	16	0	190	2474
5:35 PM	2	12	2	0	19	17	10	0	5	58	1	0	2	83	18	0	229	2493
5:40 PM	5	16	1	0	10	10	4	0	12	57	4	0	4	63	9	0	195	2458
5:45 PM	1	9	0	0	5	5	7	0	2	71	5	0	4	93	23	0	225	2500
5:50 PM	5	11	2	0	10	10	6	0	6	37	2	0	1	56	8	0	154	2431
5:55 PM	3	8	1	0	3	4	6	0	5	62	0	0	5	70	13	0	180	2435

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	60	132	36	0	188	92	76	4	96	764	20	0	28	844	288	0	2628
Heavy Trucks	4	0	0		0	4	0		8	12	0		0	8	0		36
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

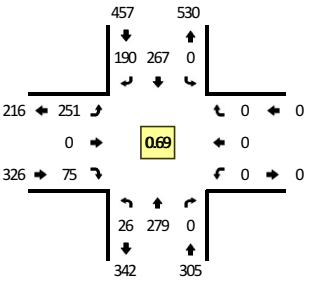
Type of peak hour being reported: Intersection Peak

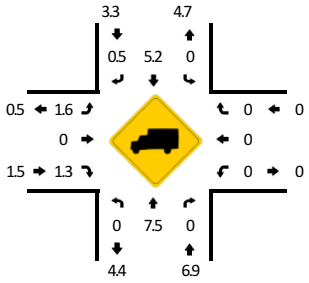
Method for determining peak hour: Total Entering Volume

LOCATION: Westbrook Blvd -- Brookstone Dr (North)
CITY/STATE: Roseville, CA

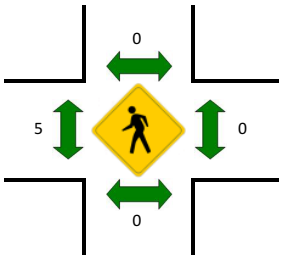
QC JOB #: 16723577
DATE: Wed, Oct 23 2024

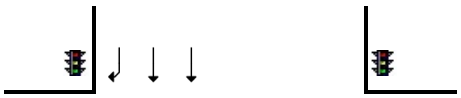
Peak-Hour: 7:10 AM -- 8:10 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

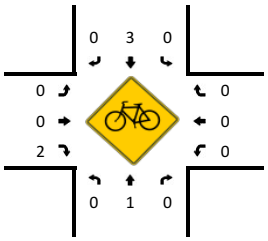


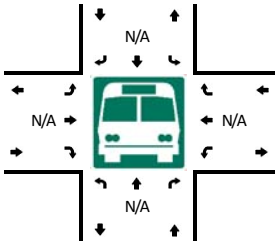


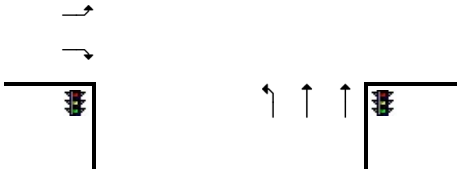
TRUE DATA TO IMPROVE MOBILITY

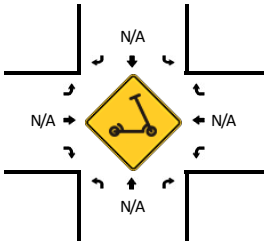












5-Min Count Period Beginning At	Westbrook Blvd (Northbound)				Westbrook Blvd (Southbound)				Brookstone Dr (North) (Eastbound)				Brookstone Dr (North) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	26	0	0	0	11	5	0	6	0	5	0	0	0	0	0	53	
7:05 AM	1	10	0	0	0	21	6	0	12	0	6	0	0	0	0	0	56	
7:10 AM	2	23	0	0	0	19	6	0	15	0	8	0	0	0	0	0	73	
7:15 AM	2	14	0	0	0	23	4	0	13	0	4	0	0	0	0	0	60	
7:20 AM	0	20	0	0	0	33	18	0	13	0	4	0	0	0	0	0	88	
7:25 AM	3	13	0	0	0	35	25	0	14	0	4	0	0	0	0	0	94	
7:30 AM	8	29	0	0	0	37	27	0	30	0	11	0	0	0	0	0	142	
7:35 AM	2	27	0	0	0	16	36	0	31	0	14	0	0	0	0	0	126	
7:40 AM	2	38	0	0	0	6	25	0	42	0	11	0	0	0	0	0	124	
7:45 AM	1	44	0	0	0	14	4	0	39	0	6	0	0	0	0	0	108	
7:50 AM	0	26	0	0	0	13	9	0	32	0	5	0	0	0	0	0	85	
7:55 AM	2	20	0	0	0	26	11	0	12	0	1	0	0	0	0	0	72	1081
8:00 AM	0	9	0	0	0	27	15	0	4	0	4	0	0	0	0	0	59	1087
8:05 AM	4	16	0	0	0	18	10	0	6	0	3	0	0	0	0	0	57	1088
8:10 AM	3	15	0	0	0	9	4	0	9	0	6	0	0	0	0	0	46	1061
8:15 AM	1	10	0	0	0	13	7	0	5	0	2	0	0	0	0	0	38	1039
8:20 AM	1	14	0	0	0	12	8	0	2	0	3	0	0	0	0	0	40	991
8:25 AM	2	12	0	0	0	11	2	0	5	0	3	0	0	0	0	0	35	932
8:30 AM	1	10	0	0	0	10	2	1	5	0	4	0	0	0	0	0	33	823
8:35 AM	1	12	0	0	0	16	4	0	13	0	7	0	0	0	0	0	53	750
8:40 AM	0	16	0	0	0	10	4	0	10	0	2	0	0	0	0	0	42	668
8:45 AM	1	10	0	0	0	6	4	0	6	0	3	0	0	0	0	0	30	590
8:50 AM	3	11	0	0	0	16	2	0	12	0	3	0	0	0	0	0	47	552
8:55 AM	1	23	0	0	0	9	8	0	11	0	2	0	0	0	0	0	54	534

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	48	376	0	0	0	236	352	0	412	0	144	0	0	0	0	0	1568
Heavy Trucks	0	24	0		0	12	0		4	0	0		0	0	0		40
Buses																	
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	8	0		0	0	0		0	0	0		8
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

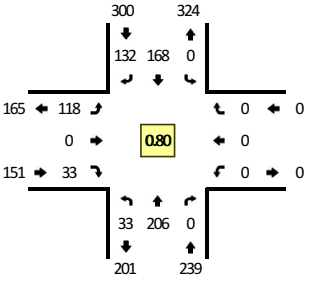
Type of peak hour being reported: Intersection Peak

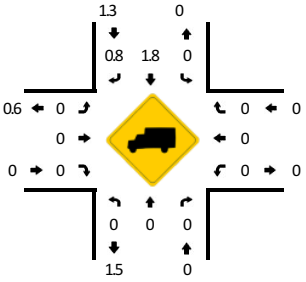
Method for determining peak hour: Total Entering Volume

LOCATION: Westbrook Blvd -- Brookstone Dr (North)
CITY/STATE: Roseville, CA

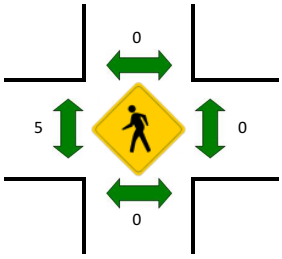
QC JOB #: 16723578
DATE: Wed, Oct 23 2024

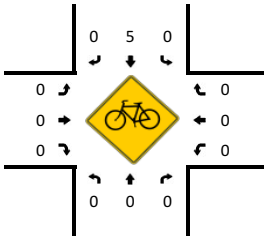
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

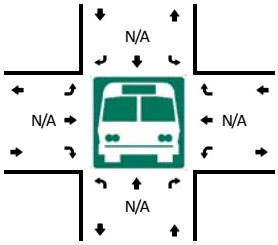


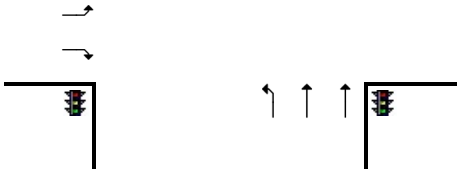


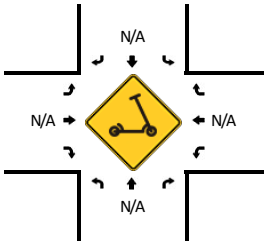
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Westbrook Blvd (Northbound)				Westbrook Blvd (Southbound)				Brookstone Dr (North) (Eastbound)				Brookstone Dr (North) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	12	0	0	0	29	10	0	7	0	2	0	0	0	0	0	61	
4:05 PM	1	17	0	0	0	12	6	0	15	0	3	0	0	0	0	0	54	
4:10 PM	1	18	0	0	0	14	8	0	8	0	2	0	0	0	0	0	51	
4:15 PM	4	16	0	0	0	16	10	0	8	0	0	0	0	0	0	0	54	
4:20 PM	2	17	0	0	0	14	9	0	12	0	4	0	0	0	0	0	58	
4:25 PM	2	20	0	0	0	19	13	0	6	0	0	0	0	0	0	0	60	
4:30 PM	1	13	0	0	0	17	12	0	13	0	4	0	0	0	0	0	60	
4:35 PM	6	18	0	0	0	21	14	0	11	0	0	0	0	0	0	0	70	
4:40 PM	0	18	0	0	0	14	3	0	8	0	8	0	0	0	0	0	51	
4:45 PM	6	12	0	0	0	15	9	0	3	0	3	0	0	0	0	0	48	
4:50 PM	6	11	0	0	0	13	14	0	2	0	4	0	0	0	0	0	50	
4:55 PM	6	14	0	0	0	16	9	0	8	0	3	0	0	0	0	0	56	673
5:00 PM	1	13	0	0	0	14	8	0	10	0	5	0	0	0	0	0	51	663
5:05 PM	0	19	0	0	0	9	8	0	6	0	3	0	0	0	0	0	45	654
5:10 PM	6	11	0	0	0	14	15	0	7	0	1	0	0	0	0	0	54	657
5:15 PM	0	25	0	0	0	12	5	0	8	0	3	0	0	0	0	0	53	656
5:20 PM	4	21	0	0	0	9	16	0	12	0	2	0	0	0	0	0	64	662
5:25 PM	4	11	0	0	0	12	6	0	11	0	4	0	0	0	0	0	48	650
5:30 PM	1	23	0	0	0	16	14	0	17	0	4	0	0	0	0	0	75	665
5:35 PM	5	13	0	0	0	16	12	0	19	0	3	0	0	0	0	0	68	663
5:40 PM	6	20	0	0	0	23	16	0	5	0	2	0	0	0	0	0	72	684
5:45 PM	0	17	0	0	0	11	9	0	9	0	2	0	0	0	0	0	48	684
5:50 PM	4	13	0	0	0	19	10	0	8	0	1	0	0	0	0	0	55	689
5:55 PM	2	20	0	0	0	13	13	0	6	0	3	0	0	0	0	0	57	690

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	48	224	0	0	0	220	168	0	164	0	36	0	0	0	0	0	860
Heavy Trucks	0	0	0		0	4	0		0	0	0		0	0	0		4
Buses																	
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	4	0		0	0	0		0	0	0		4
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

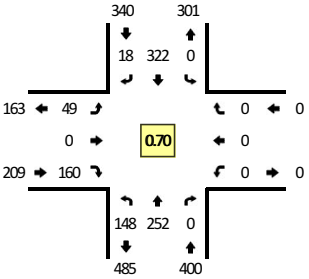
Type of peak hour being reported: Intersection Peak

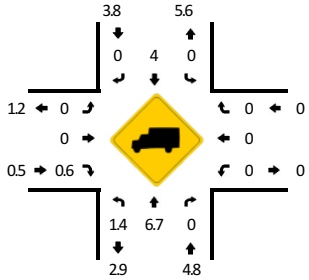
Method for determining peak hour: Total Entering Volume

LOCATION: Westbrook Blvd -- Brookstone Dr (South)
CITY/STATE: Roseville, CA

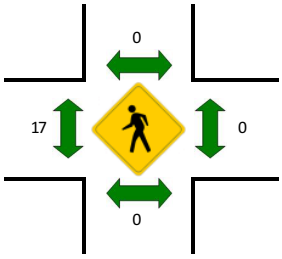
QC JOB #: 16723579
DATE: Wed, Oct 23 2024

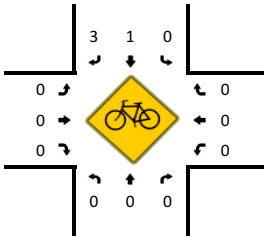
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

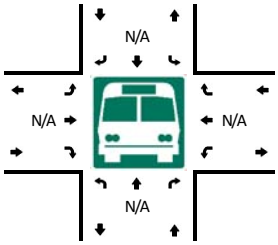


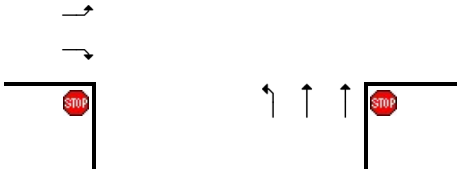


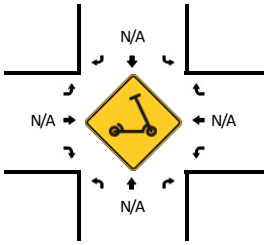
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Westbrook Blvd (Northbound)				Westbrook Blvd (Southbound)				Brookstone Dr (South) (Eastbound)				Brookstone Dr (South) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	6	25	0	0	0	15	0	0	3	0	7	0	0	0	0	0	56	
7:05 AM	3	11	0	1	0	25	1	0	0	0	7	0	0	0	0	0	48	
7:10 AM	8	21	0	0	0	30	0	0	5	0	4	0	0	0	0	0	68	
7:15 AM	13	12	0	0	0	25	0	0	3	0	10	0	0	0	0	0	63	
7:20 AM	12	17	0	0	0	35	0	0	1	0	13	0	0	0	0	0	78	
7:25 AM	22	19	0	0	0	44	1	0	0	0	15	0	0	0	0	0	101	
7:30 AM	18	27	0	0	0	41	6	0	6	0	16	0	0	0	0	0	114	
7:35 AM	23	22	0	0	0	30	2	0	7	0	19	0	0	0	0	0	103	
7:40 AM	25	40	0	1	0	24	1	0	7	0	26	0	0	0	0	0	124	
7:45 AM	7	32	0	0	0	15	2	0	11	0	28	0	0	0	0	0	95	
7:50 AM	7	15	0	0	0	18	1	0	4	0	11	0	0	0	0	0	56	
7:55 AM	1	11	0	1	0	20	4	0	2	0	4	0	0	0	0	0	43	949
8:00 AM	5	10	0	0	0	29	3	0	3	0	4	0	0	0	0	0	54	947
8:05 AM	5	12	0	0	0	15	4	0	3	0	3	0	0	0	0	0	42	941
8:10 AM	2	10	0	0	0	15	1	0	4	0	5	0	0	0	0	0	37	910
8:15 AM	7	10	0	0	0	15	0	0	2	0	4	0	0	0	0	0	38	885
8:20 AM	7	14	0	0	0	12	2	0	2	0	6	0	0	0	0	0	43	850
8:25 AM	3	14	0	1	0	20	0	0	0	0	8	0	0	0	0	0	46	795
8:30 AM	6	11	0	0	0	15	0	0	0	0	4	0	0	0	0	0	36	717
8:35 AM	4	14	0	0	0	27	0	0	1	0	6	0	0	0	0	0	52	666
8:40 AM	10	12	0	0	0	11	1	0	3	0	5	0	0	0	0	0	42	584
8:45 AM	5	7	0	0	0	9	0	0	3	0	6	0	0	0	0	0	30	519
8:50 AM	7	15	0	0	0	15	0	0	4	0	6	0	0	0	0	0	47	510
8:55 AM	8	13	0	1	0	10	1	1	6	0	4	0	0	0	0	0	44	511

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	264	356	0	4	0	380	36	0	80	0	244	0	0	0	0	0	1364
Heavy Trucks	4	20	0		0	16	0		0	0	0		0	0	0		40
Buses																	
Pedestrians		0				0				24				0			24
Bicycles	0	0	0		0	4	0		0	0	0		0	0	0		4
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

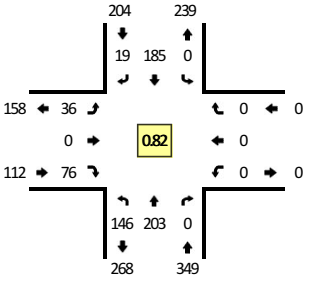
Type of peak hour being reported: Intersection Peak

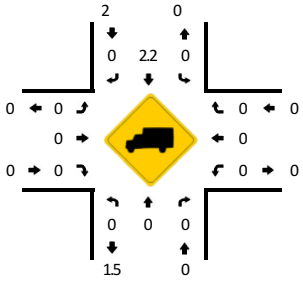
Method for determining peak hour: Total Entering Volume

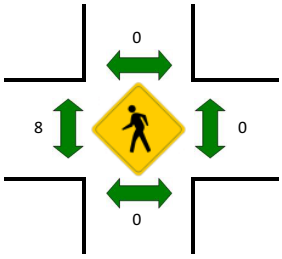
LOCATION: Westbrook Blvd -- Brookstone Dr (South)
CITY/STATE: Roseville, CA

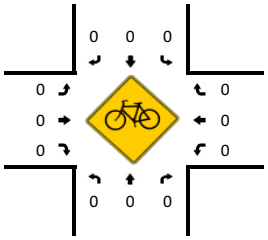
QC JOB #: 16723580
DATE: Wed, Oct 23 2024

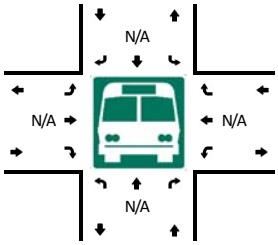
Peak-Hour: 4:55 PM -- 5:55 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

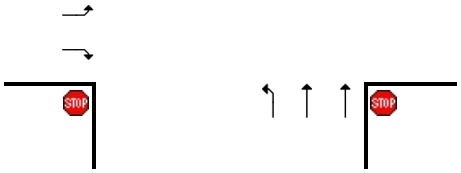


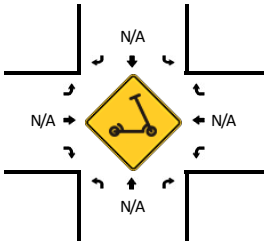












5-Min Count Period Beginning At	Westbrook Blvd (Northbound)				Westbrook Blvd (Southbound)				Brookstone Dr (South) (Eastbound)				Brookstone Dr (South) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	6	12	0	2	0	24	3	0	3	0	6	0	0	0	0	0	56	
4:05 PM	11	15	0	0	0	18	1	0	0	0	2	0	0	0	0	0	47	
4:10 PM	8	16	0	0	0	11	2	0	1	0	10	0	0	0	0	0	48	
4:15 PM	10	18	0	0	0	13	3	0	5	0	4	0	0	0	0	0	53	
4:20 PM	4	15	0	0	0	11	2	0	1	0	3	0	0	0	0	0	36	
4:25 PM	16	22	0	0	0	17	1	0	1	0	7	0	0	0	0	0	64	
4:30 PM	15	19	0	0	0	18	1	0	1	0	8	0	0	0	0	0	62	
4:35 PM	8	14	0	0	0	19	4	0	4	0	3	0	0	0	0	0	52	
4:40 PM	9	14	0	1	0	26	2	0	3	0	6	0	0	0	0	0	61	
4:45 PM	9	19	0	0	0	14	2	0	1	0	6	0	0	0	0	0	51	
4:50 PM	6	13	0	0	0	18	1	0	2	0	6	0	0	0	0	0	46	
4:55 PM	10	21	0	1	0	18	0	0	3	0	6	0	0	0	0	0	59	635
5:00 PM	10	8	0	0	0	22	3	0	5	0	3	0	0	0	0	0	51	630
5:05 PM	11	15	0	0	0	9	1	0	4	0	7	0	0	0	0	0	47	630
5:10 PM	5	14	0	2	0	18	0	0	1	0	4	0	0	0	0	0	44	626
5:15 PM	4	23	0	1	0	16	2	0	3	0	6	0	0	0	0	0	55	628
5:20 PM	9	20	0	0	0	11	0	0	3	0	6	0	0	0	0	0	49	641
5:25 PM	11	15	0	1	0	12	1	0	4	0	6	0	0	0	0	0	50	627
5:30 PM	20	19	0	1	0	17	2	0	4	0	8	0	0	0	0	0	71	636
5:35 PM	16	14	0	0	0	17	1	0	4	0	7	0	0	0	0	0	59	643
5:40 PM	15	20	0	0	0	20	5	0	5	0	7	0	0	0	0	0	72	654
5:45 PM	15	19	0	1	0	10	1	0	0	0	11	0	0	0	0	0	57	660
5:50 PM	13	15	0	0	0	15	3	0	0	0	5	0	0	0	0	0	51	665
5:55 PM	15	19	0	0	0	14	1	0	1	0	5	0	0	0	0	0	55	661

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	204	212	0	4	0	216	32	0	52	0	88	0	0	0	0	0	808
Heavy Trucks	0	0	0		0	4	0		0	0	0		0	0	0		4
Buses																	
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

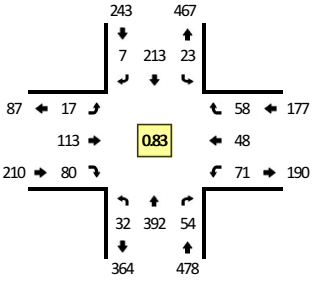
Type of peak hour being reported: Intersection Peak

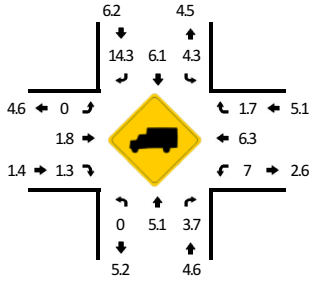
Method for determining peak hour: Total Entering Volume

LOCATION: Fiddyment Rd -- Parkland Wy/Angus Rd
CITY/STATE: Roseville, CA

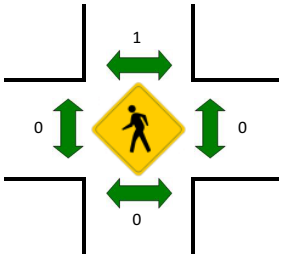
QC JOB #: 16723581
DATE: Wed, Oct 23 2024

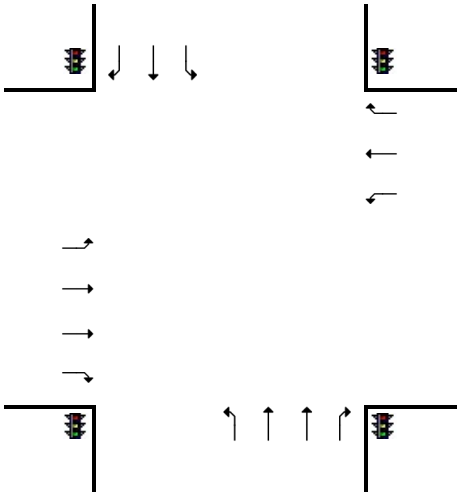
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

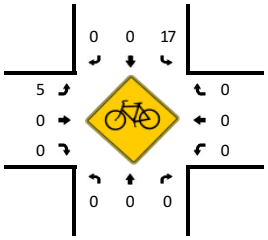


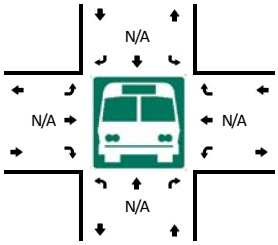


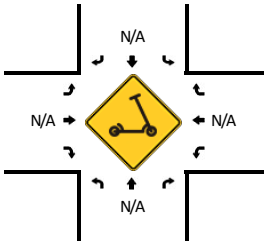
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Parkland Wy/Angus Rd (Eastbound)				Parkland Wy/Angus Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	4	24	1	0	1	17	0	0	0	4	1	0	7	0	7	0	66	
7:05 AM	1	16	3	1	0	24	0	0	1	4	1	0	4	1	4	0	60	
7:10 AM	1	22	2	0	1	23	0	0	0	3	1	0	9	3	2	0	67	
7:15 AM	1	27	1	0	1	26	1	0	4	4	7	0	11	1	3	0	87	
7:20 AM	2	21	2	0	2	20	1	0	0	7	5	0	6	2	2	0	70	
7:25 AM	8	47	5	0	2	17	1	0	1	10	5	0	5	4	7	0	112	
7:30 AM	1	34	7	0	0	16	0	0	1	17	8	0	4	7	4	0	99	
7:35 AM	5	38	7	0	0	18	0	0	2	23	15	0	4	5	2	0	119	
7:40 AM	3	47	5	0	1	15	1	0	2	12	15	0	6	6	3	0	116	
7:45 AM	3	28	5	0	2	10	1	0	0	13	9	0	8	2	7	0	88	
7:50 AM	2	48	8	0	2	19	0	0	2	10	3	0	6	5	7	0	112	
7:55 AM	1	19	7	0	2	20	1	0	2	7	7	0	5	4	9	0	84	1080
8:00 AM	1	38	3	0	3	15	0	0	2	5	3	0	7	3	8	0	88	1102
8:05 AM	2	18	1	0	4	20	0	0	0	3	1	0	2	5	4	0	60	1102
8:10 AM	3	27	3	0	4	17	1	0	1	2	2	0	7	4	2	0	73	1108
8:15 AM	2	22	2	0	5	16	0	0	1	1	8	0	4	1	4	0	66	1087
8:20 AM	2	23	1	0	1	18	1	0	0	3	6	0	2	3	2	0	62	1079
8:25 AM	1	24	2	0	7	24	0	0	1	5	1	0	2	2	1	0	70	1037
8:30 AM	0	28	1	0	5	25	0	0	0	2	4	0	3	2	2	0	72	1010
8:35 AM	1	22	4	0	2	18	1	0	0	1	2	0	2	0	1	0	54	945
8:40 AM	2	20	4	0	1	21	0	0	1	4	0	0	1	2	2	0	58	887
8:45 AM	1	28	3	0	2	15	0	0	0	2	4	0	1	3	0	0	59	858
8:50 AM	1	16	3	0	1	17	0	0	1	3	4	0	9	3	3	0	61	807
8:55 AM	4	18	0	0	4	13	1	0	1	4	6	0	9	2	5	0	67	790

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	36	476	76	0	4	196	4	0	20	208	152	0	56	72	36	0	1336
Heavy Trucks	0	24	0		0	8	0		0	8	4		4	4	0		52
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		44	0	0		8	0	0		0	0	0		52
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

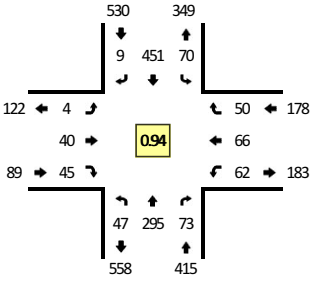
Type of peak hour being reported: Intersection Peak

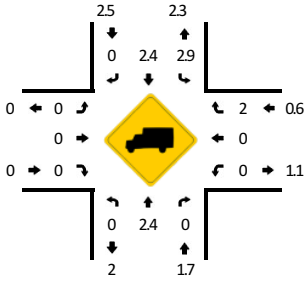
Method for determining peak hour: Total Entering Volume

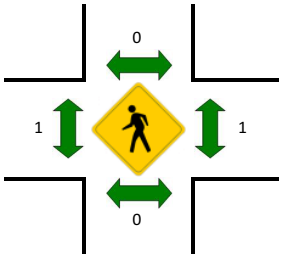
LOCATION: Fiddyment Rd -- Parkland Wy/Angus Rd
CITY/STATE: Roseville, CA

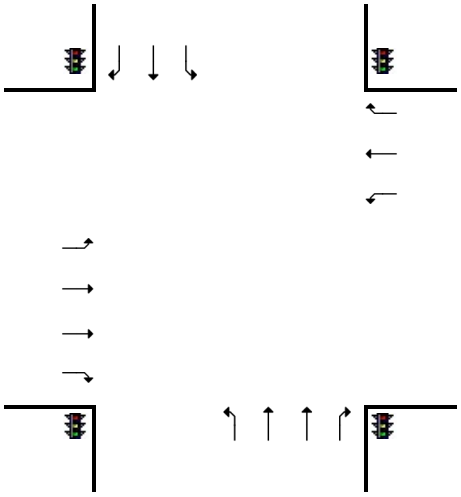
QC JOB #: 16723582
DATE: Wed, Oct 23 2024

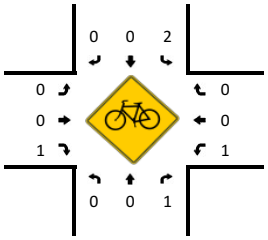
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:20 PM -- 5:35 PM

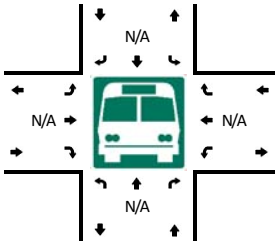


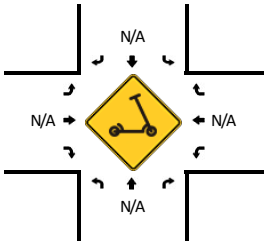












5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Parkland Wy/Angus Rd (Eastbound)				Parkland Wy/Angus Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	36	7	0	8	40	1	0	0	4	3	0	5	4	3	0	114	
4:05 PM	2	21	4	0	5	30	1	0	0	4	5	0	6	6	7	0	91	
4:10 PM	2	19	6	1	3	34	2	0	0	3	2	0	6	1	4	0	83	
4:15 PM	4	26	7	0	4	43	3	0	1	4	5	0	4	7	3	0	111	
4:20 PM	0	31	7	0	5	32	1	0	1	2	2	0	6	12	3	0	102	
4:25 PM	3	28	6	0	8	41	0	0	0	2	3	0	3	4	4	0	102	
4:30 PM	4	26	3	0	3	28	1	0	2	3	1	0	6	3	5	0	85	
4:35 PM	0	32	5	0	5	29	1	0	0	2	2	0	5	4	5	0	90	
4:40 PM	4	17	5	1	7	23	0	0	1	4	4	0	4	7	4	0	81	
4:45 PM	3	29	4	0	9	45	1	0	1	4	1	0	5	9	5	0	116	
4:50 PM	4	23	3	0	5	40	1	0	1	2	2	0	7	7	2	0	97	
4:55 PM	4	26	10	0	5	29	0	0	0	2	4	0	5	4	3	0	92	1164
5:00 PM	4	19	7	0	8	38	1	0	0	1	3	0	6	2	5	0	94	1144
5:05 PM	2	18	5	0	2	40	1	0	0	4	5	0	7	5	8	0	97	1150
5:10 PM	4	34	6	0	7	41	1	0	0	0	3	0	4	5	4	0	109	1176
5:15 PM	3	19	6	0	8	42	1	0	1	2	2	0	5	6	5	0	100	1165
5:20 PM	1	26	8	0	10	44	1	0	1	5	3	0	4	6	3	0	112	1175
5:25 PM	4	30	2	0	6	36	1	0	0	6	7	0	4	6	5	0	107	1180
5:30 PM	6	24	8	0	2	37	1	0	0	3	4	0	10	5	4	0	104	1199
5:35 PM	4	25	5	0	5	32	0	0	0	7	5	0	3	6	5	0	97	1206
5:40 PM	8	22	9	0	3	27	0	0	0	4	6	0	2	5	1	0	87	1212
5:45 PM	4	12	4	0	5	29	2	0	0	4	1	0	7	8	2	0	78	1174
5:50 PM	4	22	8	0	9	29	0	0	1	7	4	0	3	6	4	0	97	1174
5:55 PM	4	32	4	0	3	23	0	0	0	5	6	0	3	5	4	0	89	1171

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	44	320	72	0	72	468	12	0	4	56	56	0	72	68	48	0	1292
Heavy Trucks	0	12	0		0	8	0		0	0	0		0	0	0		20
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		4	0	0		0	0	0		4	0	0		8
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

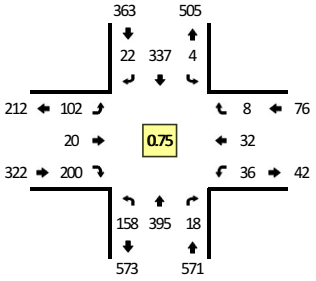
Type of peak hour being reported: Intersection Peak

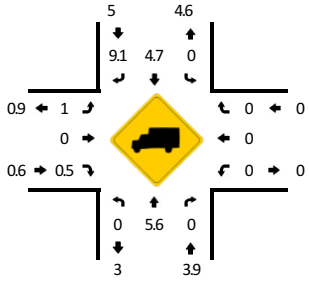
Method for determining peak hour: Total Entering Volume

LOCATION: Fiddyment Rd -- N Hayden Pkwy
CITY/STATE: Roseville, CA

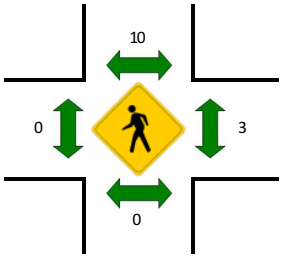
QC JOB #: 16723583
DATE: Wed, Oct 23 2024

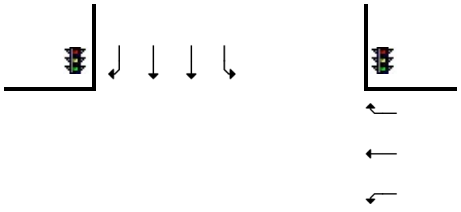
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

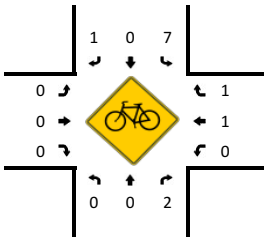


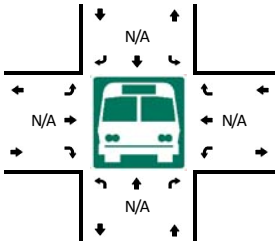


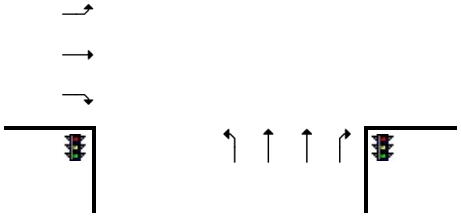
TRUE DATA TO IMPROVE MOBILITY

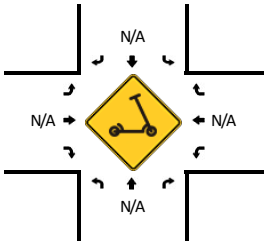












5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				N Hayden Pkwy (Eastbound)				N Hayden Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	5	25	0	0	0	23	1	0	4	0	9	0	4	0	1	0	72	
7:05 AM	6	21	0	0	0	29	1	0	3	0	6	0	3	1	1	0	71	
7:10 AM	6	22	0	0	0	27	9	0	3	0	6	0	1	0	0	0	74	
7:15 AM	7	31	0	0	0	40	2	0	2	0	5	0	2	0	1	0	90	
7:20 AM	19	27	3	0	0	21	4	0	11	1	12	0	1	4	1	0	104	
7:25 AM	19	42	2	0	0	36	1	0	11	0	13	0	2	9	1	0	136	
7:30 AM	10	35	3	0	0	25	1	0	11	1	24	0	3	9	0	0	122	
7:35 AM	28	38	3	0	2	28	2	0	12	7	28	0	8	2	0	0	158	
7:40 AM	17	51	1	0	0	34	3	0	10	5	32	0	7	5	1	0	166	
7:45 AM	5	19	1	0	1	26	3	0	16	6	35	0	4	1	0	0	117	
7:50 AM	9	47	1	0	0	26	1	0	10	0	21	0	5	0	0	0	120	
7:55 AM	6	26	1	0	0	30	1	0	7	0	10	0	2	1	1	0	85	1315
8:00 AM	12	32	2	0	0	27	1	0	6	0	6	0	0	0	1	0	87	1330
8:05 AM	11	18	1	0	0	21	2	0	4	0	10	0	2	0	2	0	71	1330
8:10 AM	15	29	0	0	1	23	1	0	2	0	4	0	0	1	0	0	76	1332
8:15 AM	4	25	0	0	0	27	0	0	2	1	9	0	2	0	0	0	70	1312
8:20 AM	2	20	1	0	0	25	2	0	2	0	9	0	2	0	0	0	63	1271
8:25 AM	7	31	1	0	0	20	2	0	1	0	9	0	1	2	0	0	74	1209
8:30 AM	4	20	1	0	0	30	2	1	3	1	6	0	0	0	0	0	68	1155
8:35 AM	1	32	2	0	0	19	1	0	0	0	7	0	0	0	0	0	62	1059
8:40 AM	7	24	1	0	1	21	0	0	1	0	14	0	1	0	0	0	70	963
8:45 AM	5	30	0	0	0	21	0	0	3	0	11	0	3	0	0	0	73	919
8:50 AM	9	22	0	0	0	22	5	0	0	0	5	0	4	1	0	0	68	867
8:55 AM	2	21	1	0	0	20	4	0	5	0	5	0	0	1	0	0	59	841

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	220	496	28	0	8	348	24	0	132	52	336	0	72	64	4	0	1784
Heavy Trucks	0	24	0		0	8	4		0	0	4		0	0	0		40
Buses																	
Pedestrians		0				16				0				0			16
Bicycles	0	0	4		20	0	0		0	0	0		0	0	0		24
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

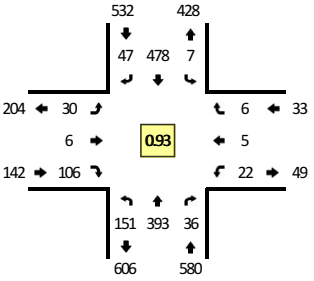
Type of peak hour being reported: Intersection Peak

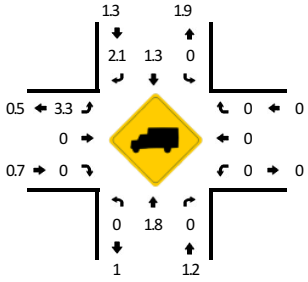
Method for determining peak hour: Total Entering Volume

LOCATION: Fiddyment Rd -- N Hayden Pkwy
CITY/STATE: Roseville, CA

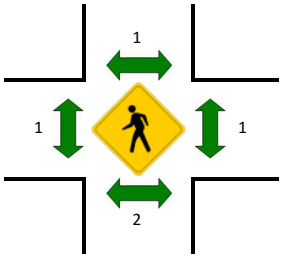
QC JOB #: 16723584
DATE: Wed, Oct 23 2024

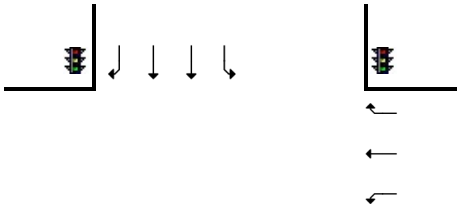
Peak-Hour: 4:35 PM -- 5:35 PM
Peak 15-Min: 5:05 PM -- 5:20 PM

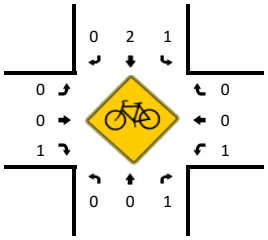


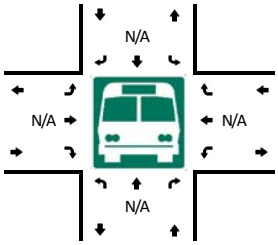


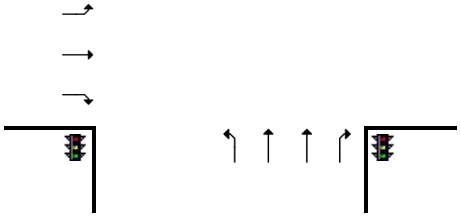
TRUE DATA TO IMPROVE MOBILITY

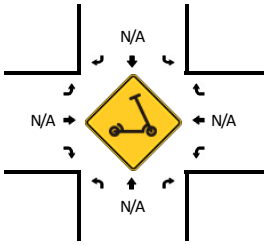












5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				N Hayden Pkwy (Eastbound)				N Hayden Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	7	39	3	0	0	35	5	0	2	0	8	0	1	0	1	0	101	
4:05 PM	17	20	4	0	0	43	3	0	3	1	6	0	3	0	0	0	100	
4:10 PM	11	37	3	0	1	40	1	0	5	0	8	0	5	1	0	0	112	
4:15 PM	13	30	2	0	0	42	3	0	3	0	8	0	0	0	0	0	101	
4:20 PM	13	33	0	0	1	41	3	0	1	1	13	0	1	0	0	0	107	
4:25 PM	14	46	4	0	0	41	4	0	3	0	12	0	0	1	1	0	126	
4:30 PM	3	24	1	0	0	33	4	0	1	0	6	0	0	0	0	0	72	
4:35 PM	13	35	1	0	1	31	6	0	4	0	9	0	2	1	1	0	104	
4:40 PM	15	24	2	0	0	27	3	0	3	1	7	0	2	0	1	0	85	
4:45 PM	13	30	4	0	0	37	3	0	2	1	11	0	2	0	1	0	104	
4:50 PM	8	36	1	0	1	46	9	0	2	0	11	1	2	1	0	0	118	
4:55 PM	13	37	5	0	0	35	4	0	1	1	6	0	2	0	0	0	104	1234
5:00 PM	8	26	2	0	0	30	2	0	3	1	10	0	4	0	1	0	87	1220
5:05 PM	16	24	3	0	0	51	4	0	2	1	9	0	2	0	0	0	112	1232
5:10 PM	13	38	4	0	1	53	2	0	3	0	7	0	3	0	1	0	125	1245
5:15 PM	15	28	4	0	0	46	1	0	2	1	10	0	2	0	1	0	110	1254
5:20 PM	7	32	2	0	1	45	4	0	2	0	7	0	1	1	0	0	102	1249
5:25 PM	10	46	5	0	0	44	2	0	3	0	9	0	0	0	0	0	119	1242
5:30 PM	20	37	3	0	3	33	7	0	2	0	10	0	0	2	0	0	117	1287
5:35 PM	10	21	2	0	0	32	3	0	7	0	8	0	0	0	1	0	84	1267
5:40 PM	14	36	1	0	0	36	0	0	1	0	7	0	1	0	0	0	96	1278
5:45 PM	9	26	5	0	0	40	3	0	1	0	9	0	2	0	0	0	95	1269
5:50 PM	17	31	4	0	0	28	0	1	5	0	8	0	1	0	0	0	95	1246
5:55 PM	10	35	3	0	0	26	5	0	1	0	4	0	0	0	0	0	84	1226

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	176	360	44	0	4	600	28	0	28	8	104	0	28	0	8	0	1388
Heavy Trucks	0	8	0		0	0	0		0	0	0		0	0	0		8
Buses																	
Pedestrians		4				4				4				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

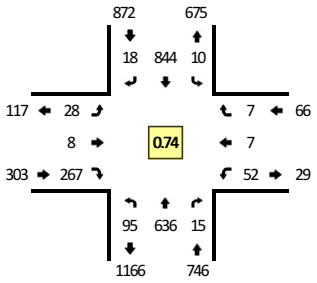
Report generated on 11/5/2024 3:39 PM

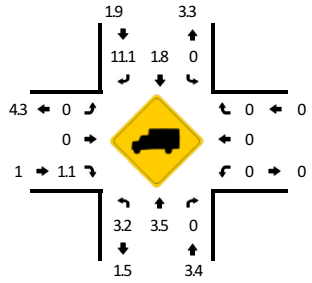
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

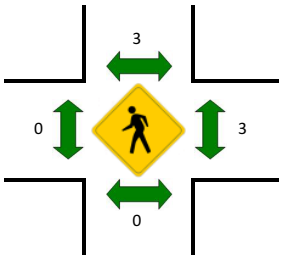
LOCATION: Fiddyment Rd -- Crawford Pkwy/Old Coach Dr | **QC JOB #:** 16723585
CITY/STATE: Roseville, CA | **DATE:** Wed, Oct 23 2024

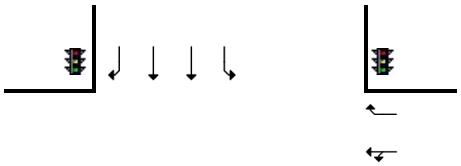
Peak-Hour: 7:10 AM -- 8:10 AM
Peak 15-Min: 7:35 AM -- 7:50 AM

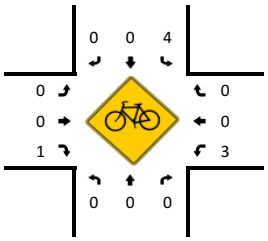


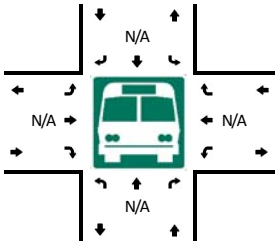


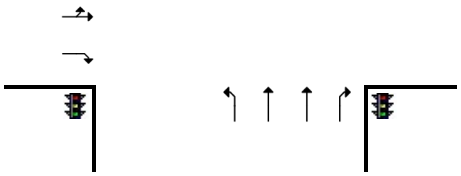
TRUE DATA TO IMPROVE MOBILITY

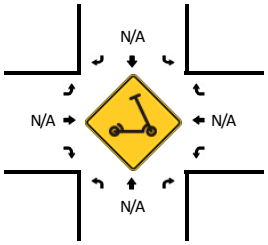












5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Crawford Pkwy/Old Coach Dr (Eastbound)				Crawford Pkwy/Old Coach Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	5	28	1	0	0	56	2	0	2	0	11	0	3	0	0	0	108	
7:05 AM	5	28	0	0	0	44	3	0	1	0	16	0	5	0	0	0	102	
7:10 AM	2	36	1	1	0	63	3	1	1	0	13	0	6	0	1	0	128	
7:15 AM	12	53	0	0	0	55	2	0	0	0	10	0	3	1	0	0	136	
7:20 AM	7	64	0	0	0	74	0	0	1	1	23	0	7	1	0	0	178	
7:25 AM	8	52	1	0	1	61	2	0	3	2	25	0	4	1	3	0	163	
7:30 AM	7	52	1	0	1	52	1	0	3	1	31	0	7	3	2	0	161	
7:35 AM	7	75	1	1	0	107	1	1	7	1	40	0	4	1	0	0	246	
7:40 AM	10	62	1	0	3	102	2	1	6	1	31	0	7	0	1	0	227	
7:45 AM	6	44	3	1	1	101	1	0	3	1	35	0	3	0	0	0	199	
7:50 AM	12	55	3	0	0	83	0	0	1	1	22	0	4	0	0	0	181	
7:55 AM	5	48	2	0	0	55	3	1	1	0	16	0	5	0	0	0	136	1965
8:00 AM	9	50	1	0	0	50	2	0	1	0	14	0	2	0	0	0	129	1986
8:05 AM	7	45	1	0	0	41	1	0	1	0	7	0	0	0	0	0	103	1987
8:10 AM	3	43	4	0	0	34	4	0	3	0	16	0	2	0	0	0	109	1968
8:15 AM	5	45	2	0	0	50	2	0	0	0	11	0	3	0	0	0	118	1950
8:20 AM	3	28	4	0	0	41	0	0	1	0	16	0	2	0	0	0	95	1867
8:25 AM	4	44	2	0	0	43	2	0	2	0	12	0	7	0	0	0	116	1820
8:30 AM	10	46	0	0	0	53	3	0	1	0	12	0	3	0	0	0	128	1787
8:35 AM	3	27	2	0	0	39	0	0	2	0	9	0	2	0	0	0	84	1625
8:40 AM	1	37	2	0	1	49	0	0	1	0	11	0	4	0	1	0	107	1505
8:45 AM	4	45	0	0	0	49	1	0	1	0	7	0	3	0	0	0	110	1416
8:50 AM	1	38	4	0	0	47	2	0	0	0	9	0	2	1	0	0	104	1339
8:55 AM	9	37	2	0	0	44	0	0	2	0	9	0	9	0	0	0	112	1315

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	92	724	20	8	16	1240	16	8	64	12	424	0	56	4	4	0	2688
Heavy Trucks	8	16	0		0	20	0		0	0	4		0	0	0		48
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		12	0	0		0	0	0		12	0	0		24
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

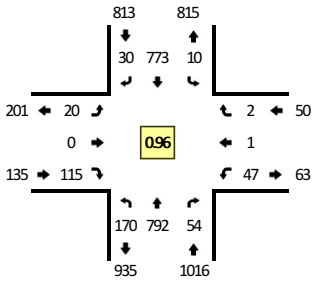
Type of peak hour being reported: Intersection Peak

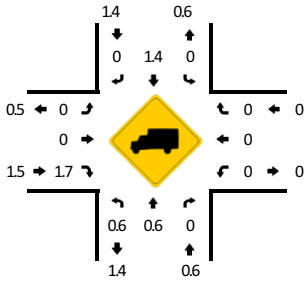
Method for determining peak hour: Total Entering Volume

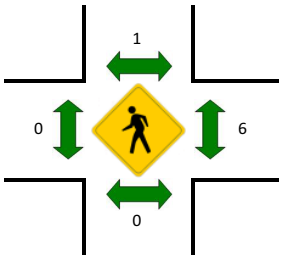
LOCATION: Fiddyment Rd -- Crawford Pkwy/Old Coach Dr
CITY/STATE: Roseville, CA

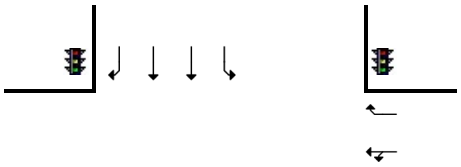
QC JOB #: 16723586
DATE: Wed, Oct 23 2024

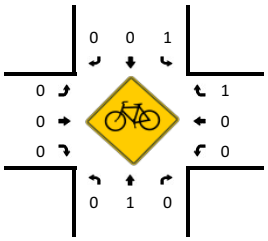
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:20 PM -- 5:35 PM

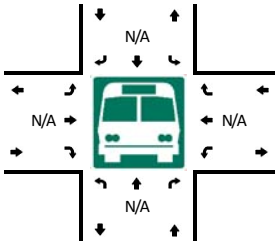


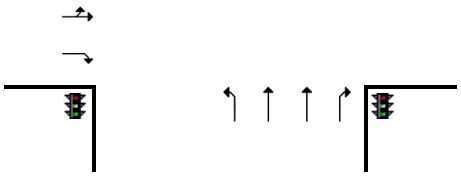


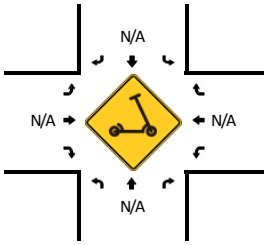












5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Crawford Pkwy/Old Coach Dr (Eastbound)				Crawford Pkwy/Old Coach Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	10	60	3	0	0	53	3	0	1	1	18	0	3	0	0	0	152	
4:05 PM	9	65	1	0	0	52	3	0	0	0	4	0	3	0	0	0	137	
4:10 PM	16	75	2	0	1	75	1	0	0	0	12	0	2	0	0	0	184	
4:15 PM	18	66	6	0	0	64	4	0	5	1	12	0	8	0	0	0	184	
4:20 PM	13	55	6	1	0	63	5	0	1	0	12	0	2	0	0	0	158	
4:25 PM	9	81	5	0	0	70	3	0	2	0	14	0	4	0	1	0	189	
4:30 PM	17	46	4	0	2	37	6	0	1	0	11	0	1	1	1	0	127	
4:35 PM	11	56	9	0	0	62	2	0	2	0	14	0	3	0	0	0	159	
4:40 PM	7	57	4	0	0	41	0	0	2	1	18	0	5	0	0	0	135	
4:45 PM	10	71	4	0	0	54	1	0	2	0	5	0	7	0	1	0	155	
4:50 PM	11	62	3	0	0	85	7	1	3	0	12	0	3	0	0	0	187	
4:55 PM	13	73	5	0	0	51	0	0	3	0	7	0	1	0	0	0	153	1920
5:00 PM	16	57	5	0	0	61	0	0	1	0	5	0	1	0	0	0	146	1914
5:05 PM	11	70	6	0	5	67	1	0	2	0	16	0	1	0	1	0	180	1957
5:10 PM	8	60	7	0	1	72	3	0	1	0	14	0	7	0	0	0	173	1946
5:15 PM	11	66	2	0	1	69	1	0	3	0	10	0	1	0	0	0	164	1926
5:20 PM	18	65	1	0	0	71	1	0	2	0	7	0	7	0	0	0	172	1940
5:25 PM	22	71	6	0	1	66	5	0	0	0	5	0	3	0	0	0	179	1930
5:30 PM	16	77	2	0	0	56	4	0	1	0	14	0	4	1	0	0	175	1978
5:35 PM	16	57	6	0	1	52	5	0	2	0	10	0	6	0	0	0	155	1974
5:40 PM	18	63	7	0	0	69	2	0	0	0	10	0	6	0	0	0	175	2014
5:45 PM	18	53	8	0	0	52	1	0	1	1	9	0	3	0	0	0	146	2005
5:50 PM	17	62	8	0	1	65	1	0	1	0	8	0	4	0	0	0	167	1985
5:55 PM	21	80	4	0	0	39	1	0	1	0	9	0	6	0	0	0	161	1993

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	224	852	36	0	4	772	40	0	12	0	104	0	56	4	0	0	2104
Heavy Trucks	0	12	0		0	8	0		0	0	4		0	0	0		24
Buses																	
Pedestrians		0				0				0				4			4
Bicycles	0	4	0		0	0	0		0	0	0		0	0	0		4
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

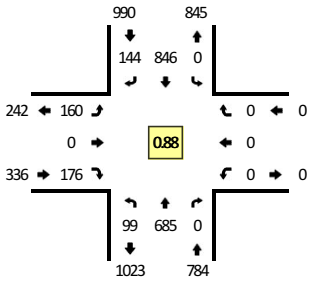
Type of peak hour being reported: Intersection Peak

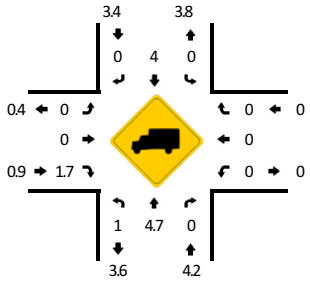
Method for determining peak hour: Total Entering Volume

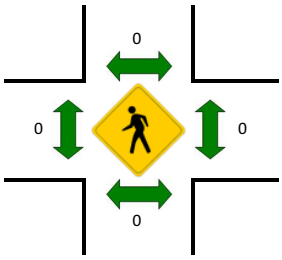
LOCATION: Fiddyment Rd -- Hayden Pkwy
CITY/STATE: Roseville, CA

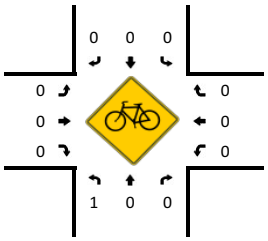
QC JOB #: 16723587
DATE: Wed, Oct 30 2024

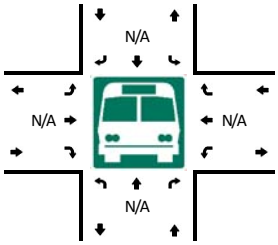
Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:40 AM -- 7:55 AM

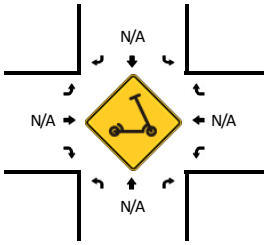












5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Hayden Pkwy (Eastbound)				Hayden Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	7	43	0	0	0	67	3	1	5	0	11	0	0	0	0	0	137	
7:05 AM	7	50	0	0	0	80	6	0	2	0	10	0	0	0	0	0	155	
7:10 AM	6	46	0	0	0	62	1	0	7	0	14	0	0	0	0	0	136	
7:15 AM	0	46	0	0	0	59	5	0	9	0	13	0	0	0	0	0	132	
7:20 AM	5	58	0	0	0	62	5	0	13	0	9	0	0	0	0	0	152	
7:25 AM	1	59	0	0	0	71	10	0	11	0	12	0	0	0	0	0	164	
7:30 AM	9	67	0	0	0	72	13	0	13	0	15	0	0	0	0	0	189	
7:35 AM	7	52	0	0	0	76	18	0	19	0	15	0	0	0	0	0	187	
7:40 AM	5	59	0	0	0	74	23	0	17	0	16	0	0	0	0	0	194	
7:45 AM	13	71	0	0	0	75	13	0	21	0	18	0	0	0	0	0	211	
7:50 AM	15	49	0	0	0	76	19	0	12	0	22	0	0	0	0	0	193	
7:55 AM	8	57	0	0	0	77	8	0	8	0	20	0	0	0	0	0	178	2028
8:00 AM	6	57	0	0	0	63	13	0	18	0	16	0	0	0	0	0	173	2064
8:05 AM	13	53	0	1	0	71	10	0	9	0	9	0	0	0	0	0	166	2075
8:10 AM	12	61	0	0	0	57	7	0	11	0	15	0	0	0	0	0	163	2102
8:15 AM	4	42	0	0	0	72	5	0	8	0	9	0	0	0	0	0	140	2110
8:20 AM	8	51	0	0	0	64	8	0	6	0	7	0	0	0	0	0	144	2102
8:25 AM	4	52	0	0	0	54	8	0	11	0	2	0	0	0	0	0	131	2069
8:30 AM	9	47	0	0	0	73	6	0	11	0	9	0	0	0	0	0	155	2035
8:35 AM	3	60	0	0	0	54	7	0	13	0	5	0	0	0	0	0	142	1990
8:40 AM	5	69	0	0	0	53	9	0	12	0	7	0	0	0	0	0	155	1951
8:45 AM	12	75	0	0	0	65	14	0	7	0	6	0	0	0	0	0	179	1919
8:50 AM	9	57	0	0	0	44	14	0	10	0	6	0	0	0	0	0	140	1866
8:55 AM	13	64	0	0	0	50	22	0	11	0	9	0	0	0	0	0	169	1857

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	132	716	0	0	0	900	220	0	200	0	224	0	0	0	0	0	2392
Heavy Trucks	4	16	0		0	40	0		0	0	0		0	0	0		60
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

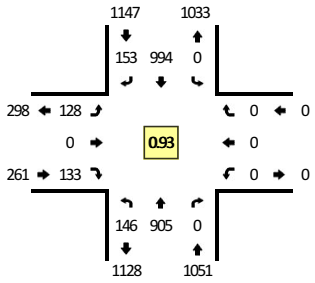
Type of peak hour being reported: Intersection Peak

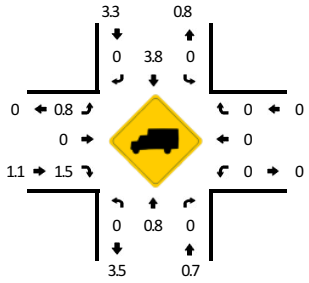
Method for determining peak hour: Total Entering Volume

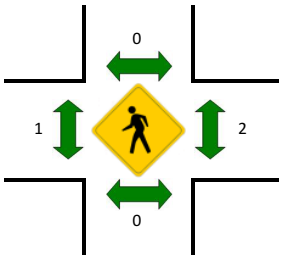
LOCATION: Fiddyment Rd -- Hayden Pkwy
CITY/STATE: Roseville, CA

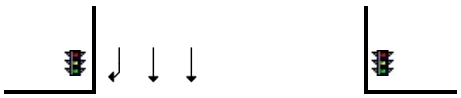
QC JOB #: 16723588
DATE: Wed, Oct 30 2024

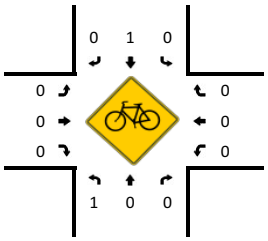
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:10 PM -- 5:25 PM

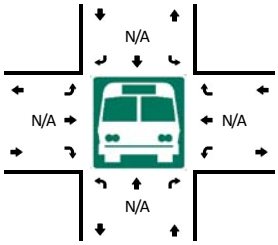


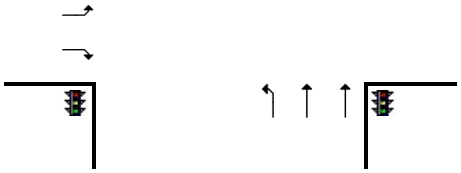


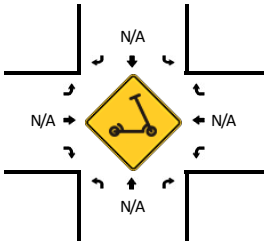












5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Hayden Pkwy (Eastbound)				Hayden Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	9	65	0	0	0	69	19	0	15	0	11	0	0	0	0	0	188	
4:05 PM	13	82	0	0	0	70	18	0	10	0	11	0	0	0	0	0	204	
4:10 PM	8	64	0	0	0	70	6	0	16	0	9	0	0	0	0	0	173	
4:15 PM	13	85	0	0	0	88	10	0	7	0	13	0	0	0	0	0	216	
4:20 PM	9	82	0	0	0	109	12	0	6	0	7	0	0	0	0	0	225	
4:25 PM	9	46	0	0	0	72	15	0	7	0	8	0	0	0	0	0	157	
4:30 PM	11	86	0	0	0	79	12	0	8	0	9	0	0	0	0	0	205	
4:35 PM	11	61	0	0	0	95	11	0	16	0	11	0	0	0	0	0	205	
4:40 PM	7	69	0	0	0	74	7	0	13	0	5	0	0	0	0	0	175	
4:45 PM	7	68	0	0	0	88	7	0	11	0	8	0	0	0	0	0	189	
4:50 PM	9	73	0	0	0	82	9	0	12	0	3	0	0	0	0	0	188	
4:55 PM	7	73	0	0	0	63	10	0	8	0	9	0	0	0	0	0	170	2295
5:00 PM	12	83	0	0	0	82	10	0	9	0	7	0	0	0	0	0	203	2310
5:05 PM	13	69	0	1	0	99	12	0	11	0	9	0	0	0	0	0	214	2320
5:10 PM	5	60	0	0	0	87	10	0	18	0	15	0	0	0	0	0	195	2342
5:15 PM	16	84	0	0	0	91	17	0	8	0	9	0	0	0	0	0	225	2351
5:20 PM	11	84	0	0	0	106	12	0	17	0	8	0	0	0	0	0	238	2364
5:25 PM	13	69	0	0	0	77	13	0	13	0	10	0	0	0	0	0	195	2402
5:30 PM	19	69	0	0	0	71	20	0	7	0	12	0	0	0	0	0	198	2395
5:35 PM	10	97	0	0	0	52	11	0	11	0	6	0	0	0	0	0	187	2377
5:40 PM	10	71	0	0	0	110	9	0	7	0	16	0	0	0	0	0	223	2425
5:45 PM	9	63	0	0	0	84	16	0	14	0	12	0	0	0	0	0	198	2434
5:50 PM	14	81	0	0	0	79	13	0	7	0	17	0	0	0	0	0	211	2457
5:55 PM	13	75	0	0	0	56	10	0	6	0	12	0	0	0	0	0	172	2459

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	128	912	0	0	0	1136	156	0	172	0	128	0	0	0	0	0	2632
Heavy Trucks	0	8	0		0	40	0		0	0	0		0	0	0		48
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

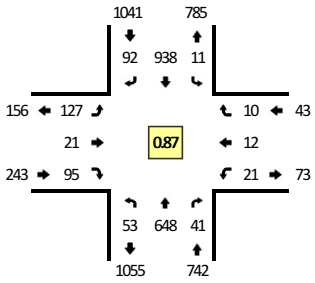
Report generated on 11/5/2024 3:39 PM

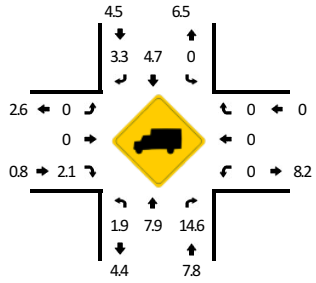
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

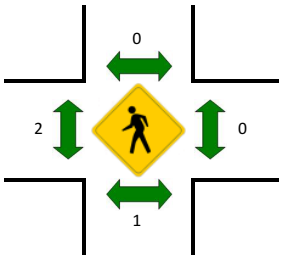
LOCATION: Fiddyment Rd -- Village Green Dr/Del Webb Blvd | **QC JOB #:** 16723589
CITY/STATE: Roseville, CA | **DATE:** Wed, Oct 23 2024

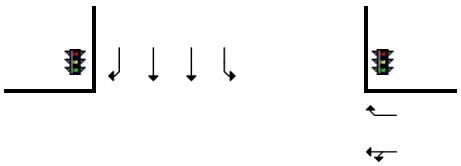
Peak-Hour: 7:10 AM -- 8:10 AM
Peak 15-Min: 7:40 AM -- 7:55 AM

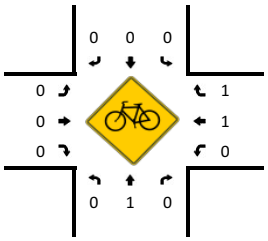


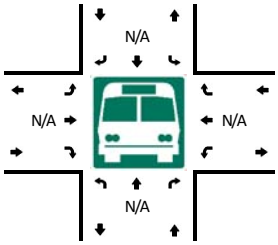


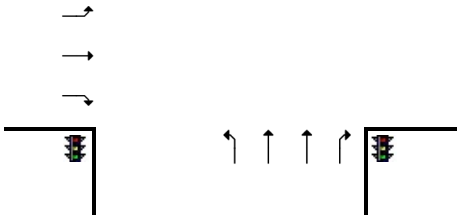
TRUE DATA TO IMPROVE MOBILITY

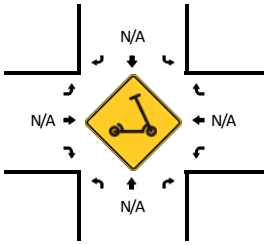












5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Village Green Dr/Del Webb Blvd (Eastbound)				Village Green Dr/Del Webb Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	42	2	0	1	83	5	0	5	1	11	0	2	0	1	0	153	
7:05 AM	0	32	1	0	0	61	3	0	4	0	9	0	5	0	1	0	116	
7:10 AM	3	39	2	0	0	77	5	0	9	2	8	0	3	1	2	0	151	
7:15 AM	3	60	1	0	0	65	1	0	7	0	9	0	3	0	0	0	149	
7:20 AM	6	56	1	0	0	75	7	0	10	1	8	0	2	0	0	0	166	
7:25 AM	6	60	6	0	0	92	6	0	2	0	4	0	1	3	1	0	181	
7:30 AM	12	45	3	0	0	55	7	0	11	1	7	0	4	1	0	0	146	
7:35 AM	7	60	2	0	0	89	8	0	14	2	7	0	1	1	1	0	192	
7:40 AM	1	46	2	0	1	102	14	0	13	1	9	0	1	2	0	0	192	
7:45 AM	4	61	4	0	0	95	7	0	15	2	10	0	1	2	1	0	202	
7:50 AM	3	62	7	1	5	84	10	0	10	3	12	0	1	0	1	0	199	
7:55 AM	3	52	4	0	2	78	10	0	11	3	6	0	1	1	1	0	172	2019
8:00 AM	3	48	6	0	1	67	10	0	14	3	9	0	3	1	1	0	166	2032
8:05 AM	1	59	3	0	2	59	7	0	11	3	6	0	0	0	2	0	153	2069
8:10 AM	2	44	4	0	0	66	5	0	11	2	8	0	2	0	1	0	145	2063
8:15 AM	2	52	3	0	1	64	10	0	9	2	9	0	2	0	0	0	154	2068
8:20 AM	3	52	5	1	3	68	9	0	8	0	6	0	0	0	0	0	155	2057
8:25 AM	3	55	1	0	0	56	7	0	4	1	8	0	3	1	1	0	140	2016
8:30 AM	1	54	5	1	3	62	8	0	8	2	3	0	2	2	2	1	154	2024
8:35 AM	1	47	1	0	3	49	8	0	6	2	13	0	3	0	3	0	136	1968
8:40 AM	3	47	1	0	1	47	5	0	10	0	8	0	2	0	1	0	125	1901
8:45 AM	4	69	9	0	1	55	5	0	11	2	5	0	2	0	3	0	166	1865
8:50 AM	6	53	5	1	1	54	6	0	3	3	4	0	3	2	1	0	142	1808
8:55 AM	1	53	7	0	0	51	6	0	4	2	5	0	4	1	0	0	134	1770

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	32	676	52	4	24	1124	124	0	152	24	124	0	12	16	8	0	2372
Heavy Trucks	0	60	8		0	44	12		0	0	0		0	0	0		124
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	4	0		0	0	0		0	0	0		0	0	4		8
Scooters																	

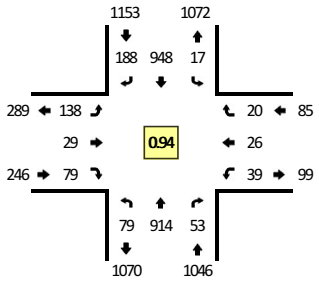
Comments:

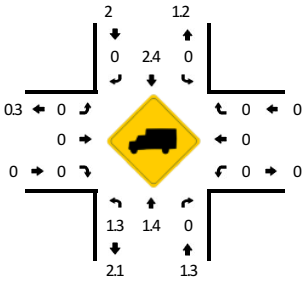
Report generated on 11/5/2024 3:39 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

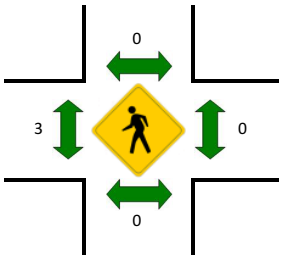
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

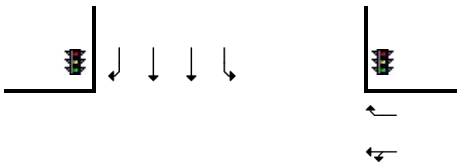
LOCATION: Fiddyment Rd -- Village Green Dr/Del Webb Blvd | **QC JOB #:** 16723590
CITY/STATE: Roseville, CA | **DATE:** Wed, Oct 23 2024

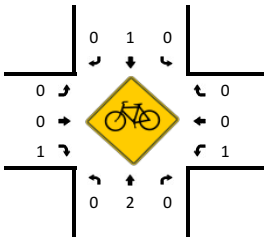
Peak-Hour: 4:55 PM -- 5:55 PM
Peak 15-Min: 5:35 PM -- 5:50 PM

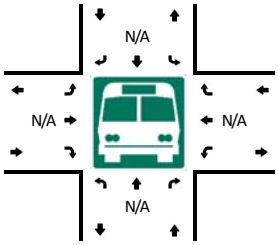


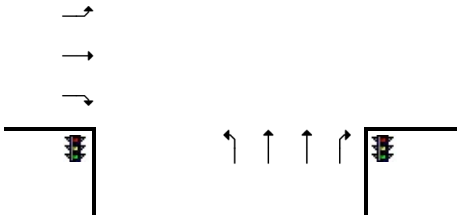


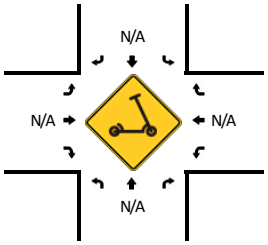












5-Min Count Period Beginning At	Fiddyment Rd (Northbound)				Fiddyment Rd (Southbound)				Village Green Dr/Del Webb Blvd (Eastbound)				Village Green Dr/Del Webb Blvd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	7	76	6	0	1	77	18	0	16	1	3	0	1	2	0	0	208	
4:05 PM	7	60	6	2	1	80	10	0	7	3	3	0	2	3	1	1	186	
4:10 PM	4	85	2	1	0	80	10	0	13	2	8	0	4	3	1	0	213	
4:15 PM	5	87	3	1	1	79	7	0	10	2	2	0	3	0	2	0	202	
4:20 PM	3	60	3	0	1	38	20	0	17	2	6	0	1	2	4	0	157	
4:25 PM	11	75	6	0	1	93	16	0	6	2	7	0	2	4	1	0	224	
4:30 PM	10	50	0	2	1	75	10	0	6	2	6	0	2	2	2	0	168	
4:35 PM	6	57	4	0	1	68	15	0	11	1	3	0	2	5	1	0	174	
4:40 PM	5	75	5	0	1	52	10	0	9	2	5	0	1	2	1	0	168	
4:45 PM	8	61	2	0	1	78	11	0	8	3	4	0	6	1	1	0	184	
4:50 PM	14	73	6	0	1	68	20	0	13	2	5	0	5	3	2	0	212	
4:55 PM	5	71	2	0	2	72	17	0	12	2	6	0	5	1	3	0	198	2294
5:00 PM	5	59	4	0	2	76	16	0	11	1	4	0	0	2	1	0	181	2267
5:05 PM	7	82	6	0	1	80	15	0	13	3	7	0	3	3	3	0	223	2304
5:10 PM	4	56	4	0	1	90	15	0	12	1	8	0	5	3	3	0	202	2293
5:15 PM	15	81	7	3	1	79	19	0	9	2	8	0	3	1	2	0	230	2321
5:20 PM	8	97	8	0	2	79	8	0	7	4	4	0	2	1	0	0	220	2384
5:25 PM	3	73	3	0	2	80	15	0	12	5	7	0	4	0	1	0	205	2365
5:30 PM	4	62	3	0	2	77	12	0	11	0	5	0	6	3	2	0	187	2384
5:35 PM	5	92	5	1	0	69	15	0	21	2	11	0	5	5	1	0	232	2442
5:40 PM	5	85	6	0	3	81	20	0	14	4	2	0	1	2	1	0	224	2498
5:45 PM	8	79	1	0	0	82	19	0	9	1	6	0	4	4	1	0	214	2528
5:50 PM	6	77	4	0	1	83	17	0	7	4	11	0	1	1	2	0	214	2530
5:55 PM	8	86	3	0	1	56	13	0	9	1	2	0	1	2	2	0	184	2516

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	72	1024	48	4	12	928	216	0	176	28	76	0	40	44	12	0	2680
Heavy Trucks	0	4	0		0	32	0		0	0	0		0	0	0		36
Buses																	
Pedestrians		0				0				8				0			8
Bicycles	0	0	0		0	4	0		0	0	4		0	0	0		8
Scooters																	

Comments:

Report generated on 11/5/2024 3:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Appendix D

Existing Conditions Synchro Reports

HCM 7th Edition all-way stop-controlled intersection methodology supports maximum of three lanes.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	360	117	65	265	56	67	194	105	138	257	68
Future Volume (veh/h)	84	360	117	65	265	56	67	194	105	138	257	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1781	1900	1900	1693	1796	1885	1885	1885	1841	1870	1841
Adj Flow Rate, veh/h	98	419	136	76	308	65	78	226	122	160	299	79
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	5	8	0	0	14	7	1	1	1	4	2	4
Cap, veh/h	126	1432	472	98	1277	419	101	358	291	204	467	343
Arrive On Green	0.07	0.29	0.29	0.05	0.28	0.28	0.06	0.19	0.19	0.12	0.25	0.25
Sat Flow, veh/h	1739	4863	1605	1810	4621	1517	1795	1885	1533	1753	1870	1373
Grp Volume(v), veh/h	98	419	136	76	308	65	78	226	122	160	299	79
Grp Sat Flow(s),veh/h/ln	1739	1621	1605	1810	1540	1517	1795	1885	1533	1753	1870	1373
Q Serve(g_s), s	3.2	3.9	3.8	2.4	3.0	1.9	2.5	6.4	4.1	5.1	8.3	2.7
Cycle Q Clear(g_c), s	3.2	3.9	3.8	2.4	3.0	1.9	2.5	6.4	4.1	5.1	8.3	2.7
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	126	1432	472	98	1277	419	101	358	291	204	467	343
V/C Ratio(X)	0.78	0.29	0.29	0.77	0.24	0.16	0.77	0.63	0.42	0.79	0.64	0.23
Avail Cap(c_a), veh/h	330	1432	472	344	1277	419	341	521	423	333	517	379
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	26.4	15.8	15.8	27.0	16.3	15.8	27.0	21.6	20.7	24.9	19.4	17.3
Incr Delay (d2), s/veh	9.8	0.1	0.3	12.0	0.4	0.8	11.8	1.8	1.0	6.6	2.3	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	1.5	1.2	1.2	1.2	0.9	0.6	1.3	2.7	1.3	2.3	3.5	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.2	15.9	16.1	39.0	16.7	16.6	38.7	23.4	21.6	31.5	21.7	17.6
LnGrp LOS	D	B	B	D	B	B	D	C	C	C	C	B
Approach Vol, veh/h		653			449			426			538	
Approach Delay, s/veh		19.0			20.5			25.7			24.0	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	16.0	8.2	22.1	8.3	19.5	9.2	21.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	11.0	16.0	11.0	16.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	7.1	8.4	4.4	5.9	4.5	10.3	5.2	5.0
Green Ext Time (p_c), s	0.1	1.0	0.1	2.2	0.1	1.0	0.1	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.0
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	403	66	415	260	230	62	403	371	405	562	51
Future Volume (veh/h)	61	403	66	415	260	230	62	403	371	405	562	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1604	1856	1856	1900	1678	1841	1870	1900	1856	1841
Adj Flow Rate, veh/h	69	458	14	472	295	50	70	458	113	460	639	16
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	2	20	3	3	0	15	4	2	0	3	4
Cap, veh/h	691	770	205	579	557	177	337	766	347	568	959	424
Arrive On Green	0.20	0.15	0.15	0.17	0.11	0.11	0.11	0.22	0.22	0.16	0.27	0.27
Sat Flow, veh/h	3510	5106	1359	3428	5066	1610	3100	3497	1583	3510	3526	1558
Grp Volume(v), veh/h	69	458	14	472	295	50	70	458	113	460	639	16
Grp Sat Flow(s),veh/h/ln	1755	1702	1359	1714	1689	1610	1550	1749	1583	1755	1763	1558
Q Serve(g_s), s	1.3	6.5	0.5	10.4	4.3	1.4	1.6	9.2	4.7	9.9	12.6	0.6
Cycle Q Clear(g_c), s	1.3	6.5	0.5	10.4	4.3	1.4	1.6	9.2	4.7	9.9	12.6	0.6
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	691	770	205	579	557	177	337	766	347	568	959	424
V/C Ratio(X)	0.10	0.60	0.07	0.82	0.53	0.28	0.21	0.60	0.33	0.81	0.67	0.04
Avail Cap(c_a), veh/h	899	1314	350	1755	1426	453	793	1477	669	1348	1489	658
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	25.7	31.0	13.4	31.3	32.9	13.3	31.7	27.4	25.7	31.6	25.3	20.9
Incr Delay (d2), s/veh	0.0	1.3	0.2	1.1	1.2	1.3	0.1	1.5	1.1	1.1	1.6	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	0.5	2.6	0.2	4.0	1.7	0.9	0.6	3.7	1.7	3.9	5.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.7	32.2	13.6	32.4	34.0	14.6	31.9	28.9	26.7	32.6	26.8	21.0
LnGrp LOS	C	C	B	C	C	B	C	C	C	C	C	C
Approach Vol, veh/h		541			817			641			1115	
Approach Delay, s/veh		30.9			31.9			28.8			29.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	23.1	18.2	18.2	14.5	27.3	21.8	14.6
Change Period (Y+Rc), s	6.0	6.0	5.0	6.4	6.0	6.0	6.4	* 6
Max Green Setting (Gmax), s	30.0	33.0	40.0	20.1	20.0	33.0	20.0	* 22
Max Q Clear Time (g_c+I1), s	11.9	11.2	12.4	8.5	3.6	14.6	3.3	6.3
Green Ext Time (p_c), s	0.8	5.6	0.8	3.2	0.1	6.4	0.1	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	30.1
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1464	141	46	996	131	95	38	129	288	84	50
Future Volume (veh/h)	51	1464	141	46	996	131	95	38	129	288	84	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		0.75	1.00		0.76
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1885	1900	1841	1870	1885	1826	1870	1885	1841	1900
Adj Flow Rate, veh/h	61	1743	168	55	1186	156	113	45	154	252	228	60
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	0	2	1	0	4	2	1	5	2	1	4	0
Cap, veh/h	131	2226	660	89	2073	635	262	267	173	371	270	71
Arrive On Green	0.07	0.44	0.44	0.10	0.83	0.83	0.15	0.15	0.15	0.21	0.21	0.21
Sat Flow, veh/h	1810	5106	1513	1810	5025	1539	1795	1826	1188	1795	1309	344
Grp Volume(v), veh/h	61	1743	168	55	1186	156	113	45	154	252	0	288
Grp Sat Flow(s),veh/h/ln	1810	1702	1513	1810	1675	1539	1795	1826	1188	1795	0	1653
Q Serve(g_s), s	3.9	35.1	8.5	3.5	9.4	2.7	6.9	2.6	15.3	15.5	0.0	20.1
Cycle Q Clear(g_c), s	3.9	35.1	8.5	3.5	9.4	2.7	6.9	2.6	15.3	15.5	0.0	20.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	131	2226	660	89	2073	635	262	267	173	371	0	342
V/C Ratio(X)	0.47	0.78	0.25	0.62	0.57	0.25	0.43	0.17	0.89	0.68	0.00	0.84
Avail Cap(c_a), veh/h	241	2226	660	241	2073	635	305	310	202	376	0	346
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.73	0.90	0.90	0.90	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.4	29.0	21.5	53.0	7.0	6.4	46.7	44.9	50.3	43.9	0.0	45.7
Incr Delay (d2), s/veh	0.7	2.1	0.7	2.4	1.0	0.8	0.4	0.1	29.3	4.0	0.0	16.0
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	13.9	3.0	1.6	2.2	0.9	3.1	1.2	5.8	7.3	0.0	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.1	31.1	22.2	55.4	8.0	7.2	47.1	45.0	79.6	47.9	0.0	61.7
LnGrp LOS	D	C	C	E	A	A	D	D	E	D		E
Approach Vol, veh/h		1972			1397			312			540	
Approach Delay, s/veh		31.0			9.8			62.9			55.3	
Approach LOS		C			A			E			E	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	22.1	9.9	58.3	29.7	12.7	55.5
Change Period (Y+Rc), s	4.6	4.0	6.0	4.9	4.0	6.0
Max Green Setting (Gmax), s	20.4	16.0	39.0	25.1	16.0	39.0
Max Q Clear Time (g_c+I1), s	17.3	5.5	37.1	22.1	5.9	11.4
Green Ext Time (p_c), s	0.3	0.0	1.9	0.5	0.0	18.7

Intersection Summary	
HCM 7th Control Delay, s/veh	29.5
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	1513	207	205	815	73	268	123	257	250	151	74
Future Volume (veh/h)	92	1513	207	205	815	73	268	123	257	250	151	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1856	1826	1678	1885	1826	1870	1870	1885	1885
Adj Flow Rate, veh/h	102	1681	230	228	906	81	298	137	286	278	168	82
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	2	2	3	5	15	1	5	2	2	1	1
Cap, veh/h	281	2647	807	285	2597	738	359	471	210	340	470	201
Arrive On Green	0.16	1.00	1.00	0.17	1.00	1.00	0.10	0.14	0.14	0.10	0.13	0.13
Sat Flow, veh/h	3483	5106	1557	3428	4985	1416	3483	3469	1547	3456	3582	1529
Grp Volume(v), veh/h	102	1681	230	228	906	81	298	137	286	278	168	82
Grp Sat Flow(s),veh/h/ln	1742	1702	1557	1714	1662	1416	1742	1735	1547	1728	1791	1529
Q Serve(g_s), s	3.1	0.0	0.0	7.7	0.0	0.0	10.1	4.3	16.3	9.5	5.1	5.9
Cycle Q Clear(g_c), s	3.1	0.0	0.0	7.7	0.0	0.0	10.1	4.3	16.3	9.5	5.1	5.9
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	281	2647	807	285	2597	738	359	471	210	340	470	201
V/C Ratio(X)	0.36	0.63	0.28	0.80	0.35	0.11	0.83	0.29	1.36	0.82	0.36	0.41
Avail Cap(c_a), veh/h	464	2647	807	600	2597	738	522	471	210	605	576	246
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	0.95	0.95	0.95	0.81	0.81	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	0.0	0.0	49.1	0.0	0.0	52.8	46.6	51.8	53.0	47.5	47.8
Incr Delay (d2), s/veh	0.2	0.8	0.6	1.9	0.4	0.3	4.0	0.4	185.6	1.8	0.7	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	1.3	0.2	0.1	3.1	0.1	0.1	4.5	1.8	17.0	4.1	2.3	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.8	0.8	0.6	51.0	0.4	0.3	56.8	47.0	237.4	54.9	48.2	49.9
LnGrp LOS	D	A	A	D	A	A	E	D	F	D	D	D
Approach Vol, veh/h		2013			1215			721			528	
Approach Delay, s/veh		3.1			9.8			126.6			52.0	
Approach LOS		A			A			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	22.0	14.0	68.2	16.4	21.5	13.7	68.5
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	11.8	16.3	21.0	42.0	18.0	19.3	16.0	47.0
Max Q Clear Time (g_c+I1), s	11.5	18.3	9.7	2.0	12.1	7.9	5.1	2.0
Green Ext Time (p_c), s	0.4	0.0	0.3	33.0	0.3	1.3	0.1	20.4

Intersection Summary	
HCM 7th Control Delay, s/veh	30.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1915	104	188	1035	33	21	11	150	51	15	18
Future Volume (veh/h)	31	1915	104	188	1035	33	21	11	150	51	15	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1841	1856	1826	1900	1900	1900	1885	1900	1900	1900
Adj Flow Rate, veh/h	33	2037	111	200	1101	35	17	19	160	54	16	19
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	4	3	5	0	0	0	1	0	0	0
Cap, veh/h	70	2849	858	255	2958	935	209	219	184	172	75	89
Arrive On Green	0.08	1.00	1.00	0.15	1.00	1.00	0.12	0.12	0.12	0.09	0.09	0.09
Sat Flow, veh/h	1810	5106	1538	3428	4985	1576	1810	1900	1598	1810	791	940
Grp Volume(v), veh/h	33	2037	111	200	1101	35	17	19	160	54	0	35
Grp Sat Flow(s),veh/h/ln	1810	1702	1538	1714	1662	1576	1810	1900	1598	1810	0	1731
Q Serve(g_s), s	2.1	0.0	0.0	6.7	0.0	0.0	1.0	1.1	11.8	3.3	0.0	2.2
Cycle Q Clear(g_c), s	2.1	0.0	0.0	6.7	0.0	0.0	1.0	1.1	11.8	3.3	0.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	70	2849	858	255	2958	935	209	219	184	172	0	164
V/C Ratio(X)	0.47	0.72	0.13	0.78	0.37	0.04	0.08	0.09	0.87	0.31	0.00	0.21
Avail Cap(c_a), veh/h	241	2849	858	457	2958	935	228	239	201	241	0	231
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	0.93	0.93	0.93	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.1	0.0	0.0	50.1	0.0	0.0	47.4	47.4	52.2	50.7	0.0	50.2
Incr Delay (d2), s/veh	1.2	1.1	0.2	1.9	0.3	0.1	0.1	0.1	27.5	0.4	0.0	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	0.9	0.3	0.1	2.7	0.1	0.0	0.5	0.5	6.0	1.5	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.4	1.1	0.2	52.0	0.3	0.1	47.5	47.5	79.7	51.1	0.0	50.4
LnGrp LOS	E	A	A	D	A	A	D	D	E	D		D
Approach Vol, veh/h		2181			1336			196			89	
Approach Delay, s/veh		1.9			8.1			73.7			50.8	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	18.7	12.9	72.9		15.4	8.7	77.2
Change Period (Y+Rc), s	4.9	4.0	6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s	15.1	16.0	54.0		16.0	16.0	54.0
Max Q Clear Time (g_c+I1), s	13.8	8.7	2.0		5.3	4.1	2.0
Green Ext Time (p_c), s	0.0	0.2	44.1		0.1	0.0	21.5

Intersection Summary	
HCM 7th Control Delay, s/veh	8.9
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	33	2061	0	1226	140	376	42
Future Volume (veh/h)	33	2061	0	1226	140	376	42
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
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
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1856	1870		1826	1885	1900	1826
Adj Flow Rate, veh/h	37	2290		1362	156	418	47
Peak Hour Factor	0.90	0.90		0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	2		5	1	0	5
Cap, veh/h	94	5004		3445	1104	488	215
Arrive On Green	0.11	1.00		0.69	0.69	0.14	0.14
Sat Flow, veh/h	1767	6696		5149	1598	3510	1547
Grp Volume(v), veh/h	37	2290		1362	156	418	47
Grp Sat Flow(s),veh/h/ln	1767	1609		1662	1598	1755	1547
Q Serve(g_s), s	2.3	0.0		13.9	4.0	14.0	3.2
Cycle Q Clear(g_c), s	2.3	0.0		13.9	4.0	14.0	3.2
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	94	5004		3445	1104	488	215
V/C Ratio(X)	0.39	0.46		0.40	0.14	0.86	0.22
Avail Cap(c_a), veh/h	236	5004		3445	1104	761	335
HCM Platoon Ratio	2.00	2.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	0.0		7.9	6.3	50.5	45.9
Incr Delay (d2), s/veh	0.7	0.2		0.3	0.3	3.6	0.2
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.1		4.3	1.2	6.4	2.9
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	52.5	0.2		8.2	6.6	54.1	46.1
LnGrp LOS	D	A		A	A	D	D
Approach Vol, veh/h		2327		1518		465	
Approach Delay, s/veh		1.0		8.0		53.3	
Approach LOS		A		A		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			99.3		20.7	10.4	88.9
Change Period (Y+Rc), s			6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s			64.0		26.0	16.0	64.0
Max Q Clear Time (g_c+I1), s			2.0		16.0	4.3	15.9
Green Ext Time (p_c), s			51.7		0.7	0.0	25.8

Intersection Summary	
HCM 7th Control Delay, s/veh	9.1
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	1912	202	324	1299	240	162	84	413	130	50	24
Future Volume (veh/h)	82	1912	202	324	1299	240	162	84	413	130	50	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1885	1870	1841	1856	1811	1826	1781	1693	1811	1900
Adj Flow Rate, veh/h	88	2056	39	348	1397	127	174	90	0	140	54	26
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	2	1	2	4	3	6	5	8	14	6	0
Cap, veh/h	275	2739	846	410	2895	895	278	275		310	327	153
Arrive On Green	0.08	0.54	0.54	0.12	0.58	0.58	0.08	0.08	0.00	0.10	0.10	0.10
Sat Flow, veh/h	3483	5106	1577	3456	5025	1553	3346	3469	1510	3127	3441	1610
Grp Volume(v), veh/h	88	2056	39	348	1397	127	174	90	0	140	54	26
Grp Sat Flow(s),veh/h/ln	1742	1702	1577	1728	1675	1553	1673	1735	1510	1564	1721	1610
Q Serve(g_s), s	2.9	37.5	1.4	11.8	19.6	4.5	6.0	2.9	0.0	5.1	1.7	1.8
Cycle Q Clear(g_c), s	2.9	37.5	1.4	11.8	19.6	4.5	6.0	2.9	0.0	5.1	1.7	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	275	2739	846	410	2895	895	278	275		310	327	153
V/C Ratio(X)	0.32	0.75	0.05	0.85	0.48	0.14	0.63	0.33		0.45	0.16	0.17
Avail Cap(c_a), veh/h	464	2739	846	605	2895	895	446	434		417	450	211
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	0.84	0.84	0.84	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	21.6	13.2	51.8	14.9	11.7	53.2	52.2	0.0	51.0	49.9	49.9
Incr Delay (d2), s/veh	0.2	1.9	0.1	4.3	0.5	0.3	0.9	1.3	0.0	0.4	0.9	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	1.2	14.2	0.5	5.2	6.9	1.5	2.5	1.3	0.0	2.0	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.5	23.5	13.3	56.1	15.4	12.0	54.1	53.6	0.0	51.4	50.8	51.8
LnGrp LOS	D	C	B	E	B	B	D	D		D	D	D
Approach Vol, veh/h		2183			1872			264			220	
Approach Delay, s/veh		24.5			22.7			53.9			51.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	15.5	18.2	70.4	14.0	17.4	13.5	75.1
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	16.0	15.0	21.0	48.0	16.0	* 16	16.0	53.0
Max Q Clear Time (g_c+I1), s	7.1	4.9	13.8	39.5	8.0	3.8	4.9	21.6
Green Ext Time (p_c), s	0.1	0.4	0.4	8.2	0.2	0.5	0.1	24.8

Intersection Summary	
HCM 7th Control Delay, s/veh	26.8
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 7th Edition methodology does not support current ring-barrier structure.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑	↱	↰↰	↑↑	↱	↰↰		↱↱	↰	↑↑	↱
Traffic Volume (veh/h)	0	2017	356	306	638	141	238	0	475	95	478	374
Future Volume (veh/h)	0	2017	356	306	638	141	238	0	475	95	478	374
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1870	1841	1870	1885	1856	0	1856	1870	1856	1826
Adj Flow Rate, veh/h	0	2192	387	333	693	0	259	0	516	103	520	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	3	2	4	2	1	3	0	3	2	3	5
Cap, veh/h	0	3782	939	394	2636		0	0	0	282	558	
Arrive On Green	0.00	0.59	0.59	0.12	0.74	0.00	0.00	0.00	0.00	0.16	0.16	0.00
Sat Flow, veh/h	0	6643	1584	3401	3554	1598		0		1781	3526	1547
Grp Volume(v), veh/h	0	2192	387	333	693	0		0.0		103	520	0
Grp Sat Flow(s),veh/h/ln	0	1596	1584	1700	1777	1598				1781	1763	1547
Q Serve(g_s), s	0.0	25.6	15.8	11.5	7.5	0.0				6.2	17.5	0.0
Cycle Q Clear(g_c), s	0.0	25.6	15.8	11.5	7.5	0.0				6.2	17.5	0.0
Prop In Lane	0.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3782	939	394	2636					282	558	
V/C Ratio(X)	0.00	0.58	0.41	0.85	0.26					0.37	0.93	
Avail Cap(c_a), veh/h	0	3782	939	595	2636					282	558	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.83	0.83	1.00	1.00	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	15.2	13.2	52.0	5.0	0.0				45.1	49.9	0.0
Incr Delay (d2), s/veh	0.0	0.5	1.1	4.4	0.2	0.0				1.5	23.1	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
%ile BackOfQ(50%),veh/ln	0.0	9.1	5.8	5.0	2.3	0.0				2.9	9.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	15.7	14.3	56.4	5.2	0.0				46.7	73.0	0.0
LnGrp LOS		B	B	E	A					D	E	
Approach Vol, veh/h		2579			1026						623	
Approach Delay, s/veh		15.5			21.8						68.6	
Approach LOS		B			C						E	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		17.9	77.1		25.0		95.0					
Change Period (Y+Rc), s		4.0	6.0		6.0		6.0					
Max Green Setting (Gmax), s		21.0	39.0		19.0		64.0					
Max Q Clear Time (g_c+I1), s		13.5	27.6		19.5		9.5					
Green Ext Time (p_c), s		0.4	11.2		0.0		11.5					

Intersection Summary	
HCM 7th Control Delay, s/veh	24.9
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	5	0	0	0	0	4	0	0	0
Future Vol, veh/h	0	0	0	5	0	0	0	0	4	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.45	0.92	0.45	0.92	0.45	0.45	0.45	0.45	0.92
Heavy Vehicles, %	2	2	2	40	2	0	2	0	75	0	0	2
Mvmt Flow	0	0	0	11	0	0	0	0	9	0	0	0
Number of Lanes	0	0	0	2	0	1	0	0	1	0	0	0

Approach	WB	NB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	NB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		WB
Conflicting Lanes Right	0	3
HCM Control Delay, s/veh	8.1	7.9
HCM LOS	A	A

Lane	NBLn1	WBLn1	WBLn2	WBLn3
Vol Left, %	0%	100%	100%	0%
Vol Thru, %	0%	0%	0%	100%
Vol Right, %	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	3	3	0
LT Vol	0	3	3	0
Through Vol	0	0	0	0
RT Vol	4	0	0	0
Lane Flow Rate	9	6	6	0
Geometry Grp	5	5	5	5
Degree of Util (X)	0.013	0.009	0.008	0
Departure Headway (Hd)	5.095	5.696	5.016	2.816
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	705	631	716	0
Service Time	2.808	3.406	2.726	0.525
HCM Lane V/C Ratio	0.013	0.01	0.008	0
HCM Control Delay, s/veh	7.9	8.5	7.8	5.5
HCM Lane LOS	A	A	A	N
HCM 95th-tile Q	0	0	0	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	183	33	80	140	119	36	185	111	265	297	55
Future Volume (veh/h)	50	183	33	80	140	119	36	185	111	265	297	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1678	1885	1870	1856	1811	1767	1900	1870	1796	1900
Adj Flow Rate, veh/h	63	232	42	101	177	151	46	234	141	335	376	70
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	15	1	2	3	6	9	0	2	7	0
Cap, veh/h	337	532	205	425	619	273	108	566	254	393	1172	520
Arrive On Green	0.10	0.15	0.15	0.12	0.17	0.17	0.06	0.17	0.17	0.22	0.34	0.34
Sat Flow, veh/h	3456	3554	1370	3483	3554	1567	1725	3357	1507	1781	3413	1513
Grp Volume(v), veh/h	63	232	42	101	177	151	46	234	141	335	376	70
Grp Sat Flow(s),veh/h/ln	1728	1777	1370	1742	1777	1567	1725	1678	1507	1781	1706	1513
Q Serve(g_s), s	1.0	3.6	1.6	1.6	2.6	5.3	1.5	3.7	5.2	10.9	4.9	1.9
Cycle Q Clear(g_c), s	1.0	3.6	1.6	1.6	2.6	5.3	1.5	3.7	5.2	10.9	4.9	1.9
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	337	532	205	425	619	273	108	566	254	393	1172	520
V/C Ratio(X)	0.19	0.44	0.20	0.24	0.29	0.55	0.43	0.41	0.55	0.85	0.32	0.13
Avail Cap(c_a), veh/h	919	845	326	926	845	373	459	798	358	1629	1172	520
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	25.0	23.3	22.4	23.9	21.6	22.7	27.2	22.3	22.9	22.5	14.6	13.6
Incr Delay (d2), s/veh	0.1	1.4	1.2	0.1	0.6	4.3	1.0	1.2	4.6	2.1	0.7	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	1.4	0.5	0.6	1.0	2.0	0.6	1.4	1.9	4.2	1.7	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.1	24.7	23.6	24.0	22.2	27.0	28.2	23.5	27.6	24.6	15.3	14.1
LnGrp LOS	C	C	C	C	C	C	C	C	C	C	B	B
Approach Vol, veh/h		337			429			421			781	
Approach Delay, s/veh		24.6			24.3			25.4			19.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	15.8	11.3	14.7	7.8	26.4	9.9	16.2
Change Period (Y+Rc), s	5.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	5.6	14.3	16.0	14.3	16.0	14.3	16.0	14.3
Max Q Clear Time (g_c+I1), s	12.9	7.2	3.6	5.6	3.5	6.9	3.0	7.3
Green Ext Time (p_c), s	0.5	1.9	0.1	1.7	0.0	3.4	0.1	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	22.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	593	12	69	286	37	19	87	128	106	118	68
Future Volume (veh/h)	76	593	12	69	286	37	19	87	128	106	118	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1811	1856	1856	1737	1885	1870	1885	1870	1856
Adj Flow Rate, veh/h	94	732	15	85	353	46	23	107	158	131	146	84
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	1	0	6	3	3	11	1	2	1	2	3
Cap, veh/h	193	1089	484	179	943	122	42	195	201	151	169	97
Arrive On Green	0.11	0.30	0.30	0.10	0.30	0.30	0.13	0.13	0.13	0.24	0.24	0.24
Sat Flow, veh/h	1810	3582	1592	1725	3135	405	331	1538	1585	640	714	411
Grp Volume(v), veh/h	94	732	15	85	197	202	130	0	158	361	0	0
Grp Sat Flow(s),veh/h/ln	1810	1791	1592	1725	1763	1777	1869	0	1585	1764	0	0
Q Serve(g_s), s	4.1	14.8	0.5	3.9	7.3	7.4	5.4	0.0	8.0	16.3	0.0	0.0
Cycle Q Clear(g_c), s	4.1	14.8	0.5	3.9	7.3	7.4	5.4	0.0	8.0	16.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.23	0.18		1.00	0.36		0.23
Lane Grp Cap(c), veh/h	193	1089	484	179	530	534	237	0	201	417	0	0
V/C Ratio(X)	0.49	0.67	0.03	0.48	0.37	0.38	0.55	0.00	0.78	0.87	0.00	0.00
Avail Cap(c_a), veh/h	437	1729	768	416	915	922	451	0	383	703	0	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	34.9	25.2	20.3	35.0	22.8	22.9	33.9	0.0	35.1	30.4	0.0	0.0
Incr Delay (d2), s/veh	0.7	1.2	0.0	0.7	0.7	0.8	0.7	0.0	2.6	2.8	0.0	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	1.8	6.2	0.2	1.6	3.0	3.1	2.5	0.0	3.2	7.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.6	26.5	20.3	35.7	23.6	23.6	34.7	0.0	37.6	33.2	0.0	0.0
LnGrp LOS	D	C	C	D	C	C	C		D	C		
Approach Vol, veh/h		841			484			288			361	
Approach Delay, s/veh		27.4			25.7			36.3			33.2	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	15.8	12.6	30.9	23.6	12.9	30.6
Change Period (Y+Rc), s	5.3	4.0	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	20.0	20.0	40.0	33.0	20.0	43.0
Max Q Clear Time (g_c+I1), s	10.0	5.9	16.8	18.3	6.1	9.4
Green Ext Time (p_c), s	0.5	0.1	8.4	1.3	0.1	4.3

Intersection Summary	
HCM 7th Control Delay, s/veh	29.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	719	276	292	193	83	190	558	445	163	806	69
Future Volume (veh/h)	77	719	276	292	193	83	190	558	445	163	806	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1885	1900	1826	1856	1796	1781	1781	1841	1826	1826	1841
Adj Flow Rate, veh/h	87	808	114	328	217	40	213	627	184	183	906	26
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	4	1	0	5	3	7	8	8	4	5	5	4
Cap, veh/h	199	1568	696	373	1727	746	258	1208	383	227	1183	370
Arrive On Green	0.06	0.44	0.44	0.11	0.49	0.49	0.08	0.25	0.25	0.07	0.24	0.24
Sat Flow, veh/h	3401	3582	1590	3374	3526	1522	3291	4863	1540	3374	4985	1560
Grp Volume(v), veh/h	87	808	114	328	217	40	213	627	184	183	906	26
Grp Sat Flow(s),veh/h/ln	1700	1791	1590	1687	1763	1522	1646	1621	1540	1687	1662	1560
Q Serve(g_s), s	3.7	24.6	6.5	14.4	5.0	2.1	9.6	16.7	15.3	8.0	25.4	1.9
Cycle Q Clear(g_c), s	3.7	24.6	6.5	14.4	5.0	2.1	9.6	16.7	15.3	8.0	25.4	1.9
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	199	1568	696	373	1727	746	258	1208	383	227	1183	370
V/C Ratio(X)	0.44	0.52	0.16	0.88	0.13	0.05	0.83	0.52	0.48	0.81	0.77	0.07
Avail Cap(c_a), veh/h	227	1568	696	450	1727	746	395	1576	499	270	1429	447
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)	0.75	0.75	0.75	0.91	0.91	0.91	1.00	1.00	1.00	0.67	0.67	0.67
Uniform Delay (d), s/veh	68.2	30.6	25.6	65.7	20.8	20.0	68.1	48.6	48.1	69.0	53.3	44.4
Incr Delay (d2), s/veh	0.4	0.9	0.4	12.9	0.1	0.1	4.7	0.5	1.5	8.3	1.9	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	1.6	10.6	2.5	6.7	2.1	0.8	4.1	6.7	6.0	3.7	10.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.7	31.5	25.9	78.6	20.9	20.2	72.9	49.2	49.6	77.3	55.2	44.5
LnGrp LOS	E	C	C	E	C	C	E	D	D	E	E	D
Approach Vol, veh/h		1009			585			1024			1115	
Approach Delay, s/veh		34.1			53.2			54.2			58.6	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	43.7	20.6	71.6	15.8	42.0	12.8	79.5
Change Period (Y+Rc), s	4.0	6.4	4.0	* 6	4.0	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	12.0	48.6	20.0	* 49	18.0	* 43	10.0	59.0
Max Q Clear Time (g_c+I1), s	10.0	18.7	16.4	26.6	11.6	27.4	5.7	7.0
Green Ext Time (p_c), s	0.1	8.0	0.2	9.2	0.2	8.2	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	49.9
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	1139	205	168	561	190	132	397	208	338	577	113
Future Volume (veh/h)	82	1139	205	168	561	190	132	397	208	338	577	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.89	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1885	1885	1885	1826	1841	1841	1870	1900	1870	1870	1856
Adj Flow Rate, veh/h	92	1280	86	189	630	80	148	446	47	380	648	34
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	4	1	1	1	5	4	4	2	0	2	2	3
Cap, veh/h	189	1173	510	711	1700	763	206	531	214	446	825	321
Arrive On Green	0.06	0.33	0.33	0.41	0.98	0.98	0.06	0.15	0.15	0.13	0.23	0.23
Sat Flow, veh/h	3401	3582	1557	3483	3469	1557	3401	3554	1432	3456	3554	1382
Grp Volume(v), veh/h	92	1280	86	189	630	80	148	446	47	380	648	34
Grp Sat Flow(s),veh/h/ln	1700	1791	1557	1742	1735	1557	1700	1777	1432	1728	1777	1382
Q Serve(g_s), s	3.2	39.3	3.7	4.3	0.7	0.1	5.1	14.7	3.5	12.9	20.6	2.3
Cycle Q Clear(g_c), s	3.2	39.3	3.7	4.3	0.7	0.1	5.1	14.7	3.5	12.9	20.6	2.3
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	189	1173	510	711	1700	763	206	531	214	446	825	321
V/C Ratio(X)	0.49	1.09	0.17	0.27	0.37	0.10	0.72	0.84	0.22	0.85	0.79	0.11
Avail Cap(c_a), veh/h	453	1173	510	711	1700	763	567	542	218	778	825	321
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.68	0.95	0.95	0.95	0.87	0.87	0.87	0.90	0.90	0.90
Uniform Delay (d), s/veh	55.0	40.4	17.9	29.5	0.6	0.2	55.4	49.7	44.9	51.1	43.3	36.3
Incr Delay (d2), s/veh	0.5	51.1	0.5	0.1	0.2	0.1	1.5	10.5	0.8	1.6	5.0	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	1.3	24.8	1.8	1.7	0.2	0.1	2.2	7.2	1.2	5.6	9.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.5	91.4	18.4	29.6	0.8	0.3	56.9	60.2	45.7	52.8	48.3	36.5
LnGrp LOS	E	F	B	C	A	A	E	E	D	D	D	D
Approach Vol, veh/h		1458			899			641			1062	
Approach Delay, s/veh		84.8			6.8			58.4			49.5	
Approach LOS		F			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	23.6	30.2	45.0	11.3	33.5	10.7	64.5
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	27.6	* 18	16.0	* 39	20.0	25.3	16.0	39.3
Max Q Clear Time (g_c+I1), s	14.9	16.7	6.3	41.3	7.1	22.6	5.2	2.7
Green Ext Time (p_c), s	0.6	0.7	0.2	0.0	0.2	1.5	0.1	8.1

Intersection Summary	
HCM 7th Control Delay, s/veh	54.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1663	47	90	831	75	166
Future Volume (veh/h)	1663	47	90	831	75	166
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1870	1841	1870	1885	1885
Adj Flow Rate, veh/h	1890	53	102	944	85	189
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	2	4	2	1	1
Cap, veh/h	2414	67	127	2785	243	216
Arrive On Green	0.90	0.90	0.07	0.78	0.14	0.14
Sat Flow, veh/h	3653	99	1753	3647	1795	1598
Grp Volume(v), veh/h	947	996	102	944	85	189
Grp Sat Flow(s),veh/h/ln	1791	1867	1753	1777	1795	1598
Q Serve(g_s), s	20.9	21.6	6.9	9.4	5.2	13.9
Cycle Q Clear(g_c), s	20.9	21.6	6.9	9.4	5.2	13.9
Prop In Lane		0.05	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1215	1266	127	2785	243	216
V/C Ratio(X)	0.78	0.79	0.80	0.34	0.35	0.87
Avail Cap(c_a), veh/h	1215	1266	380	2785	389	346
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.52	0.52	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	2.9	3.0	54.8	3.8	47.1	50.9
Incr Delay (d2), s/veh	2.7	2.7	4.5	0.3	0.3	8.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.5	3.1	2.5	2.3	5.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.6	5.6	59.3	4.1	47.4	59.2
LnGrp LOS	A	A	E	A	D	E
Approach Vol, veh/h	1943			1046	274	
Approach Delay, s/veh	5.6			9.5	55.5	
Approach LOS	A			A	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	20.2	12.7	87.1		99.8
Change Period (Y+Rc), s	4.0	4.0	5.7		5.7
Max Green Setting (Gmax), s	26.0	26.0	38.3		84.3
Max Q Clear Time (g_c+I1), s	15.9	8.9	23.6		11.4
Green Ext Time (p_c), s	0.3	0.1	13.3		14.3

Intersection Summary	
HCM 7th Control Delay, s/veh	11.0
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	1484	138	375	625	134	161	524	691	311	519	88
Future Volume (veh/h)	208	1484	138	375	625	134	161	524	691	311	519	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1841	1811	1826	1826	1811	1826	1856	1885	1841	1856
Adj Flow Rate, veh/h	229	1631	0	412	687	0	177	576	0	342	570	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	4	6	5	5	6	5	3	1	4	3
Cap, veh/h	286	2101		506	1501		234	655		402	1178	
Arrive On Green	0.08	0.41	0.00	0.10	0.43	0.00	0.07	0.19	0.00	0.12	0.23	0.00
Sat Flow, veh/h	3483	5147	1560	4864	3469	1547	3346	3469	1572	3483	5025	1572
Grp Volume(v), veh/h	229	1631	0	412	687	0	177	576	0	342	570	0
Grp Sat Flow(s),veh/h/ln	1742	1716	1560	1621	1735	1547	1673	1735	1572	1742	1675	1572
Q Serve(g_s), s	7.8	32.9	0.0	9.9	16.8	0.0	6.2	19.4	0.0	11.6	11.8	0.0
Cycle Q Clear(g_c), s	7.8	32.9	0.0	9.9	16.8	0.0	6.2	19.4	0.0	11.6	11.8	0.0
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	286	2101		506	1501		234	655		402	1178	
V/C Ratio(X)	0.80	0.78		0.81	0.46		0.76	0.88		0.85	0.48	
Avail Cap(c_a), veh/h	357	2101		770	1501		446	694		464	1178	
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	0.00	1.00	1.00	0.00	0.87	0.87	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.1	30.8	0.0	52.6	24.1	0.0	54.8	47.3	0.0	52.0	39.7	0.0
Incr Delay (d2), s/veh	7.9	2.9	0.0	2.2	1.0	0.0	1.6	11.1	0.0	12.5	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	3.6	13.4	0.0	4.0	6.8	0.0	2.6	9.2	0.0	5.7	4.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.0	33.6	0.0	54.8	25.1	0.0	56.5	58.5	0.0	64.6	40.1	0.0
LnGrp LOS	E	C		D	C		E	E		E	D	
Approach Vol, veh/h		1860			1099			753			912	
Approach Delay, s/veh		37.1			36.2			58.0			49.3	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	28.7	18.5	55.0	12.4	34.1	15.6	57.9
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	5.7	6.0
Max Green Setting (Gmax), s	16.0	24.0	19.0	* 39	16.0	24.0	12.3	46.0
Max Q Clear Time (g_c+I1), s	13.8	21.4	11.9	34.9	8.2	13.8	9.8	18.8
Green Ext Time (p_c), s	0.3	1.2	0.5	3.9	0.2	3.5	0.1	6.7

Intersection Summary	
HCM 7th Control Delay, s/veh	42.7
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	246	1596	241	211	760	76	161	611	232	121	559	199
Future Volume (veh/h)	246	1596	241	211	760	76	161	611	232	121	559	199
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1841	1900	1796	1870	1870	1737	1856	1826
Adj Flow Rate, veh/h	276	1793	102	237	854	0	181	687	0	136	628	57
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	1	4	0	7	2	2	11	3	5
Cap, veh/h	335	1672	510	725	2276		237	807		189	697	300
Arrive On Green	0.10	0.33	0.33	0.21	0.45	0.00	0.07	0.23	0.00	0.06	0.20	0.20
Sat Flow, veh/h	3456	5106	1558	3483	5025	1610	3319	3554	1585	3209	3526	1519
Grp Volume(v), veh/h	276	1793	102	237	854	0	181	687	0	136	628	57
Grp Sat Flow(s),veh/h/ln	1728	1702	1558	1742	1675	1610	1659	1777	1585	1605	1763	1519
Q Serve(g_s), s	9.4	39.3	5.7	6.9	13.4	0.0	6.4	22.2	0.0	5.0	20.9	2.9
Cycle Q Clear(g_c), s	9.4	39.3	5.7	6.9	13.4	0.0	6.4	22.2	0.0	5.0	20.9	2.9
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	335	1672	510	725	2276		237	807		189	697	300
V/C Ratio(X)	0.82	1.07	0.20	0.33	0.38		0.76	0.85		0.72	0.90	0.19
Avail Cap(c_a), veh/h	461	1672	510	725	2276		443	807		428	705	304
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	40.3	29.0	40.4	21.6	0.0	54.7	44.4	0.0	55.5	47.0	24.1
Incr Delay (d2), s/veh	6.1	44.2	0.9	0.1	0.5	0.0	1.9	9.6	0.0	1.9	17.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	22.5	2.2	2.9	5.1	0.0	2.7	10.5	0.0	2.0	10.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.3	84.6	29.9	40.5	22.1	0.0	56.6	54.0	0.0	57.5	64.0	25.5
LnGrp LOS	E	F	C	D	C		E	D		E	E	C
Approach Vol, veh/h		2171			1091			868			821	
Approach Delay, s/veh		78.8			26.1			54.6			60.2	
Approach LOS		E			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	33.0	31.0	45.0	14.3	29.7	15.6	60.4
Change Period (Y+Rc), s	4.0	5.7	6.0	5.7	5.7	* 6	4.0	6.0
Max Green Setting (Gmax), s	16.0	24.3	19.0	39.3	16.0	* 24	16.0	44.0
Max Q Clear Time (g_c+I1), s	7.0	24.2	8.9	41.3	8.4	22.9	11.4	15.4
Green Ext Time (p_c), s	0.1	0.0	0.3	0.0	0.2	0.8	0.2	8.7

Intersection Summary	
HCM 7th Control Delay, s/veh	59.9
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	2001	10	21	890	85	52	23	44	142	17	64
Future Volume (veh/h)	14	2001	10	21	890	85	52	23	44	142	17	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1826	1870	1885	1870	1900	1870	1885	1900	1900
Adj Flow Rate, veh/h	16	2327	0	24	1035	0	60	27	0	165	20	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	2	0	5	2	1	2	0	2	1	0	0
Cap, veh/h	44	2225		403	3357		90	108		192	215	
Arrive On Green	0.02	0.44	0.00	0.23	0.66	0.00	0.05	0.06	0.00	0.11	0.11	0.00
Sat Flow, veh/h	1810	5106	1610	1739	5106	1598	1781	1900	1585	1795	1900	1610
Grp Volume(v), veh/h	16	2327	0	24	1035	0	60	27	0	165	20	0
Grp Sat Flow(s),veh/h/ln	1810	1702	1610	1739	1702	1598	1781	1900	1585	1795	1900	1610
Q Serve(g_s), s	1.0	52.3	0.0	1.3	10.5	0.0	4.0	1.6	0.0	10.8	1.1	0.0
Cycle Q Clear(g_c), s	1.0	52.3	0.0	1.3	10.5	0.0	4.0	1.6	0.0	10.8	1.1	0.0
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	44	2225		403	3357		90	108		192	215	
V/C Ratio(X)	0.37	1.05		0.06	0.31		0.67	0.25		0.86	0.09	
Avail Cap(c_a), veh/h	241	2225		403	3357		238	317		209	302	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.7	33.8	0.0	35.9	8.8	0.0	56.0	54.2	0.0	52.7	47.7	0.0
Incr Delay (d2), s/veh	1.9	32.3	0.0	0.0	0.2	0.0	3.2	0.9	0.0	25.1	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	0.5	26.7	0.0	0.5	3.5	0.0	1.9	0.8	0.0	6.2	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.6	66.2	0.0	36.0	9.1	0.0	59.2	55.1	0.0	77.8	47.9	0.0
LnGrp LOS	E	F		D	A		E	E		E	D	
Approach Vol, veh/h		2343			1059			87			185	
Approach Delay, s/veh		66.1			9.7			57.9			74.6	
Approach LOS		E			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.8	11.7	33.5	58.0	10.1	18.5	6.9	84.6
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	14.0	* 20	14.0	* 52	16.0	19.1	16.0	50.3
Max Q Clear Time (g_c+I1), s	12.8	3.6	3.3	54.3	6.0	3.1	3.0	12.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7

Intersection Summary	
HCM 7th Control Delay, s/veh	50.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	782	39	428	246	353	32	1090	1007	487	575	88
Future Volume (veh/h)	167	782	39	428	246	353	32	1090	1007	487	575	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1900	1870	1870	1870	1856	1870	1885	1870	1841	1870
Adj Flow Rate, veh/h	176	823	0	451	259	0	34	1147	0	513	605	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	0	2	2	2	3	2	1	2	4	2
Cap, veh/h	494	730		664	470		155	1229		599	1896	
Arrive On Green	0.14	0.14	0.00	0.13	0.13	0.00	0.05	0.24	0.00	0.06	0.12	0.00
Sat Flow, veh/h	3428	5066	1610	5023	3554	1585	3428	5106	1598	3456	5025	1585
Grp Volume(v), veh/h	176	823	0	451	259	0	34	1147	0	513	605	0
Grp Sat Flow(s),veh/h/ln	1714	1689	1610	1674	1777	1585	1714	1702	1598	1728	1675	1585
Q Serve(g_s), s	5.6	17.3	0.0	10.3	8.2	0.0	1.1	26.4	0.0	17.7	13.2	0.0
Cycle Q Clear(g_c), s	5.6	17.3	0.0	10.3	8.2	0.0	1.1	26.4	0.0	17.7	13.2	0.0
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	494	730		664	470		155	1229		599	1896	
V/C Ratio(X)	0.36	1.13		0.68	0.55		0.22	0.93		0.86	0.32	
Avail Cap(c_a), veh/h	494	730		850	601		457	1234		778	1896	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.93	0.93	0.00
Uniform Delay (d), s/veh	46.3	51.3	0.0	49.6	48.7	0.0	55.2	44.6	0.0	55.1	38.5	0.0
Incr Delay (d2), s/veh	0.7	74.0	0.0	2.3	1.7	0.0	0.3	12.9	0.0	7.0	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	2.4	12.1	0.0	4.3	3.7	0.0	0.5	12.2	0.0	8.7	5.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.1	125.4	0.0	51.9	50.5	0.0	55.5	57.5	0.0	62.1	38.9	0.0
LnGrp LOS	D	F		D	D		E	E		E	D	
Approach Vol, veh/h		999			710			1181			1118	
Approach Delay, s/veh		111.6			51.4			57.5			49.5	
Approach LOS		F			D			E			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	23.6	25.8	34.9	25.0	9.4	51.3
Change Period (Y+Rc), s	7.7	5.0	6.0	7.7	4.0	* 6
Max Green Setting (Gmax), s	20.3	27.0	29.0	17.3	16.0	* 41
Max Q Clear Time (g_c+I1), s	12.3	19.7	28.4	19.3	3.1	15.2
Green Ext Time (p_c), s	3.2	1.1	0.5	0.0	0.0	6.4

Intersection Summary	
HCM 7th Control Delay, s/veh	67.7
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	18	149	31	7	19	265	1143	57	168	927	151
Future Volume (veh/h)	214	18	149	31	7	19	265	1143	57	168	927	151
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1856	1856	1900	1900	1885	1870	1870	1900	1856	1885
Adj Flow Rate, veh/h	254	0	38	41	0	21	298	1284	64	189	1042	57
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	0	3	3	0	0	1	2	2	0	3	1
Cap, veh/h	360	0	105	200	0	90	364	2000	99	1395	3158	995
Arrive On Green	0.07	0.00	0.07	0.06	0.00	0.06	0.10	0.32	0.32	0.79	1.00	1.00
Sat Flow, veh/h	5302	0	1552	3534	0	1585	3483	6320	314	3510	5066	1596
Grp Volume(v), veh/h	254	0	38	41	0	21	298	980	368	189	1042	57
Grp Sat Flow(s),veh/h/ln	1767	0	1552	1767	0	1585	1742	1609	1808	1755	1689	1596
Q Serve(g_s), s	5.6	0.0	2.8	1.3	0.0	1.5	10.1	20.9	21.0	1.5	0.0	0.0
Cycle Q Clear(g_c), s	5.6	0.0	2.8	1.3	0.0	1.5	10.1	20.9	21.0	1.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	360	0	105	200	0	90	364	1527	572	1395	3158	995
V/C Ratio(X)	0.71	0.00	0.36	0.20	0.00	0.23	0.82	0.64	0.64	0.14	0.33	0.06
Avail Cap(c_a), veh/h	1016	0	297	589	0	264	755	1741	653	1395	3158	995
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.73	0.73	0.73	0.93	0.93	0.93
Uniform Delay (d), s/veh	54.8	0.0	53.4	54.0	0.0	54.1	52.6	35.2	35.2	7.6	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.8	0.2	0.0	0.5	1.3	1.5	4.0	0.0	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	2.5	0.0	1.1	0.6	0.0	0.6	4.5	8.4	9.8	0.5	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.7	0.0	54.2	54.2	0.0	54.6	53.9	36.7	39.2	7.6	0.3	0.1
LnGrp LOS	E		D	D		D	D	D	D	A	A	A
Approach Vol, veh/h		292			62			1646			1288	
Approach Delay, s/veh		55.5			54.3			40.4			1.3	
Approach LOS		E			D			D			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.4	43.7		12.1	16.5	80.5		10.8
Change Period (Y+Rc), s	5.7	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	14.3	43.3		23.0	26.0	33.3		20.0
Max Q Clear Time (g_c+I1), s	13.5	23.0		7.6	12.1	2.0		3.5
Green Ext Time (p_c), s	0.2	15.0		0.5	0.5	16.1		0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	26.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	37	346	0	0	0	0	989	423	0	1065	524
Future Volume (veh/h)	86	37	346	0	0	0	0	989	423	0	1065	524
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1870				0	1870	1870	0	1856	1870
Adj Flow Rate, veh/h	79	0	437				0	1111	475	0	1197	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	3	2				0	2	2	0	3	2
Cap, veh/h	285	0	506				0	2605	1113	0	3792	
Arrive On Green	0.16	0.00	0.16				0.00	1.00	1.00	0.00	1.00	0.00
Sat Flow, veh/h	1781	0	3170				0	3649	1486	0	5233	1585
Grp Volume(v), veh/h	79	0	437				0	1087	499	0	1197	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1563	0	1689	1585
Q Serve(g_s), s	4.7	0.0	16.1				0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.7	0.0	16.1				0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.95	0.00		1.00
Lane Grp Cap(c), veh/h	285	0	506				0	2548	1170	0	3792	
V/C Ratio(X)	0.28	0.00	0.86				0.00	0.43	0.43	0.00	0.32	
Avail Cap(c_a), veh/h	515	0	917				0	2548	1170	0	3792	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.92	0.92	0.00	0.92	0.00
Uniform Delay (d), s/veh	44.3	0.0	49.1				0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.7				0.0	0.5	1.1	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
%ile BackOfQ(50%),veh/ln	2.1	0.0	6.5				0.0	0.2	0.3	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.5	0.0	50.9				0.0	0.5	1.1	0.0	0.2	0.0
LnGrp LOS	D		D					A	A		A	
Approach Vol, veh/h		516						1586			1197	
Approach Delay, s/veh		49.9						0.7			0.2	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	95.5	24.5	95.5
Change Period (Y+Rc), s	5.7	5.3	5.7
Max Green Setting (Gmax), s	74.3	34.7	74.3
Max Q Clear Time (g_c+I1), s	2.0	18.1	2.0
Green Ext Time (p_c), s	33.7	1.0	15.8

Intersection Summary	
HCM 7th Control Delay, s/veh	8.2
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	296	297	899	188	101	1280
Future Volume (veh/h)	296	297	899	188	101	1280
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1841	1826	1870	1856	1826	1870
Adj Flow Rate, veh/h	318	319	967	0	109	1376
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	5	2	3	5	2
Cap, veh/h	653	570	3314		134	3878
Arrive On Green	0.13	0.13	1.00	0.00	0.08	0.76
Sat Flow, veh/h	4944	2723	5274	1572	1739	5274
Grp Volume(v), veh/h	318	319	967	0	109	1376
Grp Sat Flow(s),veh/h/ln	1648	1362	1702	1572	1739	1702
Q Serve(g_s), s	7.2	12.6	0.0	0.0	7.4	10.6
Cycle Q Clear(g_c), s	7.2	12.6	0.0	0.0	7.4	10.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	653	570	3314		134	3878
V/C Ratio(X)	0.49	0.56	0.29		0.81	0.35
Avail Cap(c_a), veh/h	1141	839	3314		377	3878
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.91	0.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	42.5	0.0	0.0	54.5	4.7
Incr Delay (d2), s/veh	0.2	0.3	0.2	0.0	4.4	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	4.3	0.1	0.0	3.3	2.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.5	42.8	0.2	0.0	58.9	5.0
LnGrp LOS	D	D	A		E	A
Approach Vol, veh/h	637		967			1485
Approach Delay, s/veh	45.7		0.2			9.0
Approach LOS	D		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.3	83.6			96.8	23.2
Change Period (Y+Rc), s	4.0	5.7			5.7	7.3
Max Green Setting (Gmax), s	26.6	49.3			79.3	27.7
Max Q Clear Time (g_c+I1), s	9.4	2.0			12.6	14.6
Green Ext Time (p_c), s	0.1	11.8			23.1	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	13.8
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

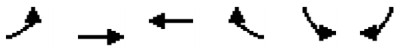
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	296	33	404	667	18	41	59	285	29	134	53
Future Volume (veh/h)	8	296	33	404	667	18	41	59	285	29	134	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1722	1678	1811	1870	1856	1811	1648	1693	1737	1796	1841	1870
Adj Flow Rate, veh/h	9	325	23	444	733	20	45	65	53	32	147	17
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	12	15	6	2	3	6	17	14	11	7	4	2
Cap, veh/h	51	673	324	490	1658	722	89	530	242	150	282	243
Arrive On Green	0.02	0.21	0.21	0.28	0.47	0.47	0.06	0.16	0.16	0.05	0.15	0.15
Sat Flow, veh/h	3182	3188	1535	1781	3526	1535	1570	3216	1472	3319	1841	1585
Grp Volume(v), veh/h	9	325	23	444	733	20	45	65	53	32	147	17
Grp Sat Flow(s),veh/h/ln	1591	1594	1535	1781	1763	1535	1570	1608	1472	1659	1841	1585
Q Serve(g_s), s	0.2	6.8	0.9	18.2	10.5	0.5	2.1	1.3	2.4	0.7	5.6	0.7
Cycle Q Clear(g_c), s	0.2	6.8	0.9	18.2	10.5	0.5	2.1	1.3	2.4	0.7	5.6	0.7
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	51	673	324	490	1658	722	89	530	242	150	282	243
V/C Ratio(X)	0.18	0.48	0.07	0.91	0.44	0.03	0.51	0.12	0.22	0.21	0.52	0.07
Avail Cap(c_a), veh/h	1681	3157	1520	1341	3492	1520	415	1359	622	877	851	733
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	36.8	26.2	23.9	26.5	13.4	10.8	34.7	27.0	27.4	34.8	29.5	27.4
Incr Delay (d2), s/veh	0.6	1.5	0.3	2.7	0.5	0.0	1.7	0.4	1.7	0.3	2.3	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	0.1	2.5	0.3	7.3	3.6	0.2	0.8	0.5	0.9	0.3	2.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.4	27.7	24.2	29.2	13.9	10.8	36.4	27.4	29.1	35.1	31.8	27.6
LnGrp LOS	D	C	C	C	B	B	D	C	C	D	C	C
Approach Vol, veh/h		357			1197			163			196	
Approach Delay, s/veh		27.7			19.5			30.4			32.0	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	18.8	25.8	22.7	9.3	17.9	6.2	42.3
Change Period (Y+Rc), s	5.0	6.3	5.0	6.7	5.0	6.3	5.0	6.7
Max Green Setting (Gmax), s	20.0	32.0	57.0	75.0	20.0	35.0	40.0	75.0
Max Q Clear Time (g_c+I1), s	2.7	4.4	20.2	8.8	4.1	7.6	2.2	12.5
Green Ext Time (p_c), s	0.0	1.3	0.6	5.2	0.0	1.4	0.0	13.8

Intersection Summary	
HCM 7th Control Delay, s/veh	23.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	132	493	749	77	151	342
Future Volume (veh/h)	132	493	749	77	151	342
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1604	1722	1841	1811	1826	1870
Adj Flow Rate, veh/h	139	519	788	81	159	360
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	20	12	4	6	5	2
Cap, veh/h	170	1850	1342	589	438	400
Arrive On Green	0.11	0.57	0.38	0.38	0.25	0.25
Sat Flow, veh/h	1527	3358	3589	1535	1739	1585
Grp Volume(v), veh/h	139	519	788	81	159	360
Grp Sat Flow(s),veh/h/ln	1527	1636	1749	1535	1739	1585
Q Serve(g_s), s	6.3	5.8	12.8	2.4	5.4	15.6
Cycle Q Clear(g_c), s	6.3	5.8	12.8	2.4	5.4	15.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	170	1850	1342	589	438	400
V/C Ratio(X)	0.82	0.28	0.59	0.14	0.36	0.90
Avail Cap(c_a), veh/h	429	2528	2702	1186	489	445
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	30.9	8.0	17.4	14.3	21.9	25.8
Incr Delay (d2), s/veh	3.7	0.2	0.9	0.2	0.2	18.7
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	1.6	4.6	0.8	2.1	14.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	34.6	8.2	18.3	14.5	22.1	44.5
LnGrp LOS	C	A	B	B	C	D
Approach Vol, veh/h		658	869		519	
Approach Delay, s/veh		13.8	18.0		37.6	
Approach LOS		B	B		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			48.2		22.9	12.9	35.3
Change Period (Y+Rc), s			8.0		5.0	5.0	8.0
Max Green Setting (Gmax), s			55.0		20.0	20.0	55.0
Max Q Clear Time (g_c+I1), s			7.8		17.6	8.3	14.8
Green Ext Time (p_c), s			7.2		0.3	0.1	12.6

Intersection Summary	
HCM 7th Control Delay, s/veh	21.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	570	33	11	660	51	20	23	7	92	36	120
Future Volume (veh/h)	67	570	33	11	660	51	20	23	7	92	36	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1767	1500	1633	1796	1811	1307	1648	1470	1826	1811	1856
Adj Flow Rate, veh/h	76	648	38	12	750	58	23	26	8	105	41	136
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	6	9	27	18	7	6	40	17	29	5	6	3
Cap, veh/h	147	1587	598	33	1396	625	46	154	116	171	280	241
Arrive On Green	0.09	0.47	0.47	0.02	0.41	0.41	0.04	0.09	0.09	0.10	0.15	0.15
Sat Flow, veh/h	1725	3357	1266	1555	3413	1527	1245	1648	1241	1739	1811	1563
Grp Volume(v), veh/h	76	648	38	12	750	58	23	26	8	105	41	136
Grp Sat Flow(s),veh/h/ln	1725	1678	1266	1555	1706	1527	1245	1648	1241	1739	1811	1563
Q Serve(g_s), s	2.5	7.3	1.0	0.4	9.7	1.4	1.1	0.8	0.3	3.4	1.1	4.7
Cycle Q Clear(g_c), s	2.5	7.3	1.0	0.4	9.7	1.4	1.1	0.8	0.3	3.4	1.1	4.7
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	147	1587	598	33	1396	625	46	154	116	171	280	241
V/C Ratio(X)	0.52	0.41	0.06	0.36	0.54	0.09	0.49	0.17	0.07	0.61	0.15	0.56
Avail Cap(c_a), veh/h	593	4325	1631	534	4397	1968	428	566	426	597	622	537
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	25.5	10.0	8.3	28.1	13.0	10.6	27.5	24.3	24.1	25.2	21.3	22.8
Incr Delay (d2), s/veh	1.1	0.3	0.1	2.5	0.6	0.1	3.0	1.1	0.5	1.3	0.3	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	0.9	2.1	0.2	0.2	3.0	0.4	0.3	0.4	0.1	1.4	0.5	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.5	10.4	8.4	30.6	13.7	10.7	30.5	25.4	24.6	26.5	21.6	25.4
LnGrp LOS	C	B	A	C	B	B	C	C	C	C	C	C
Approach Vol, veh/h		762			820			57			282	
Approach Delay, s/veh		11.9			13.7			27.3			25.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	10.0	5.2	33.2	6.2	13.6	9.0	29.5
Change Period (Y+Rc), s	4.0	* 4.6	4.0	5.7	4.0	4.6	4.0	5.7
Max Green Setting (Gmax), s	20.0	* 20	20.0	75.0	20.0	20.0	20.0	75.0
Max Q Clear Time (g_c+I1), s	5.4	2.8	2.4	9.3	3.1	6.7	4.5	11.7
Green Ext Time (p_c), s	0.1	0.1	0.0	9.6	0.0	0.6	0.1	11.9

Intersection Summary	
HCM 7th Control Delay, s/veh	15.1
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	243	389	42	209	309	217	47	757	266	368	795	344
Future Volume (veh/h)	243	389	42	209	309	217	47	757	266	368	795	344
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1678	1811	1693	1856	1781	1752	1737	1811	1856	1870	1826	1811
Adj Flow Rate, veh/h	264	423	46	227	336	60	51	823	97	400	864	125
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	15	6	14	3	8	10	11	6	3	2	5	6
Cap, veh/h	335	587	63	303	567	249	77	925	423	436	1621	874
Arrive On Green	0.11	0.19	0.19	0.09	0.17	0.17	0.05	0.27	0.27	0.24	0.47	0.47
Sat Flow, veh/h	3100	3132	339	3428	3385	1485	1654	3441	1572	1781	3469	1516
Grp Volume(v), veh/h	264	231	238	227	336	60	51	823	97	400	864	125
Grp Sat Flow(s),veh/h/ln	1550	1721	1750	1714	1692	1485	1654	1721	1572	1781	1735	1516
Q Serve(g_s), s	8.0	12.2	12.4	6.3	8.9	3.4	2.9	22.3	4.7	21.2	17.1	3.7
Cycle Q Clear(g_c), s	8.0	12.2	12.4	6.3	8.9	3.4	2.9	22.3	4.7	21.2	17.1	3.7
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	322	328	303	567	249	77	925	423	436	1621	874
V/C Ratio(X)	0.79	0.72	0.72	0.75	0.59	0.24	0.67	0.89	0.23	0.92	0.53	0.14
Avail Cap(c_a), veh/h	1056	533	542	814	1049	460	342	960	438	717	1621	874
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	42.1	36.9	37.0	43.1	37.2	35.0	45.4	34.0	27.6	35.6	18.3	9.5
Incr Delay (d2), s/veh	1.6	5.5	5.6	1.4	1.9	1.0	3.7	10.5	0.4	7.2	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	3.0	5.4	5.5	2.6	3.7	1.2	1.2	10.0	1.7	9.5	6.3	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.6	42.5	42.6	44.5	39.2	35.9	49.1	44.5	28.0	42.8	18.8	9.6
LnGrp LOS	D	D	D	D	D	D	D	D	C	D	B	A
Approach Vol, veh/h		733			623			971			1389	
Approach Delay, s/veh		42.9			40.8			43.1			24.9	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.7	32.4	12.6	24.1	8.5	51.6	14.5	22.2
Change Period (Y+Rc), s	4.0	6.4	4.0	6.0	4.0	6.4	4.0	6.0
Max Green Setting (Gmax), s	23.6	27.0	23.0	30.0	20.0	35.0	33.0	30.0
Max Q Clear Time (g_c+I1), s	23.2	24.3	8.3	14.4	4.9	19.1	10.0	10.9
Green Ext Time (p_c), s	0.5	1.8	0.3	3.8	0.0	7.8	0.4	3.6

Intersection Summary	
HCM 7th Control Delay, s/veh	35.9
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	677	23	45	500	142	36	147	56	198	119	59
Future Volume (veh/h)	43	677	23	45	500	142	36	147	56	198	119	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1856	1841	1841	1826	1870	1811	1885	1826	1885	1826	1856
Adj Flow Rate, veh/h	44	698	24	46	515	0	37	152	13	204	123	61
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	3	4	4	5	2	6	1	5	1	5	3
Cap, veh/h	69	806	28	71	1571		43	178	246	230	138	389
Arrive On Green	0.04	0.45	0.45	0.04	0.45	0.00	0.12	0.12	0.12	0.21	0.21	0.21
Sat Flow, veh/h	1739	1783	61	1753	3469	1585	365	1501	1547	1105	666	1572
Grp Volume(v), veh/h	44	0	722	46	515	0	189	0	13	327	0	61
Grp Sat Flow(s),veh/h/ln	1739	0	1844	1753	1735	1585	1867	0	1547	1771	0	1572
Q Serve(g_s), s	2.8	0.0	40.0	2.9	10.8	0.0	11.3	0.0	0.8	20.4	0.0	3.4
Cycle Q Clear(g_c), s	2.8	0.0	40.0	2.9	10.8	0.0	11.3	0.0	0.8	20.4	0.0	3.4
Prop In Lane	1.00		0.03	1.00		1.00	0.20		1.00	0.62		1.00
Lane Grp Cap(c), veh/h	69	0	834	71	1571		221	0	246	368	0	389
V/C Ratio(X)	0.64	0.00	0.87	0.65	0.33		0.86	0.00	0.05	0.89	0.00	0.16
Avail Cap(c_a), veh/h	306	0	1121	309	1802		270	0	286	624	0	616
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	0.0	28.0	53.7	20.0	0.0	49.1	0.0	40.5	43.7	0.0	33.5
Incr Delay (d2), s/veh	3.6	0.0	7.3	3.7	0.2	0.0	17.2	0.0	0.0	4.5	0.0	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	1.3	0.0	18.0	1.3	4.2	0.0	6.2	0.0	0.3	9.2	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.3	0.0	35.3	57.4	20.2	0.0	66.3	0.0	40.6	48.2	0.0	33.5
LnGrp LOS	E		D	E	C		E		D	D		C
Approach Vol, veh/h		766			561			202			388	
Approach Delay, s/veh		36.6			23.2			64.7			45.9	
Approach LOS		D			C			E			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	18.0	8.6	57.3	29.6	8.5	57.4
Change Period (Y+Rc), s	4.6	4.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	16.4	20.0	69.0	40.0	20.0	59.0
Max Q Clear Time (g_c+I1), s	13.3	4.9	42.0	22.4	4.8	12.8
Green Ext Time (p_c), s	0.2	0.0	9.3	1.2	0.0	6.7

Intersection Summary	
HCM 7th Control Delay, s/veh	37.5
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	283	560	96	155	116	346	994	68	94	947	120
Future Volume (veh/h)	144	283	560	96	155	116	346	994	68	94	947	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1841	1856	1885	1841	1856	1781	1796	1885	1885	1856	1856
Adj Flow Rate, veh/h	157	308	133	104	168	22	376	1080	34	102	1029	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	4	3	1	4	3	8	7	1	1	3	3
Cap, veh/h	185	417	187	129	307	136	441	2873	923	196	2575	
Arrive On Green	0.10	0.12	0.12	0.07	0.09	0.09	0.13	0.59	0.59	0.06	0.51	0.00
Sat Flow, veh/h	1795	3497	1572	1795	3497	1550	3291	4904	1575	3483	5066	1572
Grp Volume(v), veh/h	157	308	133	104	168	22	376	1080	34	102	1029	0
Grp Sat Flow(s),veh/h/ln	1795	1749	1572	1795	1749	1550	1646	1635	1575	1742	1689	1572
Q Serve(g_s), s	10.3	10.2	9.8	6.8	5.5	1.6	13.4	14.0	1.1	3.4	15.0	0.0
Cycle Q Clear(g_c), s	10.3	10.2	9.8	6.8	5.5	1.6	13.4	14.0	1.1	3.4	15.0	0.0
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	185	417	187	129	307	136	441	2873	923	196	2575	
V/C Ratio(X)	0.85	0.74	0.71	0.81	0.55	0.16	0.85	0.38	0.04	0.52	0.40	
Avail Cap(c_a), veh/h	329	583	262	239	428	190	576	2873	923	464	2575	
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	0.84	0.84	0.00
Uniform Delay (d), s/veh	52.9	51.1	50.9	54.9	52.4	50.6	50.8	13.2	10.5	55.0	18.2	0.0
Incr Delay (d2), s/veh	4.1	4.8	8.4	4.4	3.2	1.2	9.5	0.4	0.1	0.7	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	4.7	4.6	4.3	3.2	2.5	0.7	6.0	4.8	0.4	1.5	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.0	55.8	59.3	59.3	55.6	51.8	60.3	13.6	10.6	55.7	18.6	0.0
LnGrp LOS	E	E	E	E	E	D	E	B	B	E	B	
Approach Vol, veh/h		598			294			1490			1131	
Approach Delay, s/veh		56.9			56.6			25.3			21.9	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	76.3	12.6	20.3	20.1	67.0	16.4	16.5
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	6.8	48.0	16.0	20.0	21.0	43.0	22.0	* 15
Max Q Clear Time (g_c+I1), s	5.4	16.0	8.8	12.2	15.4	17.0	12.3	7.5
Green Ext Time (p_c), s	0.1	9.8	0.1	2.1	0.7	10.4	0.1	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	32.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	20.1
Intersection LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	251	75	26	279	267	190
Future Vol, veh/h	251	75	26	279	267	190
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69
Heavy Vehicles, %	2	1	0	8	5	1
Mvmt Flow	364	109	38	404	387	275
Number of Lanes	1	1	1	2	2	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	3	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay, s/veh	33.4	14.9	14.1
HCM LOS	D	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	100%	0%
Vol Right, %	0%	0%	0%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	26	140	140	251	75	134	134	190
LT Vol	26	0	0	251	0	0	0	0
Through Vol	0	140	140	0	0	134	134	0
RT Vol	0	0	0	0	75	0	0	190
Lane Flow Rate	38	202	202	364	109	193	193	275
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.09	0.459	0.353	0.828	0.21	0.418	0.414	0.399
Departure Headway (Hd)	8.551	8.175	6.277	8.191	6.966	7.78	7.71	5.217
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	418	439	570	440	514	462	466	686
Service Time	6.32	5.944	4.045	5.955	4.73	5.54	5.47	2.976
HCM Lane V/C Ratio	0.091	0.46	0.354	0.827	0.212	0.418	0.414	0.401
HCM Control Delay, s/veh	12.2	17.7	12.5	39.9	11.6	16.1	15.8	11.4
HCM Lane LOS	B	C	B	E	B	C	C	B
HCM 95th-tile Q	0.3	2.4	1.6	7.9	0.8	2	2	1.9

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	49	160	148	252	322	18
Future Vol, veh/h	49	160	148	252	322	18
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	0	1	1	7	4	0
Mvmt Flow	70	229	211	360	460	26
Number of Lanes	1	1	1	2	2	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	3	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay, s/veh	14.1	13.2	15.1
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	100%	0%
Vol Right, %	0%	0%	0%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	148	126	126	49	160	161	161	18
LT Vol	148	0	0	49	0	0	0	0
Through Vol	0	126	126	0	0	161	161	0
RT Vol	0	0	0	0	160	0	0	18
Lane Flow Rate	211	180	180	70	229	230	230	26
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.438	0.353	0.26	0.156	0.434	0.454	0.45	0.033
Departure Headway (Hd)	7.462	7.056	5.202	8.022	6.832	7.107	7.037	4.59
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	484	511	693	447	528	508	513	781
Service Time	5.181	4.775	2.92	5.766	4.575	4.827	4.758	2.31
HCM Lane V/C Ratio	0.436	0.352	0.26	0.157	0.434	0.453	0.448	0.033
HCM Control Delay, s/veh	15.9	13.6	9.7	12.3	14.7	15.6	15.4	7.5
HCM Lane LOS	C	B	A	B	B	C	C	A
HCM 95th-tile Q	2.2	1.6	1	0.5	2.2	2.3	2.3	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	113	80	71	48	58	32	392	54	23	213	7
Future Volume (veh/h)	17	113	80	71	48	58	32	392	54	23	213	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1885	1796	1811	1870	1900	1826	1841	1841	1811	1693
Adj Flow Rate, veh/h	20	136	96	86	58	70	39	472	65	28	257	8
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	2	1	7	6	2	0	5	4	4	6	14
Cap, veh/h	322	333	284	267	283	247	122	792	356	91	732	305
Arrive On Green	0.18	0.18	0.18	0.16	0.16	0.16	0.07	0.23	0.23	0.05	0.21	0.21
Sat Flow, veh/h	1810	1870	1595	1711	1811	1582	1810	3469	1560	1753	3441	1434
Grp Volume(v), veh/h	20	136	96	86	58	70	39	472	65	28	257	8
Grp Sat Flow(s),veh/h/ln	1810	1870	1595	1711	1811	1582	1810	1735	1560	1753	1721	1434
Q Serve(g_s), s	0.4	3.2	2.6	2.2	1.4	1.9	1.0	6.0	1.6	0.8	3.1	0.2
Cycle Q Clear(g_c), s	0.4	3.2	2.6	2.2	1.4	1.9	1.0	6.0	1.6	0.8	3.1	0.2
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	322	333	284	267	283	247	122	792	356	91	732	305
V/C Ratio(X)	0.06	0.41	0.34	0.32	0.20	0.28	0.32	0.60	0.18	0.31	0.35	0.03
Avail Cap(c_a), veh/h	739	764	652	699	740	646	739	2834	1274	716	2811	1172
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	16.7	17.8	17.6	18.4	18.0	18.2	21.8	16.9	15.2	22.4	16.4	15.3
Incr Delay (d2), s/veh	0.1	0.8	0.7	0.7	0.4	0.6	1.5	0.7	0.2	1.9	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	0.2	1.3	0.9	0.8	0.5	0.7	0.4	2.0	0.5	0.3	1.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.8	18.7	18.3	19.0	18.4	18.9	23.3	17.6	15.5	24.3	16.7	15.3
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		252			214			576			293	
Approach Delay, s/veh		18.4			18.8			17.7			17.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	17.2		12.7	7.3	16.4		12.6
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	2.8	8.0		5.2	3.0	5.1		4.2
Green Ext Time (p_c), s	0.0	3.2		1.0	0.0	1.6		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	18.0
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	20	200	36	32	8	158	395	18	4	337	22
Future Volume (veh/h)	102	20	200	36	32	8	158	395	18	4	337	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1697	1710	1710	1710	1710	1710	1710	1630	1710	1710	1643	1590
Adj Flow Rate, veh/h	136	27	267	48	43	11	211	527	24	5	449	29
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	1	0	0	0	0	0	0	6	0	0	5	9
Cap, veh/h	181	415	347	102	329	271	254	1208	563	15	759	325
Arrive On Green	0.11	0.24	0.24	0.06	0.19	0.19	0.16	0.39	0.39	0.01	0.24	0.24
Sat Flow, veh/h	1616	1710	1431	1629	1710	1408	1629	3097	1444	1629	3122	1339
Grp Volume(v), veh/h	136	27	267	48	43	11	211	527	24	5	449	29
Grp Sat Flow(s),veh/h/ln	1616	1710	1431	1629	1710	1408	1629	1548	1444	1629	1561	1339
Q Serve(g_s), s	5.3	0.8	11.3	1.9	1.4	0.4	8.2	8.2	0.7	0.2	8.3	1.1
Cycle Q Clear(g_c), s	5.3	0.8	11.3	1.9	1.4	0.4	8.2	8.2	0.7	0.2	8.3	1.1
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	181	415	347	102	329	271	254	1208	563	15	759	325
V/C Ratio(X)	0.75	0.07	0.77	0.47	0.13	0.04	0.83	0.44	0.04	0.33	0.59	0.09
Avail Cap(c_a), veh/h	619	603	505	499	524	432	624	1899	885	499	1915	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	28.1	19.0	23.0	29.5	21.8	21.4	26.7	14.6	12.3	32.1	21.8	19.1
Incr Delay (d2), s/veh	2.3	0.2	11.8	1.3	0.8	0.3	2.7	0.5	0.1	4.6	1.4	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	2.0	0.3	4.8	0.7	0.6	0.2	3.0	2.4	0.2	0.1	2.8	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.4	19.2	34.8	30.8	22.6	21.7	29.3	15.1	12.4	36.7	23.2	19.3
LnGrp LOS	C	B	C	C	C	C	C	B	B	D	C	B
Approach Vol, veh/h		430			102			762			483	
Approach Delay, s/veh		32.4			26.4			18.9			23.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	31.4	8.1	21.1	14.2	21.9	11.3	17.9
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	4.0	* 5.3
Max Green Setting (Gmax), s	20.6	40.0	20.0	23.0	25.0	40.0	25.0	* 20
Max Q Clear Time (g_c+I1), s	2.2	10.2	3.9	13.3	10.2	10.3	7.3	3.4
Green Ext Time (p_c), s	0.0	6.2	0.0	1.9	0.2	5.3	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	23.8
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	8	267	52	7	7	95	636	15	10	844	18
Future Volume (veh/h)	28	8	267	52	7	7	95	636	15	10	844	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1885	1900	1900	1900	1856	1856	1900	1900	1870	1737
Adj Flow Rate, veh/h	38	11	361	70	9	9	128	859	20	14	1141	24
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Percent Heavy Veh, %	0	0	1	0	0	0	3	3	0	0	2	11
Cap, veh/h	312	90	350	135	17	134	160	1640	747	41	1413	583
Arrive On Green	0.22	0.22	0.22	0.08	0.08	0.08	0.09	0.47	0.47	0.02	0.40	0.40
Sat Flow, veh/h	1418	411	1591	1612	207	1594	1767	3526	1605	1810	3554	1466
Grp Volume(v), veh/h	49	0	361	79	0	9	128	859	20	14	1141	24
Grp Sat Flow(s),veh/h/ln	1829	0	1591	1819	0	1594	1767	1763	1605	1810	1777	1466
Q Serve(g_s), s	2.0	0.0	20.0	3.8	0.0	0.5	6.5	15.7	0.6	0.7	25.9	0.9
Cycle Q Clear(g_c), s	2.0	0.0	20.0	3.8	0.0	0.5	6.5	15.7	0.6	0.7	25.9	0.9
Prop In Lane	0.78		1.00	0.89		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	402	0	350	153	0	134	160	1640	747	41	1413	583
V/C Ratio(X)	0.12	0.00	1.03	0.52	0.00	0.07	0.80	0.52	0.03	0.34	0.81	0.04
Avail Cap(c_a), veh/h	402	0	350	400	0	351	389	1746	795	398	1564	645
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	28.4	0.0	35.4	39.9	0.0	38.4	40.5	17.2	13.2	43.7	24.3	16.8
Incr Delay (d2), s/veh	0.0	0.0	56.3	1.0	0.0	0.1	3.5	0.5	0.0	1.8	3.5	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	0.8	0.0	13.1	1.7	0.0	0.2	2.8	5.8	0.2	0.3	10.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	0.0	91.8	40.9	0.0	38.4	44.0	17.7	13.2	45.5	27.8	16.8
LnGrp LOS	C		F	D		D	D	B	B	D	C	B
Approach Vol, veh/h		410			88			1007			1179	
Approach Delay, s/veh		84.2			40.6			20.9			27.7	
Approach LOS		F			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	48.3		24.9	12.2	42.1		11.6
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.0
Max Green Setting (Gmax), s	20.0	45.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	2.7	17.7		22.0	8.5	27.9		5.8
Green Ext Time (p_c), s	0.0	10.5		0.0	0.1	8.3		0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	34.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	160	176	99	685	846	144
Future Volume (veh/h)	160	176	99	685	846	144
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1870	1885	1826	1841	1900
Adj Flow Rate, veh/h	182	200	112	778	961	164
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	2	1	5	4	0
Cap, veh/h	305	267	191	2230	1612	742
Arrive On Green	0.17	0.17	0.11	0.64	0.46	0.46
Sat Flow, veh/h	1810	1585	1795	3561	3589	1610
Grp Volume(v), veh/h	182	200	112	778	961	164
Grp Sat Flow(s),veh/h/ln	1810	1585	1795	1735	1749	1610
Q Serve(g_s), s	4.9	6.4	3.2	5.5	10.8	3.2
Cycle Q Clear(g_c), s	4.9	6.4	3.2	5.5	10.8	3.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	305	267	191	2230	1612	742
V/C Ratio(X)	0.60	0.75	0.59	0.35	0.60	0.22
Avail Cap(c_a), veh/h	1433	1255	609	2230	2242	1032
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	20.4	21.0	22.6	4.4	10.6	8.6
Incr Delay (d2), s/veh	0.7	1.6	2.8	0.2	0.7	0.3
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	0.1	1.3	0.9	3.0	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.1	22.6	25.4	4.5	11.3	8.9
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	382			890	1125	
Approach Delay, s/veh	21.9			7.2	11.0	
Approach LOS	C			A	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	40.1		12.9	9.7	30.4
Change Period (Y+Rc), s	6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s	24.0		42.0	18.0	34.0
Max Q Clear Time (g_c+I1), s	7.5		8.4	5.2	12.8
Green Ext Time (p_c), s	7.3		0.6	0.2	11.6

Intersection Summary	
HCM 7th Control Delay, s/veh	11.3
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	21	95	21	12	10	53	648	41	11	938	92
Future Volume (veh/h)	127	21	95	21	12	10	53	648	41	11	938	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1900	1870	1781	1678	1900	1826	1856
Adj Flow Rate, veh/h	146	24	109	24	14	11	61	745	47	13	1078	106
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	2	0	0	0	2	8	15	0	5	3
Cap, veh/h	213	223	186	82	48	112	142	1578	648	46	1429	646
Arrive On Green	0.12	0.12	0.12	0.07	0.07	0.07	0.08	0.47	0.47	0.03	0.41	0.41
Sat Flow, veh/h	1810	1900	1581	1163	679	1584	1781	3385	1389	1810	3469	1569
Grp Volume(v), veh/h	146	24	109	38	0	11	61	745	47	13	1078	106
Grp Sat Flow(s),veh/h/ln	1810	1900	1581	1842	0	1584	1781	1692	1389	1810	1735	1569
Q Serve(g_s), s	5.4	0.8	4.5	1.4	0.0	0.5	2.3	10.4	1.3	0.5	18.4	3.0
Cycle Q Clear(g_c), s	5.4	0.8	4.5	1.4	0.0	0.5	2.3	10.4	1.3	0.5	18.4	3.0
Prop In Lane	1.00		1.00	0.63		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	223	186	130	0	112	142	1578	648	46	1429	646
V/C Ratio(X)	0.69	0.11	0.59	0.29	0.00	0.10	0.43	0.47	0.07	0.28	0.75	0.16
Avail Cap(c_a), veh/h	522	548	456	531	0	457	514	2099	862	522	2152	973
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	29.4	27.3	29.0	30.6	0.0	30.2	30.4	12.7	10.2	33.2	17.4	12.9
Incr Delay (d2), s/veh	3.9	0.2	2.9	1.2	0.0	0.4	2.0	0.2	0.0	3.3	0.8	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	2.4	0.4	1.8	0.6	0.0	0.2	1.0	3.3	0.3	0.2	6.2	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.3	27.6	31.9	31.8	0.0	30.5	32.4	12.9	10.3	36.4	18.2	13.0
LnGrp LOS	C	C	C	C		C	C	B	B	D	B	B
Approach Vol, veh/h		279			49			853			1197	
Approach Delay, s/veh		32.2			31.5			14.1			18.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	38.3		14.0	9.5	34.6		11.2
Change Period (Y+Rc), s	4.0	6.0		5.9	4.0	6.0		6.3
Max Green Setting (Gmax), s	20.0	43.0		20.0	20.0	43.0		20.0
Max Q Clear Time (g_c+I1), s	2.5	12.4		7.4	4.3	20.4		3.4
Green Ext Time (p_c), s	0.0	5.3		0.7	0.1	7.9		0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	18.5
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th Edition all-way stop-controlled intersection methodology supports maximum of three lanes.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	304	43	71	395	132	28	91	62	98	95	55
Future Volume (veh/h)	44	304	43	71	395	132	28	91	62	98	95	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1870	1900	1885	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	49	338	48	79	439	147	31	101	69	109	106	61
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	1	2	0	1	0	0	0	0	0	0	0
Cap, veh/h	78	930	280	109	1020	319	53	259	212	142	352	289
Arrive On Green	0.04	0.18	0.18	0.06	0.20	0.20	0.03	0.14	0.14	0.08	0.19	0.19
Sat Flow, veh/h	1810	5147	1550	1810	5147	1610	1810	1900	1557	1810	1900	1564
Grp Volume(v), veh/h	49	338	48	79	439	147	31	101	69	109	106	61
Grp Sat Flow(s),veh/h/ln	1810	1716	1550	1810	1716	1610	1810	1900	1557	1810	1900	1564
Q Serve(g_s), s	1.0	2.1	1.0	1.6	2.7	3.0	0.6	1.8	1.5	2.2	1.8	1.2
Cycle Q Clear(g_c), s	1.0	2.1	1.0	1.6	2.7	3.0	0.6	1.8	1.5	2.2	1.8	1.2
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	78	930	280	109	1020	319	53	259	212	142	352	289
V/C Ratio(X)	0.63	0.36	0.17	0.72	0.43	0.46	0.58	0.39	0.33	0.77	0.30	0.21
Avail Cap(c_a), veh/h	542	2241	675	542	2241	701	542	828	678	542	828	681
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	17.3	13.2	12.7	17.0	12.9	13.0	17.6	14.5	14.3	16.6	12.9	12.7
Incr Delay (d2), s/veh	8.2	0.2	0.3	8.8	0.3	1.0	9.6	1.0	0.9	8.4	0.5	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	0.5	0.6	0.2	0.7	0.7	0.8	0.4	0.7	0.4	1.1	0.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.5	13.4	13.0	25.7	13.2	14.0	27.2	15.4	15.2	25.0	13.4	13.1
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		435			665			201			276	
Approach Delay, s/veh		14.7			14.9			17.2			17.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	10.0	7.2	11.6	6.1	11.8	6.6	12.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	11.0	16.0	11.0	16.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	4.2	3.8	3.6	4.1	2.6	3.8	3.0	5.0
Green Ext Time (p_c), s	0.1	0.5	0.1	1.7	0.0	0.5	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	15.7
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	253	37	674	472	444	39	550	476	301	502	61
Future Volume (veh/h)	92	253	37	674	472	444	39	550	476	301	502	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1856	1885	1885	1900	1900	1885	1885	1885	1900	1856
Adj Flow Rate, veh/h	97	266	7	709	497	89	41	579	134	317	528	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	3	1	1	0	0	1	1	1	0	3
Cap, veh/h	573	522	156	820	831	259	508	921	405	415	836	363
Arrive On Green	0.16	0.10	0.10	0.24	0.16	0.16	0.14	0.26	0.26	0.12	0.23	0.23
Sat Flow, veh/h	3510	5147	1542	3483	5147	1607	3510	3582	1573	3483	3610	1568
Grp Volume(v), veh/h	97	266	7	709	497	89	41	579	134	317	528	18
Grp Sat Flow(s),veh/h/ln	1755	1716	1542	1742	1716	1607	1755	1791	1573	1742	1805	1568
Q Serve(g_s), s	1.9	4.0	0.2	15.9	7.3	2.7	0.8	11.7	5.6	7.2	10.7	0.7
Cycle Q Clear(g_c), s	1.9	4.0	0.2	15.9	7.3	2.7	0.8	11.7	5.6	7.2	10.7	0.7
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	573	522	156	820	831	259	508	921	405	415	836	363
V/C Ratio(X)	0.17	0.51	0.04	0.86	0.60	0.34	0.08	0.63	0.33	0.76	0.63	0.05
Avail Cap(c_a), veh/h	861	1262	378	1708	1388	433	861	1449	636	1281	1460	634
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	34.7	14.8	29.9	31.8	14.2	30.2	26.8	24.6	34.8	28.2	24.4
Incr Delay (d2), s/veh	0.1	1.3	0.2	1.1	1.0	1.2	0.0	1.4	0.9	1.1	1.5	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	0.8	1.6	0.1	6.2	2.9	1.5	0.3	4.8	2.0	2.9	4.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.4	36.1	15.0	31.0	32.8	15.3	30.2	28.2	25.5	35.9	29.8	24.5
LnGrp LOS	C	D	B	C	C	B	C	C	C	D	C	C
Approach Vol, veh/h		370			1295			754			863	
Approach Delay, s/veh		33.9			30.6			27.9			31.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	27.0	24.2	14.7	17.8	24.9	19.7	19.2
Change Period (Y+Rc), s	6.0	6.0	5.0	6.4	6.0	6.0	6.4	* 6
Max Green Setting (Gmax), s	30.0	33.0	40.0	20.0	20.0	33.0	20.0	* 22
Max Q Clear Time (g_c+I1), s	9.2	13.7	17.9	6.0	2.8	12.7	3.9	9.3
Green Ext Time (p_c), s	0.5	6.7	1.3	2.0	0.0	5.5	0.1	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	30.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	1339	47	31	1821	246	23	7	28	196	3	36
Future Volume (veh/h)	39	1339	47	31	1821	246	23	7	28	196	3	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1885	1885	1900	1900	1900	1885	1900	1856
Adj Flow Rate, veh/h	43	1488	52	34	2023	273	26	8	31	257	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	1	0	0	1	1	0	0	0	1	0	3
Cap, veh/h	115	3141	957	72	3018	914	147	154	128	383	202	0
Arrive On Green	0.06	0.61	0.61	0.08	1.00	1.00	0.08	0.08	0.08	0.11	0.00	0.00
Sat Flow, veh/h	1810	5147	1569	1810	5147	1559	1810	1900	1579	3591	1900	0
Grp Volume(v), veh/h	43	1488	52	34	2023	273	26	8	31	257	0	0
Grp Sat Flow(s),veh/h/ln	1810	1716	1569	1810	1716	1559	1810	1900	1579	1795	1900	0
Q Serve(g_s), s	2.7	19.0	1.6	2.2	0.0	0.0	1.6	0.5	2.2	8.3	0.0	0.0
Cycle Q Clear(g_c), s	2.7	19.0	1.6	2.2	0.0	0.0	1.6	0.5	2.2	8.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	115	3141	957	72	3018	914	147	154	128	383	202	0
V/C Ratio(X)	0.37	0.47	0.05	0.48	0.67	0.30	0.18	0.05	0.24	0.67	0.00	0.00
Avail Cap(c_a), veh/h	241	3141	957	392	3018	914	232	244	203	601	318	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	0.68	0.68	0.68	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	53.9	12.8	9.4	54.1	0.0	0.0	51.4	50.9	51.7	51.6	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.4	0.1	1.2	0.8	0.6	0.2	0.1	0.4	0.8	0.0	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	1.2	6.7	0.5	1.0	0.2	0.1	0.7	0.2	0.9	3.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.5	13.2	9.5	55.3	0.8	0.6	51.6	50.9	52.0	52.4	0.0	0.0
LnGrp LOS	D	B	A	E	A	A	D	D	D	D		
Approach Vol, veh/h		1583			2330			65			257	
Approach Delay, s/veh		14.2			1.6			51.7			52.4	
Approach LOS		B			A			D			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	14.3	8.7	79.2	17.7	11.6	76.4
Change Period (Y+Rc), s	4.6	4.0	6.0	4.9	4.0	6.0
Max Green Setting (Gmax), s	15.4	26.0	39.0	20.1	16.0	49.0
Max Q Clear Time (g_c+I1), s	4.2	4.2	21.0	10.3	4.7	2.0
Green Ext Time (p_c), s	0.1	0.0	14.9	0.3	0.0	42.4

Intersection Summary	
HCM 7th Control Delay, s/veh	10.2
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	1214	141	359	1656	209	338	124	208	160	79	59
Future Volume (veh/h)	121	1214	141	359	1656	209	338	124	208	160	79	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1856	1900	1885	1885	1885	1900	1900	1870	1900	1900
Adj Flow Rate, veh/h	129	1291	150	382	1762	222	360	132	221	170	84	63
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	1	3	0	1	1	1	0	0	2	0	0
Cap, veh/h	289	2526	761	443	2752	842	419	490	217	287	356	154
Arrive On Green	0.16	0.98	0.98	0.25	1.00	1.00	0.12	0.14	0.14	0.08	0.10	0.10
Sat Flow, veh/h	3510	5147	1549	3510	5147	1575	3483	3610	1600	3456	3610	1559
Grp Volume(v), veh/h	129	1291	150	382	1762	222	360	132	221	170	84	63
Grp Sat Flow(s),veh/h/ln	1755	1716	1549	1755	1716	1575	1742	1805	1600	1728	1805	1559
Q Serve(g_s), s	4.0	1.1	0.3	12.5	0.0	0.0	12.2	3.9	16.3	5.7	2.6	4.6
Cycle Q Clear(g_c), s	4.0	1.1	0.3	12.5	0.0	0.0	12.2	3.9	16.3	5.7	2.6	4.6
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	289	2526	761	443	2752	842	419	490	217	287	356	154
V/C Ratio(X)	0.45	0.51	0.20	0.86	0.64	0.26	0.86	0.27	1.02	0.59	0.24	0.41
Avail Cap(c_a), veh/h	614	2526	761	1053	2752	842	522	490	217	605	581	251
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.73	0.73	0.73	0.91	0.91	0.91	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	0.6	0.6	43.9	0.0	0.0	51.8	46.5	51.8	53.1	49.9	50.8
Incr Delay (d2), s/veh	0.4	0.7	0.5	1.5	0.8	0.6	8.9	0.4	62.7	0.7	0.5	2.8
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	1.7	0.4	0.2	4.7	0.2	0.1	5.7	1.8	10.1	2.5	1.2	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.0	1.2	1.1	45.3	0.8	0.6	60.7	46.9	114.6	53.8	50.5	53.6
LnGrp LOS	D	A	A	D	A	A	E	D	F	D	D	D
Approach Vol, veh/h		1570			2366			713			317	
Approach Delay, s/veh		5.1			8.0			74.8			52.9	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	22.0	19.1	64.9	18.4	17.5	13.9	70.2
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	21.0	16.3	36.0	27.0	18.0	19.3	21.0	42.0
Max Q Clear Time (g_c+I1), s	17.7	18.3	14.5	3.1	14.2	6.6	6.0	2.0
Green Ext Time (p_c), s	0.2	0.0	0.6	17.8	0.3	0.7	0.2	35.6

Intersection Summary	
HCM 7th Control Delay, s/veh	19.5
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	1459	70	259	2064	30	46	10	130	26	12	9
Future Volume (veh/h)	37	1459	70	259	2064	30	46	10	130	26	12	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1885	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	39	1552	74	276	2196	32	57	0	138	28	13	10
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	1	0	0	1	0	0	0	0	0	0	0
Cap, veh/h	77	2895	894	331	3162	989	376	0	164	148	81	62
Arrive On Green	0.08	1.00	1.00	0.19	1.00	1.00	0.10	0.00	0.10	0.08	0.08	0.08
Sat Flow, veh/h	1810	5147	1589	3510	5147	1609	3619	0	1578	1810	993	764
Grp Volume(v), veh/h	39	1552	74	276	2196	32	57	0	138	28	0	23
Grp Sat Flow(s),veh/h/ln	1810	1716	1589	1755	1716	1609	1810	0	1578	1810	0	1757
Q Serve(g_s), s	2.5	0.0	0.0	9.1	0.0	0.0	1.7	0.0	10.3	1.7	0.0	1.5
Cycle Q Clear(g_c), s	2.5	0.0	0.0	9.1	0.0	0.0	1.7	0.0	10.3	1.7	0.0	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	77	2895	894	331	3162	989	376	0	164	148	0	144
V/C Ratio(X)	0.51	0.54	0.08	0.83	0.69	0.03	0.15	0.00	0.84	0.19	0.00	0.16
Avail Cap(c_a), veh/h	241	2895	894	468	3162	989	455	0	199	241	0	234
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	0.72	0.72	0.72	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	0.0	0.0	47.8	0.0	0.0	49.0	0.0	52.8	51.4	0.0	51.3
Incr Delay (d2), s/veh	1.6	0.6	0.1	4.5	0.9	0.0	0.1	0.0	20.0	0.2	0.0	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	1.1	0.2	0.0	3.7	0.3	0.0	0.8	0.0	4.9	0.8	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.3	0.6	0.1	52.3	0.9	0.0	49.0	0.0	72.8	51.6	0.0	51.5
LnGrp LOS	E	A	A	D	A	A	D		E	D		D
Approach Vol, veh/h		1665			2504			195			51	
Approach Delay, s/veh		1.8			6.6			65.8			51.5	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	17.4	15.3	73.5	13.8	9.1	79.7
Change Period (Y+Rc), s	4.9	4.0	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	15.1	16.0	54.0	16.0	16.0	54.0
Max Q Clear Time (g_c+I1), s	12.3	11.1	2.0	3.7	4.5	2.0
Green Ext Time (p_c), s	0.1	0.2	33.9	0.1	0.0	45.7

Intersection Summary	
HCM 7th Control Delay, s/veh	7.9
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	27	1595	0	2320	319	180	26
Future Volume (veh/h)	27	1595	0	2320	319	180	26
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00				0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1900	1885		1885	1885	1885	1900
Adj Flow Rate, veh/h	29	1697		2468	339	191	28
Peak Hour Factor	0.94	0.94		0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	1		1	1	1	0
Cap, veh/h	84	5297		3793	1152	348	161
Arrive On Green	0.09	1.00		0.74	0.74	0.10	0.10
Sat Flow, veh/h	1810	6749		5316	1564	3483	1610
Grp Volume(v), veh/h	29	1697		2468	339	191	28
Grp Sat Flow(s),veh/h/ln	1810	1621		1716	1564	1742	1610
Q Serve(g_s), s	1.8	0.0		29.1	8.7	6.3	1.9
Cycle Q Clear(g_c), s	1.8	0.0		29.1	8.7	6.3	1.9
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	84	5297		3793	1152	348	161
V/C Ratio(X)	0.34	0.32		0.65	0.29	0.55	0.17
Avail Cap(c_a), veh/h	241	5297		3793	1152	610	282
HCM Platoon Ratio	2.00	2.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.7	0.0		8.0	5.3	51.4	49.5
Incr Delay (d2), s/veh	0.8	0.1		0.9	0.6	0.5	0.2
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.1		8.6	2.5	2.8	1.8
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	53.5	0.1		8.9	6.0	51.9	49.7
LnGrp LOS	D	A		A	A	D	D
Approach Vol, veh/h		1726		2807		219	
Approach Delay, s/veh		1.0		8.5		51.6	
Approach LOS		A		A		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			104.0		16.0	9.6	94.4
Change Period (Y+Rc), s			6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s			69.0		21.0	16.0	69.0
Max Q Clear Time (g_c+I1), s			2.0		8.3	3.8	31.1
Green Ext Time (p_c), s			38.2		0.3	0.0	35.9

Intersection Summary	
HCM 7th Control Delay, s/veh	7.8
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	1406	278	340	2312	124	289	44	366	374	196	90
Future Volume (veh/h)	66	1406	278	340	2312	124	289	44	366	374	196	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1885	1870	1826	1885	1870	1900	1767	1870	1885	1856	1900
Adj Flow Rate, veh/h	70	1496	134	362	2460	60	307	47	0	398	209	96
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	1	2	5	1	2	0	9	2	1	3	0
Cap, veh/h	258	2604	792	415	2850	878	366	242		460	353	159
Arrive On Green	0.08	0.51	0.51	0.12	0.55	0.55	0.10	0.07	0.00	0.13	0.10	0.10
Sat Flow, veh/h	3428	5147	1565	3374	5147	1585	3510	3357	1585	3483	3526	1587
Grp Volume(v), veh/h	70	1496	134	362	2460	60	307	47	0	398	209	96
Grp Sat Flow(s),veh/h/ln	1714	1716	1565	1687	1716	1585	1755	1678	1585	1742	1763	1587
Q Serve(g_s), s	2.3	24.3	5.6	12.6	49.0	2.1	10.3	1.6	0.0	13.4	6.8	7.0
Cycle Q Clear(g_c), s	2.3	24.3	5.6	12.6	49.0	2.1	10.3	1.6	0.0	13.4	6.8	7.0
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	258	2604	792	415	2850	878	366	242		460	353	159
V/C Ratio(X)	0.27	0.57	0.17	0.87	0.86	0.07	0.84	0.19		0.86	0.59	0.60
Avail Cap(c_a), veh/h	457	2604	792	450	2850	878	468	420		610	608	274
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	0.78	0.78	0.78	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	20.6	16.0	51.7	22.9	12.4	52.7	52.4	0.0	51.0	51.7	51.7
Incr Delay (d2), s/veh	0.2	0.9	0.5	12.2	3.0	0.1	8.4	0.8	0.0	8.0	5.7	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	9.3	2.0	5.9	18.5	0.7	4.8	0.7	0.0	6.3	3.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.6	21.6	16.5	63.9	25.9	12.5	61.1	53.1	0.0	59.0	57.3	64.5
LnGrp LOS	D	C	B	E	C	B	E	D		E	E	E
Approach Vol, veh/h		1700			2882			354			703	
Approach Delay, s/veh		22.4			30.3			60.1			59.3	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	14.7	18.8	66.7	16.5	18.0	13.0	72.5
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	21.0	15.0	16.0	48.0	16.0	* 21	16.0	48.0
Max Q Clear Time (g_c+I1), s	15.4	3.6	14.6	26.3	12.3	9.0	4.3	51.0
Green Ext Time (p_c), s	0.4	0.2	0.1	17.9	0.2	2.6	0.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	33.4
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 7th Edition methodology does not support current ring-barrier structure.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1932	259	313	1003	221	541	0	563	171	355	465
Future Volume (veh/h)	0	1932	259	313	1003	221	541	0	563	171	355	465
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	1885	1900	0	1885	1885	1870	1856
Adj Flow Rate, veh/h	0	2012	270	326	1045	0	564	0	586	178	370	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	1	1	1	1	0	0	1	1	2	3
Cap, veh/h	0	4022	979	389	2741		0	0	0	242	479	
Arrive On Green	0.00	0.62	0.62	0.11	0.77	0.00	0.00	0.00	0.00	0.13	0.13	0.00
Sat Flow, veh/h	0	6749	1578	3483	3582	1598		0		1795	3554	1572
Grp Volume(v), veh/h	0	2012	270	326	1045	0		0.0		178	370	0
Grp Sat Flow(s),veh/h/ln	0	1621	1578	1742	1791	1598				1795	1777	1572
Q Serve(g_s), s	0.0	20.5	9.4	11.0	11.6	0.0				11.4	12.1	0.0
Cycle Q Clear(g_c), s	0.0	20.5	9.4	11.0	11.6	0.0				11.4	12.1	0.0
Prop In Lane	0.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	4022	979	389	2741					242	479	
V/C Ratio(X)	0.00	0.50	0.28	0.84	0.38					0.74	0.77	
Avail Cap(c_a), veh/h	0	4022	979	610	2741					284	563	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.87	0.87	1.00	1.00	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	12.5	10.4	52.2	4.7	0.0				49.9	50.1	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.6	3.3	0.4	0.0				10.8	7.2	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	0.0	7.2	3.3	4.9	3.3	0.0				5.9	5.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	12.9	11.0	55.6	5.1	0.0				60.6	57.3	0.0
LnGrp LOS		B	B	E	A					E	E	
Approach Vol, veh/h		2282			1371						548	
Approach Delay, s/veh		12.7			17.1						58.4	
Approach LOS		B			B						E	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		17.4	80.4		22.2		97.8					
Change Period (Y+Rc), s		4.0	6.0		6.0		6.0					
Max Green Setting (Gmax), s		21.0	39.0		19.0		64.0					
Max Q Clear Time (g_c+I1), s		13.0	22.5		14.1		13.6					
Green Ext Time (p_c), s		0.4	15.8		2.0		20.0					

Intersection Summary	
HCM 7th Control Delay, s/veh	20.1
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	7	0	0	0	0	3	0	0	0
Future Vol, veh/h	0	0	0	7	0	0	0	0	3	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.62	0.92	0.62	0.92	0.62	0.62	0.62	0.62	0.92
Heavy Vehicles, %	2	2	2	0	2	0	2	0	33	0	0	2
Mvmt Flow	0	0	0	11	0	0	0	0	5	0	0	0
Number of Lanes	0	0	0	2	0	1	0	0	1	0	0	0

Approach	WB	NB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	NB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		WB
Conflicting Lanes Right	0	3
HCM Control Delay, s/veh	7.8	7.1
HCM LOS	A	A

Lane	NBLn1	WBLn1	WBLn2	WBLn3
Vol Left, %	0%	100%	100%	0%
Vol Thru, %	0%	0%	0%	100%
Vol Right, %	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	4	4	0
LT Vol	0	4	4	0
Through Vol	0	0	0	0
RT Vol	3	0	0	0
Lane Flow Rate	5	6	6	0
Geometry Grp	5	5	5	5
Degree of Util (X)	0.006	0.008	0.008	0
Departure Headway (Hd)	4.38	5.008	5.008	2.808
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	820	718	718	0
Service Time	2.092	2.712	2.712	0.512
HCM Lane V/C Ratio	0.006	0.008	0.008	0
HCM Control Delay, s/veh	7.1	7.8	7.8	5.5
HCM Lane LOS	A	A	A	N
HCM 95th-tile Q	0	0	0	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	119	25	86	132	174	31	160	67	182	137	17
Future Volume (veh/h)	14	119	25	86	132	174	31	160	67	182	137	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1693	1885	1841	1900	1870	1885	1856	1856	1885	1870	1796	1900
Adj Flow Rate, veh/h	15	125	26	91	139	183	33	168	71	192	144	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	14	1	4	0	2	1	3	3	1	2	7	0
Cap, veh/h	106	582	253	462	924	410	92	500	222	248	853	395
Arrive On Green	0.03	0.16	0.16	0.13	0.26	0.26	0.05	0.14	0.14	0.14	0.25	0.25
Sat Flow, veh/h	3127	3582	1560	3510	3554	1577	1767	3526	1565	1781	3413	1581
Grp Volume(v), veh/h	15	125	26	91	139	183	33	168	71	192	144	18
Grp Sat Flow(s),veh/h/ln	1564	1791	1560	1755	1777	1577	1767	1763	1565	1781	1706	1581
Q Serve(g_s), s	0.2	1.5	0.7	1.1	1.4	4.7	0.9	2.1	2.0	5.0	1.6	0.4
Cycle Q Clear(g_c), s	0.2	1.5	0.7	1.1	1.4	4.7	0.9	2.1	2.0	5.0	1.6	0.4
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	106	582	253	462	924	410	92	500	222	248	853	395
V/C Ratio(X)	0.14	0.21	0.10	0.20	0.15	0.45	0.36	0.34	0.32	0.77	0.17	0.05
Avail Cap(c_a), veh/h	1042	1066	464	1169	1058	470	589	1050	466	2040	1016	471
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	22.5	17.5	17.1	18.6	13.7	14.9	22.0	18.6	18.5	19.9	14.1	13.7
Incr Delay (d2), s/veh	0.2	0.5	0.4	0.1	0.2	1.9	0.9	1.0	2.0	2.0	0.4	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	0.1	0.5	0.2	0.4	0.5	1.5	0.3	0.8	0.7	1.9	0.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.7	17.9	17.6	18.7	13.9	16.8	22.9	19.5	20.6	21.9	14.5	13.9
LnGrp LOS	C	B	B	B	B	B	C	B	C	C	B	B
Approach Vol, veh/h		166			413			272			354	
Approach Delay, s/veh		18.3			16.2			20.2			18.5	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	12.5	10.3	13.5	6.5	17.7	5.6	18.2
Change Period (Y+Rc), s	5.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	6.6	14.3	16.0	14.3	16.0	14.3	16.0	14.3
Max Q Clear Time (g_c+I1), s	7.0	4.1	3.1	3.5	2.9	3.6	2.2	6.7
Green Ext Time (p_c), s	0.3	1.5	0.1	0.9	0.0	1.5	0.0	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	18.1
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	447	9	69	517	131	16	81	72	113	79	62
Future Volume (veh/h)	50	447	9	69	517	131	16	81	72	113	79	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1900	1900	1900	1900	1856	1900	1900	1900
Adj Flow Rate, veh/h	57	508	10	78	588	149	18	92	82	128	90	70
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	1	0	0	0	0	3	0	0	0
Cap, veh/h	169	1105	492	194	910	230	41	209	209	155	109	85
Arrive On Green	0.09	0.31	0.31	0.11	0.32	0.32	0.13	0.13	0.13	0.20	0.20	0.20
Sat Flow, veh/h	1810	3610	1608	1795	2839	717	308	1576	1572	792	557	433
Grp Volume(v), veh/h	57	508	10	78	373	364	110	0	82	288	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1608	1795	1805	1751	1885	0	1572	1782	0	0
Q Serve(g_s), s	2.2	8.4	0.3	3.0	13.1	13.2	4.0	0.0	3.5	11.4	0.0	0.0
Cycle Q Clear(g_c), s	2.2	8.4	0.3	3.0	13.1	13.2	4.0	0.0	3.5	11.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.41	0.16		1.00	0.44		0.24
Lane Grp Cap(c), veh/h	169	1105	492	194	579	562	250	0	209	350	0	0
V/C Ratio(X)	0.34	0.46	0.02	0.40	0.64	0.65	0.44	0.00	0.39	0.82	0.00	0.00
Avail Cap(c_a), veh/h	490	1954	870	486	1051	1019	510	0	426	796	0	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	31.4	20.7	17.9	30.7	21.5	21.5	29.5	0.0	29.3	28.5	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.5	0.0	0.5	2.1	2.2	0.5	0.0	0.4	1.9	0.0	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	0.9	3.4	0.1	1.3	5.5	5.4	1.8	0.0	1.3	4.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.8	21.2	17.9	31.2	23.6	23.7	30.0	0.0	29.8	30.4	0.0	0.0
LnGrp LOS	C	C	B	C	C	C	C		C	C		
Approach Vol, veh/h		575			815			192			288	
Approach Delay, s/veh		22.2			24.3			29.9			30.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	15.1	12.0	28.3	18.5	10.9	29.4
Change Period (Y+Rc), s	5.3	4.0	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	20.0	20.0	40.0	33.0	20.0	43.0
Max Q Clear Time (g_c+I1), s	6.0	5.0	10.4	13.4	4.2	15.2
Green Ext Time (p_c), s	0.4	0.1	6.1	1.1	0.0	8.5

Intersection Summary	
HCM 7th Control Delay, s/veh	25.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	480	280	451	656	122	386	872	458	162	783	89
Future Volume (veh/h)	79	480	280	451	656	122	386	872	458	162	783	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1870	1900	1900	1900	1885	1885	1900	1856	1900
Adj Flow Rate, veh/h	83	505	109	475	691	55	406	918	177	171	824	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1	2	0	0	0	1	1	0	3	0
Cap, veh/h	292	799	350	552	1082	475	483	1720	534	252	1360	426
Arrive On Green	0.08	0.22	0.22	0.16	0.30	0.30	0.14	0.33	0.33	0.07	0.27	0.27
Sat Flow, veh/h	3510	3582	1569	3456	3610	1586	3510	5147	1598	3510	5066	1588
Grp Volume(v), veh/h	83	505	109	475	691	55	406	918	177	171	824	31
Grp Sat Flow(s),veh/h/ln	1755	1791	1569	1728	1805	1586	1755	1716	1598	1755	1689	1588
Q Serve(g_s), s	2.1	12.3	5.6	12.9	16.0	2.4	10.9	14.0	8.0	4.6	13.7	1.4
Cycle Q Clear(g_c), s	2.1	12.3	5.6	12.9	16.0	2.4	10.9	14.0	8.0	4.6	13.7	1.4
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	292	799	350	552	1082	475	483	1720	534	252	1360	426
V/C Ratio(X)	0.28	0.63	0.31	0.86	0.64	0.12	0.84	0.53	0.33	0.68	0.61	0.07
Avail Cap(c_a), veh/h	363	1828	801	715	2205	969	654	2589	804	436	2255	707
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	41.6	33.9	31.3	39.5	29.3	24.5	40.6	26.1	24.1	43.8	30.9	26.4
Incr Delay (d2), s/veh	0.2	1.4	0.9	6.9	0.9	0.2	5.5	0.4	0.6	1.2	0.9	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	5.2	2.1	5.8	6.6	0.9	4.9	5.4	0.1	2.0	5.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.8	35.4	32.2	46.5	30.2	24.7	46.1	26.5	24.6	45.0	31.7	26.5
LnGrp LOS	D	D	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		697			1221			1501			1026	
Approach Delay, s/veh		35.6			36.3			31.6			33.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	38.7	19.4	27.6	17.3	32.3	12.0	35.0
Change Period (Y+Rc), s	4.0	6.4	4.0	* 6	4.0	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	12.9	48.6	20.0	* 49	18.0	* 43	10.0	59.0
Max Q Clear Time (g_c+I1), s	6.6	16.0	14.9	14.3	12.9	15.7	4.1	18.0
Green Ext Time (p_c), s	0.1	12.0	0.5	6.5	0.4	10.2	0.0	7.8

Intersection Summary	
HCM 7th Control Delay, s/veh	34.0
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	984	173	203	1138	226	242	276	174	223	393	124
Future Volume (veh/h)	106	984	173	203	1138	226	242	276	174	223	393	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.96	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1885	1885	1885	1900	1885	1885	1900	1856	1885	1870
Adj Flow Rate, veh/h	110	1025	180	211	1185	235	252	288	181	232	409	129
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	3	1	1	1	0	1	1	0	3	1	2
Cap, veh/h	196	1066	470	921	1878	832	314	565	244	292	599	254
Arrive On Green	0.06	0.30	0.30	0.53	1.00	1.00	0.09	0.16	0.16	0.09	0.17	0.17
Sat Flow, veh/h	3456	3526	1553	3483	3582	1587	3483	3582	1547	3428	3582	1521
Grp Volume(v), veh/h	110	1025	180	211	1185	235	252	288	181	232	409	129
Grp Sat Flow(s),veh/h/ln	1728	1763	1553	1742	1791	1587	1742	1791	1547	1714	1791	1521
Q Serve(g_s), s	3.7	34.3	8.3	3.9	0.0	0.0	8.5	8.8	13.4	8.0	12.9	9.3
Cycle Q Clear(g_c), s	3.7	34.3	8.3	3.9	0.0	0.0	8.5	8.8	13.4	8.0	12.9	9.3
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	196	1066	470	921	1878	832	314	565	244	292	599	254
V/C Ratio(X)	0.56	0.96	0.38	0.23	0.63	0.28	0.80	0.51	0.74	0.79	0.68	0.51
Avail Cap(c_a), veh/h	461	1066	470	921	1878	832	551	725	313	543	725	308
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.77	0.84	0.84	0.84	0.89	0.89	0.89	0.83	0.83	0.83
Uniform Delay (d), s/veh	55.1	41.2	18.8	21.7	0.0	0.0	53.6	46.3	48.2	53.8	47.0	45.5
Incr Delay (d2), s/veh	0.7	16.5	1.8	0.0	0.7	0.3	1.6	1.1	8.2	1.5	2.4	2.2
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	16.7	3.1	1.5	0.2	0.1	3.7	4.0	5.6	3.4	5.8	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.8	57.7	20.6	21.8	0.7	0.3	55.2	47.4	56.4	55.4	49.4	47.7
LnGrp LOS	E	E	C	C	A	A	E	D	E	E	D	D
Approach Vol, veh/h		1315			1631			721			770	
Approach Delay, s/veh		52.5			3.4			52.4			50.9	
Approach LOS		D			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	24.6	37.4	42.0	14.8	25.8	10.8	68.6
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	10.0	* 24	21.0	* 36	19.0	24.3	16.0	41.3
Max Q Clear Time (g_c+I1), s	10.3	15.4	5.9	36.3	10.5	14.9	5.7	2.0
Green Ext Time (p_c), s	0.3	2.4	0.3	0.0	0.3	3.1	0.1	19.8

Intersection Summary	
HCM 7th Control Delay, s/veh	34.1
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1378	29	101	1539	41	100
Future Volume (veh/h)	1378	29	101	1539	41	100
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1900	1885	1900	1870	1900
Adj Flow Rate, veh/h	1466	31	107	1637	44	106
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	0	1	0	2	0
Cap, veh/h	2594	55	133	3021	147	133
Arrive On Green	1.00	1.00	0.07	0.84	0.08	0.08
Sat Flow, veh/h	3650	75	1795	3705	1781	1610
Grp Volume(v), veh/h	732	765	107	1637	44	106
Grp Sat Flow(s),veh/h/ln	1777	1855	1795	1805	1781	1610
Q Serve(g_s), s	0.0	0.0	7.0	16.2	2.8	7.8
Cycle Q Clear(g_c), s	0.0	0.0	7.0	16.2	2.8	7.8
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1296	1353	133	3021	147	133
V/C Ratio(X)	0.56	0.57	0.80	0.54	0.30	0.80
Avail Cap(c_a), veh/h	1296	1353	389	3021	386	349
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	54.7	2.9	51.8	54.1
Incr Delay (d2), s/veh	1.2	1.2	4.3	0.7	0.4	4.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	3.3	3.1	1.3	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	1.2	1.2	59.0	3.6	52.2	58.2
LnGrp LOS	A	A	E	A	D	E
Approach Vol, veh/h	1497			1744	150	
Approach Delay, s/veh	1.2			7.0	56.5	
Approach LOS	A			A	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	13.9	12.9	93.2		106.1
Change Period (Y+Rc), s	4.0	4.0	5.7		5.7
Max Green Setting (Gmax), s	26.0	26.0	38.3		84.3
Max Q Clear Time (g_c+I1), s	9.8	9.0	2.0		18.2
Green Ext Time (p_c), s	0.2	0.1	21.7		35.6

Intersection Summary	
HCM 7th Control Delay, s/veh	6.6
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1242	124	759	1232	180	283	488	590	420	882	153
Future Volume (veh/h)	150	1242	124	759	1232	180	283	488	590	420	882	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1870	1870	1885	1885	1856	1900	1826	1885	1900	1885	1870
Adj Flow Rate, veh/h	156	1294	0	791	1283	0	295	508	0	438	919	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	1	1	3	0	5	1	0	1	2
Cap, veh/h	211	1686		890	1597		357	589		495	1077	
Arrive On Green	0.06	0.33	0.00	0.18	0.45	0.00	0.10	0.17	0.00	0.14	0.21	0.00
Sat Flow, veh/h	3374	5106	1585	5063	3582	1572	3510	3469	1598	3510	5147	1585
Grp Volume(v), veh/h	156	1294	0	791	1283	0	295	508	0	438	919	0
Grp Sat Flow(s),veh/h/ln	1687	1702	1585	1688	1791	1572	1755	1735	1598	1755	1716	1585
Q Serve(g_s), s	5.5	27.3	0.0	18.3	37.1	0.0	9.9	17.1	0.0	14.7	20.6	0.0
Cycle Q Clear(g_c), s	5.5	27.3	0.0	18.3	37.1	0.0	9.9	17.1	0.0	14.7	20.6	0.0
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	211	1686		890	1597		357	589		495	1077	
V/C Ratio(X)	0.74	0.77		0.89	0.80		0.83	0.86		0.88	0.85	
Avail Cap(c_a), veh/h	346	1686		1013	1597		527	636		527	1077	
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	0.00	1.00	1.00	0.00	0.87	0.87	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.3	36.1	0.0	48.3	28.7	0.0	52.9	48.5	0.0	50.6	45.7	0.0
Incr Delay (d2), s/veh	1.9	3.4	0.0	8.3	4.4	0.0	3.8	10.4	0.0	15.7	7.0	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	2.3	11.4	0.0	8.2	15.9	0.0	4.5	8.1	0.0	7.4	9.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.2	39.5	0.0	56.6	33.1	0.0	56.7	58.9	0.0	66.3	52.7	0.0
LnGrp LOS	E	D		E	C		E	E		E	D	
Approach Vol, veh/h		1450			2074			803			1357	
Approach Delay, s/veh		41.4			42.1			58.1			57.1	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.9	26.4	27.1	45.6	16.2	31.1	13.2	59.5
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	5.7	6.0
Max Green Setting (Gmax), s	18.9	22.0	24.0	* 34	18.0	22.0	12.3	46.0
Max Q Clear Time (g_c+I1), s	16.7	19.1	20.3	29.3	11.9	22.6	7.5	39.1
Green Ext Time (p_c), s	0.2	1.1	0.8	4.0	0.3	0.0	0.1	5.1

Intersection Summary	
HCM 7th Control Delay, s/veh	47.7
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	248	1687	222	389	1600	95	190	377	287	163	685	312
Future Volume (veh/h)	248	1687	222	389	1600	95	190	377	287	163	685	312
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1870	1885	1885	1885	1885	1885	1900	1841	1870	1885
Adj Flow Rate, veh/h	253	1721	88	397	1633	0	194	385	0	166	699	77
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	2	1	1	1	1	1	0	4	2	1
Cap, veh/h	313	1728	525	713	2393		254	772		223	681	305
Arrive On Green	0.09	0.34	0.34	0.20	0.46	0.00	0.07	0.22	0.00	0.07	0.19	0.19
Sat Flow, veh/h	3483	5147	1563	3483	5147	1598	3483	3582	1610	3401	3554	1593
Grp Volume(v), veh/h	253	1721	88	397	1633	0	194	385	0	166	699	77
Grp Sat Flow(s),veh/h/ln	1742	1716	1563	1742	1716	1598	1742	1791	1610	1700	1777	1593
Q Serve(g_s), s	8.6	40.0	4.8	12.3	29.8	0.0	6.6	11.3	0.0	5.8	23.0	3.9
Cycle Q Clear(g_c), s	8.6	40.0	4.8	12.3	29.8	0.0	6.6	11.3	0.0	5.8	23.0	3.9
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	313	1728	525	713	2393		254	772		223	681	305
V/C Ratio(X)	0.81	1.00	0.17	0.56	0.68		0.77	0.50		0.74	1.03	0.25
Avail Cap(c_a), veh/h	464	1728	525	713	2393		464	772		453	681	305
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	39.8	28.0	42.8	25.2	0.0	54.6	41.4	0.0	55.1	48.5	25.4
Incr Delay (d2), s/veh	3.8	20.7	0.7	0.6	1.6	0.0	1.8	1.2	0.0	1.8	41.3	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	3.8	19.3	1.8	5.2	11.7	0.0	2.9	5.0	0.0	2.5	13.8	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.4	60.4	28.7	43.4	26.8	0.0	56.4	42.6	0.0	56.9	89.8	27.4
LnGrp LOS	E	E	C	D	C		E	D		E	F	C
Approach Vol, veh/h		2062			2030			579			942	
Approach Delay, s/veh		58.7			30.0			47.3			78.9	
Approach LOS		E			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	31.6	30.6	46.0	14.4	29.0	14.8	61.8
Change Period (Y+Rc), s	4.0	5.7	6.0	5.7	5.7	* 6	4.0	6.0
Max Green Setting (Gmax), s	16.0	23.3	19.0	40.3	16.0	* 23	16.0	45.0
Max Q Clear Time (g_c+I1), s	7.8	13.3	14.3	42.0	8.6	25.0	10.6	31.8
Green Ext Time (p_c), s	0.2	2.8	0.4	0.0	0.2	0.0	0.2	10.2

Intersection Summary	
HCM 7th Control Delay, s/veh	50.5
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	2026	20	37	2069	80	38	7	44	57	3	20
Future Volume (veh/h)	13	2026	20	37	2069	80	38	7	44	57	3	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1856	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	13	2089	0	38	2133	0	39	7	0	59	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	0	3	0	0	0	0	0	0	0	0
Cap, veh/h	37	2235		515	3732		77	104		91	119	
Arrive On Green	0.02	0.43	0.00	0.29	0.72	0.00	0.04	0.05	0.00	0.05	0.06	0.00
Sat Flow, veh/h	1810	5147	1610	1767	5187	1610	1810	1900	1610	1810	1900	1610
Grp Volume(v), veh/h	13	2089	0	38	2133	0	39	7	0	59	3	0
Grp Sat Flow(s),veh/h/ln	1810	1716	1610	1767	1729	1610	1810	1900	1610	1810	1900	1610
Q Serve(g_s), s	0.9	46.4	0.0	1.9	23.5	0.0	2.5	0.4	0.0	3.8	0.2	0.0
Cycle Q Clear(g_c), s	0.9	46.4	0.0	1.9	23.5	0.0	2.5	0.4	0.0	3.8	0.2	0.0
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	37	2235		515	3732		77	104		91	119	
V/C Ratio(X)	0.35	0.93		0.07	0.57		0.51	0.07		0.65	0.03	
Avail Cap(c_a), veh/h	241	2243		515	3732		241	317		241	302	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.0	32.3	0.0	30.8	8.0	0.0	56.2	53.8	0.0	56.0	52.8	0.0
Incr Delay (d2), s/veh	2.1	8.8	0.0	0.0	0.6	0.0	1.9	0.2	0.0	2.9	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	0.4	19.7	0.0	0.8	7.2	0.0	1.2	0.2	0.0	1.8	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.1	41.1	0.0	30.8	8.7	0.0	58.2	54.0	0.0	58.9	52.9	0.0
LnGrp LOS	E	D		C	A		E	D		E	D	
Approach Vol, veh/h		2102			2171			46			62	
Approach Delay, s/veh		41.3			9.0			57.5			58.6	
Approach LOS		D			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	11.5	40.7	57.8	9.1	12.4	6.5	92.0
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	6.0	* 20	14.0	* 52	16.0	19.1	16.0	50.3
Max Q Clear Time (g_c+I1), s	5.8	2.4	3.9	48.4	4.5	2.2	2.9	25.5
Green Ext Time (p_c), s	0.0	0.0	0.0	3.7	0.0	0.0	0.0	21.6

Intersection Summary	
HCM 7th Control Delay, s/veh	25.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	274	537	23	912	502	765	46	1164	842	544	1277	175
Future Volume (veh/h)	274	537	23	912	502	765	46	1164	842	544	1277	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1885	1900	1900	1678	1870	1900	1900	1885	1870
Adj Flow Rate, veh/h	282	554	0	940	518	0	47	1200	0	561	1316	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	0	1	0	0	15	2	0	0	1	2
Cap, veh/h	475	691		941	671		298	1234		648	1669	
Arrive On Green	0.14	0.14	0.00	0.19	0.19	0.00	0.10	0.24	0.00	0.06	0.11	0.00
Sat Flow, veh/h	3510	5106	1610	5063	3610	1610	3100	5106	1610	3510	5147	1585
Grp Volume(v), veh/h	282	554	0	940	518	0	47	1200	0	561	1316	0
Grp Sat Flow(s),veh/h/ln	1755	1702	1610	1688	1805	1610	1550	1702	1610	1755	1716	1585
Q Serve(g_s), s	9.1	12.6	0.0	22.3	16.4	0.0	1.7	28.0	0.0	19.0	29.9	0.0
Cycle Q Clear(g_c), s	9.1	12.6	0.0	22.3	16.4	0.0	1.7	28.0	0.0	19.0	29.9	0.0
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	475	691		941	671		298	1234		648	1669	
V/C Ratio(X)	0.59	0.80		1.00	0.77		0.16	0.97		0.87	0.79	
Avail Cap(c_a), veh/h	506	736		941	671		413	1234		790	1771	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.71	0.71	0.00
Uniform Delay (d), s/veh	48.8	50.3	0.0	48.8	46.4	0.0	49.8	45.1	0.0	54.9	49.6	0.0
Incr Delay (d2), s/veh	2.4	6.7	0.0	29.1	6.1	0.0	0.1	19.4	0.0	6.3	2.8	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	4.0	5.7	0.0	11.6	7.7	0.0	0.6	13.6	0.0	9.5	14.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.2	57.0	0.0	77.9	52.6	0.0	49.9	64.5	0.0	61.2	52.3	0.0
LnGrp LOS	D	E		E	D		D	E		E	D	
Approach Vol, veh/h		836			1458			1247			1877	
Approach Delay, s/veh		55.1			68.9			63.9			55.0	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	28.0	27.1	35.0		23.9	17.5	44.6
Change Period (Y+Rc), s	5.7	5.0	6.0		7.7	6.0	* 5.7
Max Green Setting (Gmax), s	22.3	27.0	29.0		17.3	16.0	* 41
Max Q Clear Time (g_c+I1), s	24.3	21.0	30.0		14.6	3.7	31.9
Green Ext Time (p_c), s	0.0	1.1	0.0		1.6	0.0	7.0

Intersection Summary	
HCM 7th Control Delay, s/veh	60.8
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	408	10	359	100	14	118	381	1688	14	100	1495	201
Future Volume (veh/h)	408	10	359	100	14	118	381	1688	14	100	1495	201
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1885	1693	1870	1885	1885	1796	1870	1885	1870
Adj Flow Rate, veh/h	437	0	85	116	0	124	401	1777	15	105	1574	70
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	1	1	14	2	1	1	7	2	1	2
Cap, veh/h	557	0	162	349	0	153	468	2342	20	993	2664	809
Arrive On Green	0.10	0.00	0.10	0.10	0.00	0.10	0.13	0.35	0.35	0.57	1.00	1.00
Sat Flow, veh/h	5386	0	1570	3591	0	1580	3483	6681	56	3456	5147	1562
Grp Volume(v), veh/h	437	0	85	116	0	124	401	1294	498	105	1574	70
Grp Sat Flow(s),veh/h/ln	1795	0	1570	1795	0	1580	1742	1621	1874	1728	1716	1562
Q Serve(g_s), s	9.5	0.0	6.2	3.6	0.0	9.2	13.5	28.2	28.2	1.7	0.0	0.0
Cycle Q Clear(g_c), s	9.5	0.0	6.2	3.6	0.0	9.2	13.5	28.2	28.2	1.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	557	0	162	349	0	153	468	1705	657	993	2664	809
V/C Ratio(X)	0.78	0.00	0.52	0.33	0.00	0.81	0.86	0.76	0.76	0.11	0.59	0.09
Avail Cap(c_a), veh/h	1032	0	301	598	0	263	755	1755	676	993	2664	809
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.64	0.64	0.64	0.88	0.88	0.88
Uniform Delay (d), s/veh	52.5	0.0	51.0	50.5	0.0	53.1	50.8	34.5	34.5	18.5	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.0	0.2	0.0	3.8	2.0	2.1	5.3	0.0	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	4.3	0.0	2.5	1.6	0.0	3.8	6.0	11.3	13.7	0.6	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.4	0.0	52.0	50.8	0.0	56.9	52.8	36.6	39.7	18.6	0.9	0.2
LnGrp LOS	D		D	D		E	D	D	D	B	A	A
Approach Vol, veh/h		522			240			2193			1749	
Approach Delay, s/veh		53.2			53.9			40.2			1.9	
Approach LOS		D			D			D			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.2	47.8		16.4	20.1	67.8		15.7
Change Period (Y+Rc), s	5.7	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	14.3	43.3		23.0	26.0	33.3		20.0
Max Q Clear Time (g_c+I1), s	13.7	30.2		11.5	15.5	2.0		11.2
Green Ext Time (p_c), s	0.1	11.8		0.9	0.6	23.8		0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	28.1
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	6	290	0	0	0	0	1863	454	0	1690	306
Future Volume (veh/h)	152	6	290	0	0	0	0	1863	454	0	1690	306
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1900	1885				0	1885	1870	0	1885	1885
Adj Flow Rate, veh/h	107	0	360				0	1941	473	0	1760	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	0	1				0	1	2	0	1	1
Cap, veh/h	239	0	429				0	3207	752	0	3984	
Arrive On Green	0.13	0.00	0.13				0.00	1.00	1.00	0.00	1.00	0.00
Sat Flow, veh/h	1781	0	3195				0	4314	972	0	5316	1598
Grp Volume(v), veh/h	107	0	360				0	1594	820	0	1760	0
Grp Sat Flow(s),veh/h/ln	1781	0	1598				0	1716	1685	0	1716	1598
Q Serve(g_s), s	6.6	0.0	13.2				0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.6	0.0	13.2				0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.58	0.00		1.00
Lane Grp Cap(c), veh/h	239	0	429				0	2656	1304	0	3984	
V/C Ratio(X)	0.45	0.00	0.84				0.00	0.60	0.63	0.00	0.44	
Avail Cap(c_a), veh/h	515	0	924				0	2656	1304	0	3984	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.80	0.80	0.00	0.88	0.00
Uniform Delay (d), s/veh	47.8	0.0	50.7				0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	1.7				0.0	0.8	1.9	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
%ile BackOfQ(50%),veh/ln	3.0	0.0	5.4				0.0	0.3	0.7	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.3	0.0	52.4				0.0	0.8	1.9	0.0	0.3	0.0
LnGrp LOS	D		D					A	A		A	
Approach Vol, veh/h		467						2414			1760	
Approach Delay, s/veh		51.5						1.2			0.3	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	98.6	21.4	98.6
Change Period (Y+Rc), s	5.7	5.3	5.7
Max Green Setting (Gmax), s	74.3	34.7	74.3
Max Q Clear Time (g_c+I1), s	2.0	15.2	2.0
Green Ext Time (p_c), s	59.7	0.9	31.3

Intersection Summary	
HCM 7th Control Delay, s/veh	5.9
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	381	342	1570	446	188	1599
Future Volume (veh/h)	381	342	1570	446	188	1599
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	393	353	1619	0	194	1648
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	1	1	1	1	1
Cap, veh/h	743	416	3017		223	3828
Arrive On Green	0.15	0.15	1.00	0.00	0.12	0.74
Sat Flow, veh/h	5023	2812	5316	1598	1795	5316
Grp Volume(v), veh/h	393	353	1619	0	194	1648
Grp Sat Flow(s),veh/h/ln	1674	1406	1716	1598	1795	1716
Q Serve(g_s), s	8.7	14.7	0.0	0.0	12.7	14.5
Cycle Q Clear(g_c), s	8.7	14.7	0.0	0.0	12.7	14.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	743	416	3017		223	3828
V/C Ratio(X)	0.53	0.85	0.54		0.87	0.43
Avail Cap(c_a), veh/h	950	532	3017		389	3828
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.74	0.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	49.8	0.0	0.0	51.6	5.8
Incr Delay (d2), s/veh	0.2	8.3	0.5	0.0	4.1	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	5.6	0.1	0.0	5.8	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	47.5	58.1	0.5	0.0	55.7	6.2
LnGrp LOS	D	E	A		E	A
Approach Vol, veh/h	746		1619			1842
Approach Delay, s/veh	52.5		0.5			11.4
Approach LOS	D		A			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	18.9	76.1			95.0	25.0
Change Period (Y+Rc), s	4.0	5.7			5.7	7.3
Max Green Setting (Gmax), s	26.6	54.3			84.3	22.7
Max Q Clear Time (g_c+I1), s	14.7	2.0			16.5	16.7
Green Ext Time (p_c), s	0.2	25.9			31.5	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	14.5
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

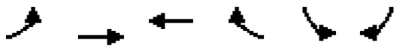
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	720	49	292	458	33	58	103	349	23	56	29
Future Volume (veh/h)	38	720	49	292	458	33	58	103	349	23	56	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1900	1856	1826	1856	1870	1900	1885	1900	1826	1856
Adj Flow Rate, veh/h	41	774	53	314	492	35	62	111	119	25	60	31
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	2	0	3	5	3	2	0	1	0	5	3
Cap, veh/h	171	1299	589	353	1788	810	109	521	230	127	218	188
Arrive On Green	0.05	0.37	0.37	0.20	0.52	0.52	0.06	0.14	0.14	0.04	0.12	0.12
Sat Flow, veh/h	3428	3554	1610	1767	3469	1572	1781	3610	1598	3510	1826	1572
Grp Volume(v), veh/h	41	774	53	314	492	35	62	111	119	25	60	31
Grp Sat Flow(s),veh/h/ln	1714	1777	1610	1767	1735	1572	1781	1805	1598	1755	1826	1572
Q Serve(g_s), s	1.0	16.0	2.0	15.6	7.2	1.0	3.1	2.5	6.2	0.6	2.7	1.6
Cycle Q Clear(g_c), s	1.0	16.0	2.0	15.6	7.2	1.0	3.1	2.5	6.2	0.6	2.7	1.6
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	171	1299	589	353	1788	810	109	521	230	127	218	188
V/C Ratio(X)	0.24	0.60	0.09	0.89	0.28	0.04	0.57	0.21	0.52	0.20	0.28	0.17
Avail Cap(c_a), veh/h	1517	2949	1336	1114	2879	1305	394	1278	566	777	707	609
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	41.3	23.3	18.8	35.2	12.4	10.9	41.3	34.1	35.8	42.3	36.3	35.8
Incr Delay (d2), s/veh	0.3	1.2	0.2	3.1	0.2	0.1	1.7	0.8	6.7	0.3	1.1	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	0.4	6.3	0.7	6.6	2.5	0.3	1.3	1.1	2.7	0.3	1.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.6	24.5	19.0	38.3	12.6	10.9	43.0	34.9	42.5	42.6	37.3	36.4
LnGrp LOS	D	C	B	D	B	B	D	C	D	D	D	D
Approach Vol, veh/h		868			841			292			116	
Approach Delay, s/veh		24.9			22.1			39.7			38.2	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	19.3	23.0	39.7	10.5	17.1	9.5	53.3
Change Period (Y+Rc), s	5.0	6.3	5.0	6.7	5.0	6.3	5.0	6.7
Max Green Setting (Gmax), s	20.0	32.0	57.0	75.0	20.0	35.0	40.0	75.0
Max Q Clear Time (g_c+I1), s	2.6	8.2	17.6	18.0	5.1	4.7	3.0	9.2
Green Ext Time (p_c), s	0.0	2.6	0.4	15.1	0.0	0.6	0.1	8.5

Intersection Summary	
HCM 7th Control Delay, s/veh	26.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	224	886	640	121	113	135
Future Volume (veh/h)	224	886	640	121	113	135
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1870	1826	1870	1900	1856
Adj Flow Rate, veh/h	233	923	667	126	118	141
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	5	2	0	3
Cap, veh/h	290	2262	1336	610	228	198
Arrive On Green	0.16	0.64	0.39	0.39	0.13	0.13
Sat Flow, veh/h	1810	3647	3561	1585	1810	1572
Grp Volume(v), veh/h	233	923	667	126	118	141
Grp Sat Flow(s),veh/h/ln	1810	1777	1735	1585	1810	1572
Q Serve(g_s), s	6.8	7.0	8.0	2.9	3.3	4.7
Cycle Q Clear(g_c), s	6.8	7.0	8.0	2.9	3.3	4.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	290	2262	1336	610	228	198
V/C Ratio(X)	0.80	0.41	0.50	0.21	0.52	0.71
Avail Cap(c_a), veh/h	661	3568	3483	1591	661	574
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	22.2	4.9	12.8	11.3	22.4	23.0
Incr Delay (d2), s/veh	2.0	0.3	0.6	0.4	0.7	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	2.6	1.3	2.5	0.9	1.4	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	24.2	5.1	13.4	11.6	23.0	24.7
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h		1156	793		259	
Approach Delay, s/veh		9.0	13.1		24.0	
Approach LOS		A	B		C	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			42.9		11.9	13.8	29.1
Change Period (Y+Rc), s			8.0		5.0	5.0	8.0
Max Green Setting (Gmax), s			55.0		20.0	20.0	55.0
Max Q Clear Time (g_c+I1), s			9.0		6.7	8.8	10.0
Green Ext Time (p_c), s			15.0		0.3	0.2	11.1

Intersection Summary	
HCM 7th Control Delay, s/veh	12.2
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	868	21	6	676	92	27	24	8	71	29	65
Future Volume (veh/h)	86	868	21	6	676	92	27	24	8	71	29	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1752	1900	1796	1900	1515	1781	1722	1900	1900	1722
Adj Flow Rate, veh/h	91	923	22	6	719	98	29	26	9	76	31	69
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	3	10	0	7	0	26	8	12	0	0	12
Cap, veh/h	168	1724	726	20	1385	653	65	160	131	156	248	191
Arrive On Green	0.09	0.49	0.49	0.01	0.41	0.41	0.05	0.09	0.09	0.09	0.13	0.13
Sat Flow, veh/h	1781	3526	1485	1810	3413	1610	1443	1781	1459	1810	1900	1459
Grp Volume(v), veh/h	91	923	22	6	719	98	29	26	9	76	31	69
Grp Sat Flow(s),veh/h/ln	1781	1763	1485	1810	1706	1610	1443	1781	1459	1810	1900	1459
Q Serve(g_s), s	2.8	10.2	0.4	0.2	9.0	2.2	1.1	0.8	0.3	2.3	0.8	2.4
Cycle Q Clear(g_c), s	2.8	10.2	0.4	0.2	9.0	2.2	1.1	0.8	0.3	2.3	0.8	2.4
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	168	1724	726	20	1385	653	65	160	131	156	248	191
V/C Ratio(X)	0.54	0.54	0.03	0.30	0.52	0.15	0.44	0.16	0.07	0.49	0.12	0.36
Avail Cap(c_a), veh/h	631	4680	1971	641	4531	2138	511	631	517	641	673	517
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	24.4	10.0	7.5	27.7	12.6	10.6	26.3	23.8	23.5	24.6	21.7	22.4
Incr Delay (d2), s/veh	1.0	0.5	0.0	3.0	0.6	0.2	1.8	1.0	0.5	0.9	0.3	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	1.1	2.9	0.1	0.1	2.7	0.6	0.4	0.3	0.1	0.9	0.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.4	10.5	7.5	30.7	13.2	10.8	28.0	24.8	24.0	25.5	22.0	23.8
LnGrp LOS	C	B	A	C	B	B	C	C	C	C	C	C
Approach Vol, veh/h		1036			823			64			176	
Approach Delay, s/veh		11.8			13.1			26.1			24.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	9.7	4.6	33.3	6.6	12.0	9.3	28.6
Change Period (Y+Rc), s	4.0	* 4.6	4.0	5.7	4.0	4.6	4.0	5.7
Max Green Setting (Gmax), s	20.0	* 20	20.0	75.0	20.0	20.0	20.0	75.0
Max Q Clear Time (g_c+I1), s	4.8	2.8	2.2	12.2	3.1	4.4	4.8	11.0
Green Ext Time (p_c), s	0.1	0.1	0.0	15.4	0.0	0.3	0.1	11.7

Intersection Summary	
HCM 7th Control Delay, s/veh	13.8
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	438	52	328	411	360	51	816	252	300	843	319
Future Volume (veh/h)	370	438	52	328	411	360	51	816	252	300	843	319
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1856	1811	1885	1841	1885	1900	1885	1900	1885	1870	1826
Adj Flow Rate, veh/h	389	461	55	345	433	171	54	859	47	316	887	74
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	3	6	1	4	1	0	1	0	1	2	5
Cap, veh/h	471	647	77	425	656	296	86	961	432	352	1483	852
Arrive On Green	0.14	0.20	0.20	0.12	0.19	0.19	0.05	0.27	0.27	0.20	0.42	0.42
Sat Flow, veh/h	3401	3174	377	3483	3497	1577	1810	3582	1610	1795	3554	1528
Grp Volume(v), veh/h	389	255	261	345	433	171	54	859	47	316	887	74
Grp Sat Flow(s),veh/h/ln	1700	1763	1788	1742	1749	1577	1810	1791	1610	1795	1777	1528
Q Serve(g_s), s	10.8	13.1	13.2	9.4	11.2	9.6	2.9	22.5	2.1	16.7	18.9	2.2
Cycle Q Clear(g_c), s	10.8	13.1	13.2	9.4	11.2	9.6	2.9	22.5	2.1	16.7	18.9	2.2
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	471	360	365	425	656	296	86	961	432	352	1483	852
V/C Ratio(X)	0.83	0.71	0.72	0.81	0.66	0.58	0.63	0.89	0.11	0.90	0.60	0.09
Avail Cap(c_a), veh/h	1152	543	550	822	1077	485	371	993	446	719	1483	852
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	40.8	36.1	36.1	41.7	36.7	36.1	45.6	34.3	26.9	38.2	22.0	10.1
Incr Delay (d2), s/veh	1.4	4.8	4.8	1.4	2.2	3.5	2.8	10.6	0.2	3.3	0.8	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	4.4	5.8	6.0	4.0	4.7	3.8	1.3	10.6	0.8	7.3	7.4	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.2	40.8	41.0	43.1	38.9	39.5	48.4	44.9	27.0	41.5	22.9	10.2
LnGrp LOS	D	D	D	D	D	D	D	D	C	D	C	B
Approach Vol, veh/h		905			949			960			1277	
Approach Delay, s/veh		41.5			40.5			44.3			26.8	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.1	32.5	15.9	25.9	8.6	47.0	17.5	24.3
Change Period (Y+Rc), s	4.0	6.4	4.0	6.0	4.0	6.4	4.0	6.0
Max Green Setting (Gmax), s	19.0	27.0	23.0	30.0	20.0	35.0	33.0	30.0
Max Q Clear Time (g_c+I1), s	18.7	24.5	11.4	15.2	4.9	20.9	12.8	13.2
Green Ext Time (p_c), s	0.4	1.6	0.5	4.1	0.0	7.1	0.7	5.1

Intersection Summary	
HCM 7th Control Delay, s/veh	37.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	734	27	36	871	217	42	132	25	157	103	75
Future Volume (veh/h)	81	734	27	36	871	217	42	132	25	157	103	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1900	1856	1885	1900	1870	1900	1900	1885	1870	1856
Adj Flow Rate, veh/h	85	773	28	38	917	0	44	139	26	165	108	79
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	3	1	0	2	0	0	1	2	3
Cap, veh/h	108	881	32	65	1675		52	166	245	190	125	363
Arrive On Green	0.06	0.49	0.49	0.04	0.47	0.00	0.12	0.12	0.12	0.17	0.17	0.17
Sat Flow, veh/h	1781	1794	65	1767	3582	1610	451	1426	1598	1097	718	1544
Grp Volume(v), veh/h	85	0	801	38	917	0	183	0	26	273	0	79
Grp Sat Flow(s),veh/h/ln	1781	0	1859	1767	1791	1610	1877	0	1598	1815	0	1544
Q Serve(g_s), s	5.3	0.0	43.6	2.4	20.7	0.0	10.8	0.0	1.6	16.6	0.0	4.7
Cycle Q Clear(g_c), s	5.3	0.0	43.6	2.4	20.7	0.0	10.8	0.0	1.6	16.6	0.0	4.7
Prop In Lane	1.00		0.03	1.00		1.00	0.24		1.00	0.60		1.00
Lane Grp Cap(c), veh/h	108	0	913	65	1675		218	0	245	315	0	363
V/C Ratio(X)	0.79	0.00	0.88	0.58	0.55		0.84	0.00	0.11	0.87	0.00	0.22
Avail Cap(c_a), veh/h	315	0	1133	312	1867		272	0	291	641	0	641
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.4	0.0	25.7	53.7	21.6	0.0	49.0	0.0	41.3	45.5	0.0	35.0
Incr Delay (d2), s/veh	4.6	0.0	8.1	3.0	0.5	0.0	14.3	0.0	0.1	2.8	0.0	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	2.5	0.0	19.5	1.1	8.2	0.0	5.8	0.0	0.6	7.6	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.1	0.0	33.8	56.7	22.1	0.0	63.3	0.0	41.3	48.4	0.0	35.1
LnGrp LOS	E		C	E	C		E		D	D		D
Approach Vol, veh/h		886			955			209			352	
Approach Delay, s/veh		36.1			23.5			60.6			45.4	
Approach LOS		D			C			E			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	17.7	8.2	61.6	25.6	10.9	58.9
Change Period (Y+Rc), s	4.6	4.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	16.4	20.0	69.0	40.0	20.0	59.0
Max Q Clear Time (g_c+I1), s	12.8	4.4	45.6	18.6	7.3	22.7
Green Ext Time (p_c), s	0.2	0.0	10.0	1.1	0.1	12.9

Intersection Summary	
HCM 7th Control Delay, s/veh	34.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	232	466	130	339	115	611	1114	72	135	1338	172
Future Volume (veh/h)	161	232	466	130	339	115	611	1114	72	135	1338	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1885	1885	1870	1870	1885	1885	1870	1885
Adj Flow Rate, veh/h	168	242	89	135	353	21	636	1160	29	141	1394	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	1	1	2	2	1	1	2	1
Cap, veh/h	195	483	210	162	419	181	708	2803	862	201	2052	
Arrive On Green	0.11	0.14	0.14	0.09	0.12	0.12	0.20	0.55	0.55	0.06	0.40	0.00
Sat Flow, veh/h	1781	3554	1546	1781	3582	1546	3456	5106	1571	3483	5106	1598
Grp Volume(v), veh/h	168	242	89	135	353	21	636	1160	29	141	1394	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1546	1781	1791	1546	1728	1702	1571	1742	1702	1598
Q Serve(g_s), s	11.1	7.6	6.3	8.9	11.6	1.5	21.5	15.9	1.0	4.8	27.0	0.0
Cycle Q Clear(g_c), s	11.1	7.6	6.3	8.9	11.6	1.5	21.5	15.9	1.0	4.8	27.0	0.0
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	195	483	210	162	419	181	708	2803	862	201	2052	
V/C Ratio(X)	0.86	0.50	0.42	0.83	0.84	0.12	0.90	0.41	0.03	0.70	0.68	
Avail Cap(c_a), veh/h	267	483	210	238	439	189	806	2803	862	522	2052	
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	0.50	0.50	0.00
Uniform Delay (d), s/veh	52.5	48.1	47.5	53.7	51.9	47.4	46.5	15.8	12.4	55.5	29.5	0.0
Incr Delay (d2), s/veh	14.5	1.4	2.3	10.2	15.0	0.6	11.9	0.5	0.1	0.8	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	5.6	3.4	0.1	4.4	6.0	0.6	10.1	5.9	0.4	2.1	10.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.1	49.5	49.9	63.9	66.9	48.0	58.4	16.3	12.5	56.3	30.5	0.0
LnGrp LOS	E	D	D	E	E	D	E	B	B	E	C	
Approach Vol, veh/h		499			509			1825			1535	
Approach Delay, s/veh		55.5			65.3			30.9			32.8	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	71.9	14.9	22.3	28.6	54.2	17.2	20.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	18.0	50.0	16.0	16.0	28.0	40.0	18.0	* 15
Max Q Clear Time (g_c+I1), s	6.8	17.9	10.9	9.6	23.5	29.0	13.1	13.6
Green Ext Time (p_c), s	0.2	10.7	0.1	1.3	1.1	7.9	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	38.4
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	118	33	33	206	168	132
Future Vol, veh/h	118	33	33	206	168	132
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	2	1
Mvmt Flow	148	41	41	258	210	165
Number of Lanes	1	1	1	2	2	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	3	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay, s/veh	11	9	8.4
HCM LOS	B	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	100%	0%
Vol Right, %	0%	0%	0%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	33	103	103	118	33	84	84	132
LT Vol	33	0	0	118	0	0	0	0
Through Vol	0	103	103	0	0	84	84	0
RT Vol	0	0	0	0	33	0	0	132
Lane Flow Rate	41	129	129	148	41	105	105	165
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.073	0.211	0.149	0.27	0.062	0.17	0.17	0.155
Departure Headway (Hd)	6.374	5.886	4.169	6.578	5.38	5.844	5.827	3.386
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	563	612	863	547	666	616	618	1063
Service Time	4.104	3.599	1.881	4.309	3.111	3.556	3.539	1.098
HCM Lane V/C Ratio	0.073	0.211	0.149	0.271	0.062	0.17	0.17	0.155
HCM Control Delay, s/veh	9.6	10.2	7.6	11.7	8.5	9.8	9.7	6.7
HCM Lane LOS	A	B	A	B	A	A	A	A
HCM 95th-tile Q	0.2	0.8	0.5	1.1	0.2	0.6	0.6	0.5

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	36	76	146	203	185	19
Future Vol, veh/h	36	76	146	203	185	19
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	2	0
Mvmt Flow	44	93	178	248	226	23
Number of Lanes	1	1	1	2	2	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	3	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay, s/veh	9.4	9.5	9.5
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	100%	0%
Vol Right, %	0%	0%	0%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	146	102	102	36	76	93	93	19
LT Vol	146	0	0	36	0	0	0	0
Through Vol	0	102	102	0	0	93	93	0
RT Vol	0	0	0	0	76	0	0	19
Lane Flow Rate	178	124	124	44	93	113	113	23
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.293	0.187	0.128	0.082	0.142	0.183	0.182	0.021
Departure Headway (Hd)	5.934	5.432	3.722	6.702	5.504	5.844	5.81	3.293
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	600	654	944	537	654	618	622	1061
Service Time	3.731	3.228	1.517	4.412	3.214	3.544	3.51	1.093
HCM Lane V/C Ratio	0.297	0.19	0.131	0.082	0.142	0.183	0.182	0.022
HCM Control Delay, s/veh	11.2	9.5	7.1	10	9.1	9.8	9.8	6.2
HCM Lane LOS	B	A	A	A	A	A	A	A
HCM 95th-tile Q	1.2	0.7	0.4	0.3	0.5	0.7	0.7	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	40	45	62	66	50	47	295	73	70	451	9
Future Volume (veh/h)	4	40	45	62	66	50	47	295	73	70	451	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1870	1900	1870	1900	1856	1870	1900
Adj Flow Rate, veh/h	4	43	48	66	70	53	50	314	78	74	480	10
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	0	3	2	0
Cap, veh/h	242	254	215	308	324	270	146	726	328	184	809	366
Arrive On Green	0.13	0.13	0.13	0.17	0.17	0.17	0.08	0.20	0.20	0.10	0.23	0.23
Sat Flow, veh/h	1810	1900	1610	1810	1900	1585	1810	3554	1606	1767	3554	1607
Grp Volume(v), veh/h	4	43	48	66	70	53	50	314	78	74	480	10
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1585	1810	1777	1606	1767	1777	1607
Q Serve(g_s), s	0.1	1.0	1.3	1.5	1.5	1.4	1.3	3.8	2.0	1.9	5.9	0.2
Cycle Q Clear(g_c), s	0.1	1.0	1.3	1.5	1.5	1.4	1.3	3.8	2.0	1.9	5.9	0.2
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	242	254	215	308	324	270	146	726	328	184	809	366
V/C Ratio(X)	0.02	0.17	0.22	0.21	0.22	0.20	0.34	0.43	0.24	0.40	0.59	0.03
Avail Cap(c_a), veh/h	742	780	661	742	780	650	742	2916	1318	725	2916	1318
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	18.3	18.7	18.9	17.4	17.4	17.4	21.2	16.9	16.2	20.4	16.8	14.6
Incr Delay (d2), s/veh	0.0	0.3	0.5	0.3	0.3	0.4	1.4	0.4	0.4	1.4	0.7	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	0.0	0.4	0.5	0.6	0.6	0.5	0.5	1.3	0.6	0.7	2.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.4	19.0	19.4	17.8	17.7	17.7	22.6	17.3	16.6	21.9	17.5	14.7
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		95			189			442			564	
Approach Delay, s/veh		19.2			17.7			17.8			18.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	16.0		10.5	7.9	17.1		13.2
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	3.5	5.8		3.3	3.3	7.9		3.5
Green Ext Time (p_c), s	0.1	2.2		0.3	0.1	3.1		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	18.0
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	6	106	22	5	6	151	393	36	7	478	47
Future Volume (veh/h)	30	6	106	22	5	6	151	393	36	7	478	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1670	1710	1710	1710	1710	1710	1710	1683	1710	1710	1697	1683
Adj Flow Rate, veh/h	32	6	114	24	5	6	162	423	39	8	514	51
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	0	0	0	0	0	0	2	0	0	1	2
Cap, veh/h	81	209	177	65	191	161	240	1348	610	24	931	402
Arrive On Green	0.05	0.12	0.12	0.04	0.11	0.11	0.15	0.42	0.42	0.01	0.29	0.29
Sat Flow, veh/h	1590	1710	1443	1629	1710	1443	1629	3198	1447	1629	3224	1392
Grp Volume(v), veh/h	32	6	114	24	5	6	162	423	39	8	514	51
Grp Sat Flow(s),veh/h/ln	1590	1710	1443	1629	1710	1443	1629	1599	1447	1629	1612	1392
Q Serve(g_s), s	0.9	0.1	3.6	0.7	0.1	0.2	4.5	4.2	0.8	0.2	6.5	1.3
Cycle Q Clear(g_c), s	0.9	0.1	3.6	0.7	0.1	0.2	4.5	4.2	0.8	0.2	6.5	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	81	209	177	65	191	161	240	1348	610	24	931	402
V/C Ratio(X)	0.40	0.03	0.65	0.37	0.03	0.04	0.68	0.31	0.06	0.33	0.55	0.13
Avail Cap(c_a), veh/h	662	1423	1201	847	1423	1201	847	1531	693	678	1342	579
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	22.1	18.6	20.1	22.5	19.0	19.0	19.4	9.3	8.3	23.4	14.5	12.6
Incr Delay (d2), s/veh	1.2	0.1	7.2	1.3	0.1	0.2	1.2	0.5	0.1	3.0	2.3	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	0.3	0.1	1.4	0.3	0.1	0.1	1.5	1.1	0.2	0.1	2.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.3	18.7	27.3	23.8	19.1	19.2	20.6	9.7	8.4	26.4	16.8	13.3
LnGrp LOS	C	B	C	C	B	B	C	A	A	C	B	B
Approach Vol, veh/h		152			35			624			573	
Approach Delay, s/veh		26.1			22.3			12.5			16.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	11.4	4.7	25.6	5.9	11.9	11.1	19.2
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	4.0	* 5.3
Max Green Setting (Gmax), s	20.0	40.0	20.0	23.0	25.0	40.0	25.0	* 20
Max Q Clear Time (g_c+I1), s	2.9	2.2	2.2	6.2	2.7	5.6	6.5	8.5
Green Ext Time (p_c), s	0.0	0.0	0.0	5.2	0.0	0.8	0.2	5.4

Intersection Summary	
HCM 7th Control Delay, s/veh	15.9
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	0	115	47	1	2	170	792	54	10	773	30
Future Volume (veh/h)	20	0	115	47	1	2	170	792	54	10	773	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1900	1885	1885	1900	1900	1885	1900
Adj Flow Rate, veh/h	21	0	120	49	1	2	177	825	56	10	805	31
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	2	0	0	0	1	1	0	0	1	0
Cap, veh/h	213	0	186	139	3	126	224	1721	753	32	1339	597
Arrive On Green	0.12	0.00	0.12	0.08	0.08	0.08	0.12	0.48	0.48	0.02	0.37	0.37
Sat Flow, veh/h	1810	0	1581	1775	36	1606	1795	3582	1567	1810	3582	1597
Grp Volume(v), veh/h	21	0	120	50	0	2	177	825	56	10	805	31
Grp Sat Flow(s),veh/h/ln	1810	0	1581	1811	0	1606	1795	1791	1567	1810	1791	1597
Q Serve(g_s), s	0.6	0.0	4.5	1.6	0.0	0.1	5.9	9.6	1.2	0.3	11.2	0.8
Cycle Q Clear(g_c), s	0.6	0.0	4.5	1.6	0.0	0.1	5.9	9.6	1.2	0.3	11.2	0.8
Prop In Lane	1.00		1.00	0.98		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	0	186	142	0	126	224	1721	753	32	1339	597
V/C Ratio(X)	0.10	0.00	0.64	0.35	0.00	0.02	0.79	0.48	0.07	0.31	0.60	0.05
Avail Cap(c_a), veh/h	585	0	511	585	0	519	580	2604	1139	585	2314	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	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	0.0	26.1	27.0	0.0	26.3	26.3	10.9	8.7	30.0	15.7	12.4
Incr Delay (d2), s/veh	0.1	0.0	1.4	0.5	0.0	0.0	2.4	0.4	0.1	2.0	0.8	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	0.3	0.0	1.7	0.7	0.0	0.0	2.4	3.0	0.3	0.2	3.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.4	0.0	27.5	27.6	0.0	26.3	28.7	11.2	8.7	32.0	16.5	12.4
LnGrp LOS	C		C	C		C	C	B	A	C	B	B
Approach Vol, veh/h		141			52			1058			846	
Approach Delay, s/veh		27.0			27.5			14.0			16.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	35.7		12.2	11.7	29.1		8.9
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.0
Max Green Setting (Gmax), s	20.0	45.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	2.3	11.6		6.5	7.9	13.2		3.6
Green Ext Time (p_c), s	0.0	11.2		0.2	0.2	9.7		0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	16.2
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	128	133	146	905	994	153
Future Volume (veh/h)	128	133	146	905	994	153
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1870	1900	1885	1841	1900
Adj Flow Rate, veh/h	138	143	157	973	1069	165
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	2	0	1	4	0
Cap, veh/h	233	206	213	2449	1718	774
Arrive On Green	0.13	0.13	0.12	0.68	0.49	0.49
Sat Flow, veh/h	1795	1585	1810	3676	3589	1575
Grp Volume(v), veh/h	138	143	157	973	1069	165
Grp Sat Flow(s),veh/h/ln	1795	1585	1810	1791	1749	1575
Q Serve(g_s), s	3.9	4.6	4.5	6.3	12.0	3.2
Cycle Q Clear(g_c), s	3.9	4.6	4.5	6.3	12.0	3.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	233	206	213	2449	1718	774
V/C Ratio(X)	0.59	0.70	0.74	0.40	0.62	0.21
Avail Cap(c_a), veh/h	1407	1242	608	2449	2218	999
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	22.0	22.3	22.8	3.7	10.0	7.8
Incr Delay (d2), s/veh	0.9	1.6	4.9	0.2	0.7	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.1	1.9	0.8	3.2	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.9	23.9	27.7	3.9	10.7	8.0
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	281			1130	1234	
Approach Delay, s/veh	23.4			7.2	10.4	
Approach LOS	C			A	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	42.7		11.0	10.3	32.3
Change Period (Y+Rc), s	6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s	24.0		42.0	18.0	34.0
Max Q Clear Time (g_c+I1), s	8.3		6.6	6.5	14.0
Green Ext Time (p_c), s	8.8		0.4	0.3	12.3

Intersection Summary	
HCM 7th Control Delay, s/veh	10.4
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	29	79	39	26	20	79	914	53	17	948	188
Future Volume (veh/h)	138	29	79	39	26	20	79	914	53	17	948	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1885	1885	1900	1900	1870	1900
Adj Flow Rate, veh/h	147	31	84	41	28	21	84	972	56	18	1009	200
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	1	1	0	0	2	0
Cap, veh/h	208	218	185	103	70	151	164	1594	699	61	1377	609
Arrive On Green	0.11	0.11	0.11	0.09	0.09	0.09	0.09	0.45	0.45	0.03	0.39	0.39
Sat Flow, veh/h	1810	1900	1610	1096	749	1610	1795	3582	1570	1810	3554	1570
Grp Volume(v), veh/h	147	31	84	69	0	21	84	972	56	18	1009	200
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1845	0	1610	1795	1791	1570	1810	1777	1570
Q Serve(g_s), s	5.6	1.0	3.5	2.5	0.0	0.9	3.2	14.7	1.5	0.7	17.2	6.3
Cycle Q Clear(g_c), s	5.6	1.0	3.5	2.5	0.0	0.9	3.2	14.7	1.5	0.7	17.2	6.3
Prop In Lane	1.00		1.00	0.59		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	218	185	173	0	151	164	1594	699	61	1377	609
V/C Ratio(X)	0.71	0.14	0.45	0.40	0.00	0.14	0.51	0.61	0.08	0.30	0.73	0.33
Avail Cap(c_a), veh/h	510	535	454	520	0	454	506	2170	951	510	2153	951
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	30.3	28.3	29.3	30.3	0.0	29.5	30.8	15.0	11.3	33.5	18.6	15.3
Incr Delay (d2), s/veh	4.4	0.3	1.7	1.5	0.0	0.4	2.5	0.4	0.0	2.7	0.8	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	2.5	0.5	1.4	1.1	0.0	0.3	1.4	5.0	0.4	0.3	6.1	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.6	28.6	31.1	31.8	0.0	30.0	33.2	15.4	11.4	36.1	19.4	15.6
LnGrp LOS	C	C	C	C		C	C	B	B	D	B	B
Approach Vol, veh/h		262			90			1112			1227	
Approach Delay, s/veh		32.8			31.4			16.5			19.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	37.6		14.1	10.5	33.5		12.9
Change Period (Y+Rc), s	4.0	6.0		5.9	4.0	6.0		6.3
Max Green Setting (Gmax), s	20.0	43.0		20.0	20.0	43.0		20.0
Max Q Clear Time (g_c+I1), s	2.5	16.7		7.6	5.2	19.2		4.5
Green Ext Time (p_c), s	0.0	7.1		0.6	0.1	7.9		0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	19.7
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Appendix E

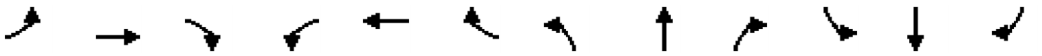
Phillip Road Site Project Trip Generation

Trip Generation

Land Use	Unit	Size	Weekday Daily Rate	Weekday Daily Vehicle Trips	Weekday AM Peak Hour						Weekday PM Peak Hour					
					Average Rate	In%	Out%	In	Out	Total	Average Rate	In%	Out%	In	Out	Total
Proposed Project																
Single-Family Detached Housing (ITE Code - 210)	Dwelling Units	527	9.43	4970	0.70	25%	75%	92	277	369	0.94	63%	37%	312	183	495
Multifamily Residential (ITE Code - 221)	Dwelling Units	135	*4.54*	*613*	0.37	*23%*	*77%*	*12*	*39*	50	*0.39*	*61%*	*39%*	32	21	53
Strip Retail Plaza (<40k) (ITE Code - 822)	1000 Sq.Ft.	29.7	*54.45*	1617	2.36	60%	40%	42	28	70	6.59	50%	50%	98	98	196
Medical-Dental Office Building (ITE Code - 720)	1000 Sq.Ft.	21.3	*36.00*	767	3.10	79%	21%	52	14	66	3.93	30%	70%	25	59	84
Industrial Park (ITE Code - 130)	1000 Sq.Ft.	1005.872	*3.37*	3390	0.34	81%	19%	277	65	342	0.34	22%	78%	75	267	342
Total Proposed Project Trips				**11356**				**475**	**422**	**897**				**542**	**628**	**1170**

Source: ITE Trip Generation Manual 11th Edition & Trip Generation Handbook, 3rd Edition

Appendix F
Opening Year No Project Conditions
Synchro Reports



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	320	215	247	333	70	202	137	385	119	142	11
Future Volume (veh/h)	0	320	215	247	333	70	202	137	385	119	142	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1648	1826	1885	1441	1752	1767	1722	1870	1856	1826	1767
Adj Flow Rate, veh/h	0	390	262	301	406	85	246	167	470	145	173	13
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	17	5	1	31	10	9	12	2	3	5	9
Cap, veh/h	3	671	330	375	1519	572	286	1038	503	182	868	375
Arrive On Green	0.00	0.21	0.21	0.11	0.39	0.39	0.17	0.32	0.32	0.10	0.25	0.25
Sat Flow, veh/h	1810	3131	1539	3483	3933	1480	1682	3272	1585	1767	3469	1497
Grp Volume(v), veh/h	0	390	262	301	406	85	246	167	470	145	173	13
Grp Sat Flow(s),veh/h/ln	1810	1566	1539	1742	1311	1480	1682	1636	1585	1767	1735	1497
Q Serve(g_s), s	0.0	7.8	11.2	5.9	4.9	2.6	9.9	2.6	20.1	5.6	2.7	0.5
Cycle Q Clear(g_c), s	0.0	7.8	11.2	5.9	4.9	2.6	9.9	2.6	20.1	5.6	2.7	0.5
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	3	671	330	375	1519	572	286	1038	503	182	868	375
V/C Ratio(X)	0.00	0.58	0.79	0.80	0.27	0.15	0.86	0.16	0.94	0.80	0.20	0.03
Avail Cap(c_a), veh/h	130	808	397	375	1519	572	302	1041	505	236	945	408
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)	0.00	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	0.0	24.6	26.0	30.4	14.6	13.9	28.1	17.1	23.1	30.6	20.6	19.8
Incr Delay (d2), s/veh	0.0	0.8	9.0	12.0	0.1	0.1	20.7	0.1	24.9	13.4	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	0.0	2.7	4.5	2.9	1.3	0.8	5.3	0.9	9.9	2.9	1.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	25.4	34.9	42.4	14.7	14.1	48.8	17.2	48.0	44.0	20.7	19.8
LnGrp LOS		C	C	D	B	B	D	B	D	D	C	B
Approach Vol, veh/h		652			792			883			331	
Approach Delay, s/veh		29.2			25.2			42.4			30.9	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	26.6	12.0	19.4	16.4	21.9	0.0	31.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.3	22.2	7.5	18.0	12.5	19.0	5.0	20.5
Max Q Clear Time (g_c+I1), s	7.6	22.1	7.9	13.2	11.9	4.7	0.0	6.9
Green Ext Time (p_c), s	0.1	0.0	0.0	1.4	0.0	0.8	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	32.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	609	121	65	545	56	72	194	105	138	257	68
Future Volume (veh/h)	84	609	121	65	545	56	72	194	105	138	257	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1781	1900	1900	1693	1796	1885	1885	1885	1841	1870	1841
Adj Flow Rate, veh/h	98	708	141	76	634	65	84	226	122	160	299	79
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	5	8	0	0	14	7	1	1	1	4	2	4
Cap, veh/h	127	1048	345	151	1043	342	108	333	270	207	438	319
Arrive On Green	0.07	0.22	0.22	0.08	0.23	0.23	0.06	0.18	0.18	0.12	0.23	0.23
Sat Flow, veh/h	1739	4863	1603	1810	4621	1516	1795	1885	1529	1753	1870	1363
Grp Volume(v), veh/h	98	708	141	76	634	65	84	226	122	160	299	79
Grp Sat Flow(s),veh/h/ln	1739	1621	1603	1810	1540	1516	1795	1885	1529	1753	1870	1363
Q Serve(g_s), s	2.7	6.6	3.7	2.0	6.1	1.7	2.3	5.5	3.5	4.4	7.2	2.3
Cycle Q Clear(g_c), s	2.7	6.6	3.7	2.0	6.1	1.7	2.3	5.5	3.5	4.4	7.2	2.3
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	127	1048	345	151	1043	342	108	333	270	207	438	319
V/C Ratio(X)	0.77	0.68	0.41	0.50	0.61	0.19	0.78	0.68	0.45	0.77	0.68	0.25
Avail Cap(c_a), veh/h	566	1285	424	699	1503	493	365	422	342	428	494	360
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	22.4	17.7	16.6	21.6	17.1	15.4	22.8	18.9	18.1	21.1	17.2	15.3
Incr Delay (d2), s/veh	9.5	1.0	0.8	2.6	0.6	0.3	11.3	3.1	1.2	6.0	3.3	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	1.3	2.1	1.1	0.8	1.7	0.5	1.2	2.4	1.1	1.9	3.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.9	18.8	17.4	24.2	17.7	15.7	34.0	22.0	19.3	27.1	20.4	15.7
LnGrp LOS	C	B	B	C	B	B	C	C	B	C	C	B
Approach Vol, veh/h		947			775			432			538	
Approach Delay, s/veh		19.9			18.1			23.6			21.7	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	13.7	9.1	15.6	8.0	16.5	8.6	16.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	12.0	11.0	19.0	13.0	10.0	13.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	6.4	7.5	4.0	8.6	4.3	9.2	4.7	8.1
Green Ext Time (p_c), s	0.2	0.5	0.1	2.0	0.1	0.7	0.1	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	20.4
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	593	83	415	474	230	81	403	371	405	562	98
Future Volume (veh/h)	103	593	83	415	474	230	81	403	371	405	562	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1604	1856	1856	1900	1678	1841	1870	1900	1856	1841
Adj Flow Rate, veh/h	117	674	33	472	539	50	92	458	113	460	639	69
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	2	20	3	3	0	15	4	2	0	3	4
Cap, veh/h	627	965	257	570	835	265	325	737	334	559	936	414
Arrive On Green	0.18	0.19	0.19	0.17	0.16	0.16	0.10	0.21	0.21	0.16	0.27	0.27
Sat Flow, veh/h	3510	5106	1359	3428	5066	1610	3100	3497	1583	3510	3526	1558
Grp Volume(v), veh/h	117	674	33	472	539	50	92	458	113	460	639	69
Grp Sat Flow(s),veh/h/ln	1755	1702	1359	1714	1689	1610	1550	1749	1583	1755	1763	1558
Q Serve(g_s), s	2.4	10.5	1.2	11.3	8.5	1.5	2.3	10.1	5.2	10.8	13.9	2.9
Cycle Q Clear(g_c), s	2.4	10.5	1.2	11.3	8.5	1.5	2.3	10.1	5.2	10.8	13.9	2.9
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	627	965	257	570	835	265	325	737	334	559	936	414
V/C Ratio(X)	0.19	0.70	0.13	0.83	0.65	0.19	0.28	0.62	0.34	0.82	0.68	0.17
Avail Cap(c_a), veh/h	824	1205	321	1610	1308	416	728	1355	613	1236	1366	604
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	29.7	32.3	13.7	34.3	33.2	12.6	35.2	30.5	28.6	34.6	28.1	24.0
Incr Delay (d2), s/veh	0.1	1.9	0.4	1.2	1.2	0.5	0.2	1.7	1.2	1.2	1.7	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	1.0	4.2	0.5	4.5	3.3	0.8	0.8	4.2	1.9	4.4	5.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.8	34.2	14.1	35.5	34.5	13.1	35.4	32.2	29.7	35.8	29.8	24.4
LnGrp LOS	C	C	B	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		824			1061			663			1168	
Approach Delay, s/veh		32.8			33.9			32.2			31.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	24.0	19.2	22.5	14.9	28.6	21.6	20.0
Change Period (Y+Rc), s	6.0	6.0	5.0	6.4	6.0	6.0	6.4	* 6
Max Green Setting (Gmax), s	30.0	33.0	40.0	20.1	20.0	33.0	20.0	* 22
Max Q Clear Time (g_c+I1), s	12.8	12.1	13.3	12.5	4.3	15.9	4.4	10.5
Green Ext Time (p_c), s	0.8	5.5	0.8	3.6	0.1	6.5	0.1	3.6

Intersection Summary	
HCM 7th Control Delay, s/veh	32.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1654	141	46	1210	131	95	38	129	288	84	50
Future Volume (veh/h)	51	1654	141	46	1210	131	95	38	129	288	84	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		0.75	1.00		0.76
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1885	1900	1841	1870	1885	1826	1870	1885	1841	1900
Adj Flow Rate, veh/h	61	1969	168	55	1440	156	113	45	154	252	228	60
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	0	2	1	0	4	2	1	5	2	1	4	0
Cap, veh/h	131	2226	660	89	2073	635	262	267	173	371	270	71
Arrive On Green	0.07	0.44	0.44	0.10	0.83	0.83	0.15	0.15	0.15	0.21	0.21	0.21
Sat Flow, veh/h	1810	5106	1513	1810	5025	1539	1795	1826	1188	1795	1309	344
Grp Volume(v), veh/h	61	1969	168	55	1440	156	113	45	154	252	0	288
Grp Sat Flow(s),veh/h/ln	1810	1702	1513	1810	1675	1539	1795	1826	1188	1795	0	1653
Q Serve(g_s), s	3.9	42.5	8.5	3.5	14.1	2.7	6.9	2.6	15.3	15.5	0.0	20.1
Cycle Q Clear(g_c), s	3.9	42.5	8.5	3.5	14.1	2.7	6.9	2.6	15.3	15.5	0.0	20.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	131	2226	660	89	2073	635	262	267	173	371	0	342
V/C Ratio(X)	0.47	0.88	0.25	0.62	0.69	0.25	0.43	0.17	0.89	0.68	0.00	0.84
Avail Cap(c_a), veh/h	241	2226	660	241	2073	635	305	310	202	376	0	346
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	0.82	0.82	0.82	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.4	31.1	21.5	53.0	7.4	6.4	46.7	44.9	50.3	43.9	0.0	45.7
Incr Delay (d2), s/veh	0.6	3.8	0.6	2.2	1.6	0.8	0.4	0.1	29.3	4.0	0.0	16.0
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	17.1	3.0	1.6	2.8	0.9	3.1	1.2	5.8	7.3	0.0	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.1	34.9	22.1	55.2	9.0	7.2	47.1	45.0	79.6	47.9	0.0	61.7
LnGrp LOS	D	C	C	E	A	A	D	D	E	D		E
Approach Vol, veh/h		2198			1651			312			540	
Approach Delay, s/veh		34.4			10.4			62.9			55.3	
Approach LOS		C			B			E			E	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	22.1	9.9	58.3		29.7	12.7	55.5
Change Period (Y+Rc), s	4.6	4.0	6.0		4.9	4.0	6.0
Max Green Setting (Gmax), s	20.4	16.0	39.0		25.1	16.0	39.0
Max Q Clear Time (g_c+I1), s	17.3	5.5	44.5		22.1	5.9	16.1
Green Ext Time (p_c), s	0.3	0.0	0.0		0.5	0.0	18.5

Intersection Summary	
HCM 7th Control Delay, s/veh	30.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	1682	228	205	1005	73	292	123	257	250	151	74
Future Volume (veh/h)	92	1682	228	205	1005	73	292	123	257	250	151	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1856	1826	1678	1885	1826	1870	1870	1885	1885
Adj Flow Rate, veh/h	102	1869	253	228	1117	81	324	137	286	278	168	82
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	2	2	3	5	15	1	5	2	2	1	1
Cap, veh/h	281	2345	714	257	2261	642	354	708	318	337	716	309
Arrive On Green	0.16	0.92	0.92	0.15	0.91	0.91	0.10	0.20	0.20	0.10	0.20	0.20
Sat Flow, veh/h	3483	5106	1556	3428	4985	1415	3483	3469	1559	3456	3582	1546
Grp Volume(v), veh/h	102	1869	253	228	1117	81	324	137	286	278	168	82
Grp Sat Flow(s),veh/h/ln	1742	1702	1556	1714	1662	1415	1742	1735	1559	1728	1791	1546
Q Serve(g_s), s	3.1	13.4	2.4	7.8	4.5	0.7	11.1	3.9	21.4	9.5	4.7	5.4
Cycle Q Clear(g_c), s	3.1	13.4	2.4	7.8	4.5	0.7	11.1	3.9	21.4	9.5	4.7	5.4
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	281	2345	714	257	2261	642	354	708	318	337	716	309
V/C Ratio(X)	0.36	0.80	0.35	0.89	0.49	0.13	0.91	0.19	0.90	0.83	0.23	0.27
Avail Cap(c_a), veh/h	305	2345	714	257	2261	642	354	821	369	455	955	412
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.55	0.55	0.55	0.92	0.92	0.92	0.81	0.81	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	3.2	2.7	50.5	3.2	3.1	53.4	39.6	46.5	53.2	40.3	40.6
Incr Delay (d2), s/veh	0.2	1.6	0.8	26.3	0.7	0.4	23.2	0.1	19.3	6.6	0.3	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	1.8	0.7	4.0	1.1	0.3	5.9	1.7	9.7	4.4	2.1	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.8	4.8	3.5	76.8	4.0	3.4	76.6	39.7	65.8	59.8	40.6	41.3
LnGrp LOS	D	A	A	E	A	A	E	D	E	E	D	D
Approach Vol, veh/h		2224			1426			747			528	
Approach Delay, s/veh		6.6			15.6			65.7			50.8	
Approach LOS		A			B			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	30.2	13.0	61.1	16.2	29.7	13.7	60.4
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	15.8	28.4	9.0	47.1	12.2	32.0	10.5	45.6
Max Q Clear Time (g_c+I1), s	11.5	23.4	9.8	15.4	13.1	7.4	5.1	6.5
Green Ext Time (p_c), s	0.2	1.1	0.0	28.6	0.0	1.9	0.1	23.7

Intersection Summary	
HCM 7th Control Delay, s/veh	22.9
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	2084	104	188	1225	33	21	11	150	51	15	18
Future Volume (veh/h)	31	2084	104	188	1225	33	21	11	150	51	15	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1841	1856	1826	1900	1900	1900	1885	1900	1900	1900
Adj Flow Rate, veh/h	33	2217	111	200	1303	35	17	19	160	54	16	19
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	4	3	5	0	0	0	1	0	0	0
Cap, veh/h	70	2849	858	255	2958	935	209	219	184	172	75	89
Arrive On Green	0.08	1.00	1.00	0.15	1.00	1.00	0.12	0.12	0.12	0.09	0.09	0.09
Sat Flow, veh/h	1810	5106	1538	3428	4985	1576	1810	1900	1598	1810	791	940
Grp Volume(v), veh/h	33	2217	111	200	1303	35	17	19	160	54	0	35
Grp Sat Flow(s),veh/h/ln	1810	1702	1538	1714	1662	1576	1810	1900	1598	1810	0	1731
Q Serve(g_s), s	2.1	0.0	0.0	6.7	0.0	0.0	1.0	1.1	11.8	3.3	0.0	2.2
Cycle Q Clear(g_c), s	2.1	0.0	0.0	6.7	0.0	0.0	1.0	1.1	11.8	3.3	0.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	70	2849	858	255	2958	935	209	219	184	172	0	164
V/C Ratio(X)	0.47	0.78	0.13	0.78	0.44	0.04	0.08	0.09	0.87	0.31	0.00	0.21
Avail Cap(c_a), veh/h	241	2849	858	457	2958	935	228	239	201	241	0	231
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.54	0.54	0.54	0.89	0.89	0.89	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.1	0.0	0.0	50.1	0.0	0.0	47.4	47.4	52.2	50.7	0.0	50.2
Incr Delay (d2), s/veh	1.0	1.2	0.2	1.8	0.4	0.1	0.1	0.1	27.5	0.4	0.0	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	0.9	0.3	0.0	2.7	0.1	0.0	0.5	0.5	6.0	1.5	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.1	1.2	0.2	51.9	0.4	0.1	47.5	47.5	79.7	51.1	0.0	50.4
LnGrp LOS	E	A	A	D	A	A	D	D	E	D		D
Approach Vol, veh/h		2361			1538			196			89	
Approach Delay, s/veh		1.9			7.1			73.7			50.8	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	18.7	12.9	72.9		15.4	8.7	77.2
Change Period (Y+Rc), s	4.9	4.0	6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s	15.1	16.0	54.0		16.0	16.0	54.0
Max Q Clear Time (g_c+I1), s	13.8	8.7	2.0		5.3	4.1	2.0
Green Ext Time (p_c), s	0.0	0.2	46.5		0.1	0.0	26.9

Intersection Summary	
HCM 7th Control Delay, s/veh	8.2
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	33	2230	0	1416	140	376	42
Future Volume (veh/h)	33	2230	0	1416	140	376	42
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
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
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1856	1870		1826	1885	1900	1826
Adj Flow Rate, veh/h	37	2478		1573	156	418	47
Peak Hour Factor	0.90	0.90		0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	2		5	1	0	5
Cap, veh/h	94	5004		3445	1104	488	215
Arrive On Green	0.11	1.00		0.69	0.69	0.14	0.14
Sat Flow, veh/h	1767	6696		5149	1598	3510	1547
Grp Volume(v), veh/h	37	2478		1573	156	418	47
Grp Sat Flow(s),veh/h/ln	1767	1609		1662	1598	1755	1547
Q Serve(g_s), s	2.3	0.0		17.1	4.0	14.0	3.2
Cycle Q Clear(g_c), s	2.3	0.0		17.1	4.0	14.0	3.2
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	94	5004		3445	1104	488	215
V/C Ratio(X)	0.39	0.50		0.46	0.14	0.86	0.22
Avail Cap(c_a), veh/h	236	5004		3445	1104	761	335
HCM Platoon Ratio	2.00	2.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.61	0.61		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	0.0		8.4	6.3	50.5	45.9
Incr Delay (d2), s/veh	0.6	0.2		0.4	0.3	3.6	0.2
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.1		5.3	1.2	6.4	2.9
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	52.4	0.2		8.8	6.6	54.1	46.1
LnGrp LOS	D	A		A	A	D	D
Approach Vol, veh/h		2515		1729		465	
Approach Delay, s/veh		1.0		8.6		53.3	
Approach LOS		A		A		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			99.3		20.7	10.4	88.9
Change Period (Y+Rc), s			6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s			64.0		26.0	16.0	64.0
Max Q Clear Time (g_c+I1), s			2.0		16.0	4.3	19.1
Green Ext Time (p_c), s			54.9		0.7	0.0	29.3

Intersection Summary	
HCM 7th Control Delay, s/veh	8.9
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	2060	223	324	1465	240	186	84	413	130	50	24
Future Volume (veh/h)	82	2060	223	324	1465	240	186	84	413	130	50	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1885	1870	1841	1856	1811	1826	1781	1693	1811	1900
Adj Flow Rate, veh/h	88	2215	62	348	1575	127	200	90	0	140	54	26
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	2	1	2	4	3	6	5	8	14	6	0
Cap, veh/h	275	2739	846	410	2895	895	278	275		310	327	153
Arrive On Green	0.08	0.54	0.54	0.12	0.58	0.58	0.08	0.08	0.00	0.10	0.10	0.10
Sat Flow, veh/h	3483	5106	1577	3456	5025	1553	3346	3469	1510	3127	3441	1610
Grp Volume(v), veh/h	88	2215	62	348	1575	127	200	90	0	140	54	26
Grp Sat Flow(s),veh/h/ln	1742	1702	1577	1728	1675	1553	1673	1735	1510	1564	1721	1610
Q Serve(g_s), s	2.9	42.6	2.3	11.8	23.2	4.5	7.0	2.9	0.0	5.1	1.7	1.8
Cycle Q Clear(g_c), s	2.9	42.6	2.3	11.8	23.2	4.5	7.0	2.9	0.0	5.1	1.7	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	275	2739	846	410	2895	895	278	275		310	327	153
V/C Ratio(X)	0.32	0.81	0.07	0.85	0.54	0.14	0.72	0.33		0.45	0.17	0.17
Avail Cap(c_a), veh/h	464	2739	846	605	2895	895	446	434		417	450	211
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	0.83	0.83	0.83	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	22.8	13.4	51.8	15.7	11.7	53.6	52.2	0.0	51.0	49.9	49.9
Incr Delay (d2), s/veh	0.2	2.7	0.2	4.2	0.6	0.3	1.3	1.3	0.0	0.4	0.9	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	1.2	16.2	0.8	5.2	8.2	1.5	2.9	1.3	0.0	2.0	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.5	25.5	13.6	56.0	16.3	12.0	54.9	53.6	0.0	51.4	50.8	51.8
LnGrp LOS	D	C	B	E	B	B	D	D		D	D	D
Approach Vol, veh/h		2365			2050			290			220	
Approach Delay, s/veh		26.2			22.8			54.5			51.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	15.5	18.2	70.4	14.0	17.4	13.5	75.1
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	16.0	15.0	21.0	48.0	16.0	* 16	16.0	53.0
Max Q Clear Time (g_c+I1), s	7.1	4.9	13.8	44.6	9.0	3.8	4.9	25.2
Green Ext Time (p_c), s	0.1	0.4	0.4	3.3	0.2	0.5	0.1	24.0

Intersection Summary	
HCM 7th Control Delay, s/veh	27.5
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 7th Edition methodology does not support current ring-barrier structure.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑	↱	↰↰	↑↑	↱	↰↰		↱↱	↰	↑↑	↱
Traffic Volume (veh/h)	0	2165	356	306	804	141	238	0	475	95	478	374
Future Volume (veh/h)	0	2165	356	306	804	141	238	0	475	95	478	374
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1870	1841	1870	1885	1856	0	1856	1870	1856	1826
Adj Flow Rate, veh/h	0	2353	387	333	874	0	259	0	516	103	520	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	3	2	4	2	1	3	0	3	2	3	5
Cap, veh/h	0	3782	939	394	2636		0	0	0	282	558	
Arrive On Green	0.00	0.59	0.59	0.12	0.74	0.00	0.00	0.00	0.00	0.16	0.16	0.00
Sat Flow, veh/h	0	6643	1584	3401	3554	1598		0		1781	3526	1547
Grp Volume(v), veh/h	0	2353	387	333	874	0		0.0		103	520	0
Grp Sat Flow(s),veh/h/ln	0	1596	1584	1700	1777	1598				1781	1763	1547
Q Serve(g_s), s	0.0	28.6	15.8	11.5	10.1	0.0				6.2	17.5	0.0
Cycle Q Clear(g_c), s	0.0	28.6	15.8	11.5	10.1	0.0				6.2	17.5	0.0
Prop In Lane	0.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3782	939	394	2636					282	558	
V/C Ratio(X)	0.00	0.62	0.41	0.85	0.33					0.37	0.93	
Avail Cap(c_a), veh/h	0	3782	939	595	2636					282	558	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.80	0.80	1.00	1.00	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	15.8	13.2	52.0	5.3	0.0				45.1	49.9	0.0
Incr Delay (d2), s/veh	0.0	0.6	1.1	4.4	0.3	0.0				1.5	23.1	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
%ile BackOfQ(50%),veh/ln	0.0	10.1	5.8	5.0	3.0	0.0				2.9	9.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	16.4	14.3	56.4	5.6	0.0				46.7	73.0	0.0
LnGrp LOS		B	B	E	A					D	E	
Approach Vol, veh/h		2740			1207						623	
Approach Delay, s/veh		16.1			19.7						68.6	
Approach LOS		B			B						E	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		17.9	77.1		25.0		95.0					
Change Period (Y+Rc), s		4.0	6.0		6.0		6.0					
Max Green Setting (Gmax), s		21.0	39.0		19.0		64.0					
Max Q Clear Time (g_c+I1), s		13.5	30.6		19.5		12.1					
Green Ext Time (p_c), s		0.4	8.4		0.0		15.6					

Intersection Summary	
HCM 7th Control Delay, s/veh	24.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	5	0	0	0	0	4	0	0	0
Future Volume (veh/h)	0	0	0	5	0	0	0	0	4	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1307	1900	1900	1900	1900	789	1900	1900	1900
Adj Flow Rate, veh/h	0	0	0	11	0	0	0	0	9	0	0	0
Peak Hour Factor	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Percent Heavy Veh, %	0	0	0	40	0	0	0	0	75	0	0	0
Cap, veh/h	13	25	11	36	54	24	13	1270	235	13	1825	566
Arrive On Green	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00
Sat Flow, veh/h	1810	3610	1610	2415	3610	1610	1810	3610	668	1810	5187	1610
Grp Volume(v), veh/h	0	0	0	11	0	0	0	0	9	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1208	1805	1610	1810	1805	668	1810	1729	1610
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
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	13	25	11	36	54	24	13	1270	235	13	1825	566
V/C Ratio(X)	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
Avail Cap(c_a), veh/h	764	4572	2039	3314	8001	3569	637	4953	917	637	7117	2209
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)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.1	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	0.0	11.6	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0
LnGrp LOS				B					A			
Approach Vol, veh/h		0			11			9			0	
Approach Delay, s/veh		0.0			11.6			3.1			0.0	
Approach LOS					B			A				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.0	9.5	4.7	0.0	0.0	9.5	0.0	4.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	19.5	19.5	18.0	5.0	19.5	6.0	31.5
Max Q Clear Time (g_c+I1), s	0.0	2.1	2.1	0.0	0.0	0.0	0.0	0.0
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 7th Control Delay, s/veh	7.8
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	183	33	80	140	295	36	185	111	421	297	55
Future Volume (veh/h)	50	183	33	80	140	295	36	185	111	421	297	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1678	1885	1870	1856	1811	1767	1900	1870	1796	1900
Adj Flow Rate, veh/h	63	232	42	101	177	373	46	234	141	533	376	70
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	15	1	2	3	6	9	0	2	7	0
Cap, veh/h	296	591	232	356	649	286	98	492	219	577	1457	666
Arrive On Green	0.09	0.17	0.17	0.10	0.18	0.18	0.06	0.15	0.15	0.32	0.43	0.43
Sat Flow, veh/h	3456	3554	1392	3483	3554	1567	1725	3357	1495	1781	3413	1559
Grp Volume(v), veh/h	63	232	42	101	177	373	46	234	141	533	376	70
Grp Sat Flow(s),veh/h/ln	1728	1777	1392	1742	1777	1567	1725	1678	1495	1781	1706	1559
Q Serve(g_s), s	1.3	4.6	2.0	2.1	3.4	14.3	2.0	5.0	7.0	22.6	5.6	2.1
Cycle Q Clear(g_c), s	1.3	4.6	2.0	2.1	3.4	14.3	2.0	5.0	7.0	22.6	5.6	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	296	591	232	356	649	286	98	492	219	577	1457	666
V/C Ratio(X)	0.21	0.39	0.18	0.28	0.27	1.30	0.47	0.48	0.64	0.92	0.26	0.11
Avail Cap(c_a), veh/h	707	649	254	712	649	286	683	613	273	1252	1714	783
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	33.3	29.1	28.0	32.5	27.5	32.0	35.8	30.6	31.5	25.5	14.4	13.4
Incr Delay (d2), s/veh	0.1	1.1	0.9	0.2	0.6	159.1	1.3	1.8	7.8	2.8	0.4	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	0.5	1.9	0.7	0.8	1.4	17.6	0.8	2.0	2.8	9.1	2.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.4	30.1	29.0	32.6	28.1	191.1	37.1	32.4	39.2	28.3	14.9	13.8
LnGrp LOS	C	C	C	C	C	F	D	C	D	C	B	B
Approach Vol, veh/h		337			651			421			979	
Approach Delay, s/veh		30.6			122.2			35.2			22.1	
Approach LOS		C			F			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.4	17.2	12.0	18.7	8.4	39.1	10.7	20.0
Change Period (Y+Rc), s	5.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	25.4	14.3	16.0	14.3	31.0	39.3	16.0	14.3
Max Q Clear Time (g_c+I1), s	24.6	9.0	4.1	6.6	4.0	7.6	3.3	16.3
Green Ext Time (p_c), s	0.8	1.5	0.1	1.5	0.0	8.8	0.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	52.9
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	741	12	69	452	37	19	87	128	106	118	68
Future Volume (veh/h)	76	741	12	69	452	37	19	87	128	106	118	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1811	1856	1856	1737	1885	1870	1885	1870	1856
Adj Flow Rate, veh/h	94	915	15	85	558	46	23	107	158	131	146	84
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	1	0	6	3	3	11	1	2	1	2	3
Cap, veh/h	178	1229	547	165	1122	92	41	191	196	149	166	95
Arrive On Green	0.10	0.34	0.34	0.10	0.34	0.34	0.12	0.12	0.12	0.23	0.23	0.23
Sat Flow, veh/h	1810	3582	1594	1725	3295	271	331	1538	1585	640	714	411
Grp Volume(v), veh/h	94	915	15	85	298	306	130	0	158	361	0	0
Grp Sat Flow(s),veh/h/ln	1810	1791	1594	1725	1763	1803	1869	0	1585	1764	0	0
Q Serve(g_s), s	4.6	20.9	0.6	4.3	12.4	12.5	6.1	0.0	9.0	18.3	0.0	0.0
Cycle Q Clear(g_c), s	4.6	20.9	0.6	4.3	12.4	12.5	6.1	0.0	9.0	18.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.15	0.18		1.00	0.36		0.23
Lane Grp Cap(c), veh/h	178	1229	547	165	600	614	232	0	196	410	0	0
V/C Ratio(X)	0.53	0.74	0.03	0.51	0.50	0.50	0.56	0.00	0.80	0.88	0.00	0.00
Avail Cap(c_a), veh/h	391	1546	688	372	818	837	403	0	342	628	0	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	39.7	26.9	20.2	39.8	24.2	24.3	38.2	0.0	39.5	34.3	0.0	0.0
Incr Delay (d2), s/veh	0.9	2.0	0.0	0.9	1.1	1.1	0.8	0.0	2.9	6.3	0.0	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	2.1	9.0	0.2	1.9	5.2	5.4	2.8	0.0	3.6	8.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.6	28.9	20.2	40.8	25.3	25.3	39.0	0.0	42.4	40.7	0.0	0.0
LnGrp LOS	D	C	C	D	C	C	D		D	D		
Approach Vol, veh/h		1024			689			288			361	
Approach Delay, s/veh		29.8			27.2			40.9			40.7	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	16.8	12.9	37.5	25.5	13.1	37.3
Change Period (Y+Rc), s	5.3	4.0	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	20.0	20.0	40.0	33.0	20.0	43.0
Max Q Clear Time (g_c+I1), s	11.0	6.3	22.9	20.3	6.6	14.5
Green Ext Time (p_c), s	0.5	0.1	8.9	1.2	0.1	6.7

Intersection Summary	
HCM 7th Control Delay, s/veh	32.1
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	740	403	292	217	83	332	582	445	163	827	69
Future Volume (veh/h)	77	740	403	292	217	83	332	582	445	163	827	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1885	1900	1826	1856	1796	1781	1781	1841	1826	1826	1841
Adj Flow Rate, veh/h	87	831	257	328	244	40	373	654	184	183	929	26
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	4	1	0	5	3	7	8	8	4	5	5	4
Cap, veh/h	199	1415	628	378	1583	683	395	1408	446	227	1180	369
Arrive On Green	0.06	0.40	0.40	0.11	0.45	0.45	0.12	0.29	0.29	0.07	0.24	0.24
Sat Flow, veh/h	3401	3582	1590	3374	3526	1522	3291	4863	1540	3374	4985	1560
Grp Volume(v), veh/h	87	831	257	328	244	40	373	654	184	183	929	26
Grp Sat Flow(s),veh/h/ln	1700	1791	1590	1687	1763	1522	1646	1621	1540	1687	1662	1560
Q Serve(g_s), s	3.7	27.4	17.5	14.3	6.1	2.2	16.9	16.6	14.5	8.0	26.2	1.9
Cycle Q Clear(g_c), s	3.7	27.4	17.5	14.3	6.1	2.2	16.9	16.6	14.5	8.0	26.2	1.9
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	199	1415	628	378	1583	683	395	1408	446	227	1180	369
V/C Ratio(X)	0.44	0.59	0.41	0.87	0.15	0.06	0.94	0.46	0.41	0.81	0.79	0.07
Avail Cap(c_a), veh/h	272	1415	628	652	1583	683	395	1511	478	270	1362	426
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)	0.67	0.67	0.67	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.2	35.7	32.7	65.5	24.5	23.4	65.5	43.7	43.0	69.0	53.7	44.4
Incr Delay (d2), s/veh	0.4	1.2	1.3	2.3	0.2	0.1	31.0	0.4	1.0	11.9	3.4	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	1.6	11.9	6.9	6.2	2.6	0.8	8.7	6.6	5.6	3.8	11.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.6	36.9	34.1	67.8	24.7	23.5	96.5	44.1	44.0	80.9	57.2	44.6
LnGrp LOS	E	D	C	E	C	C	F	D	D	F	E	D
Approach Vol, veh/h		1175			612			1211			1138	
Approach Delay, s/veh		38.7			47.7			60.2			60.7	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	49.8	20.8	65.3	22.0	41.9	12.8	73.3
Change Period (Y+Rc), s	4.0	6.4	4.0	* 6	4.0	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	12.0	46.6	29.0	* 42	18.0	* 41	12.0	59.0
Max Q Clear Time (g_c+I1), s	10.0	18.6	16.3	29.4	18.9	28.2	5.7	8.1
Green Ext Time (p_c), s	0.1	8.1	0.5	7.4	0.0	7.3	0.1	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	52.4
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	1160	205	168	585	190	132	397	208	338	577	113
Future Volume (veh/h)	82	1160	205	168	585	190	132	397	208	338	577	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.89	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1885	1885	1885	1826	1841	1841	1870	1900	1870	1870	1856
Adj Flow Rate, veh/h	92	1303	86	189	657	80	148	446	47	380	648	34
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	4	1	1	1	5	4	4	2	0	2	2	3
Cap, veh/h	189	1173	510	711	1700	763	206	531	214	446	825	321
Arrive On Green	0.06	0.33	0.33	0.41	0.98	0.98	0.06	0.15	0.15	0.13	0.23	0.23
Sat Flow, veh/h	3401	3582	1557	3483	3469	1557	3401	3554	1432	3456	3554	1382
Grp Volume(v), veh/h	92	1303	86	189	657	80	148	446	47	380	648	34
Grp Sat Flow(s),veh/h/ln	1700	1791	1557	1742	1735	1557	1700	1777	1432	1728	1777	1382
Q Serve(g_s), s	3.2	39.3	3.7	4.3	0.7	0.1	5.1	14.7	3.5	12.9	20.6	2.3
Cycle Q Clear(g_c), s	3.2	39.3	3.7	4.3	0.7	0.1	5.1	14.7	3.5	12.9	20.6	2.3
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	189	1173	510	711	1700	763	206	531	214	446	825	321
V/C Ratio(X)	0.49	1.11	0.17	0.27	0.39	0.10	0.72	0.84	0.22	0.85	0.79	0.11
Avail Cap(c_a), veh/h	453	1173	510	711	1700	763	567	542	218	778	825	321
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	0.95	0.95	0.95	0.87	0.87	0.87	0.91	0.91	0.91
Uniform Delay (d), s/veh	55.0	40.4	17.9	29.5	0.6	0.2	55.4	49.7	44.9	51.1	43.3	36.3
Incr Delay (d2), s/veh	0.5	58.8	0.5	0.1	0.2	0.1	1.5	10.5	0.8	1.7	5.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	26.0	1.8	1.7	0.2	0.1	2.2	7.2	1.2	5.6	9.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.5	99.2	18.4	29.6	0.8	0.3	56.9	60.2	45.7	52.8	48.3	36.5
LnGrp LOS	E	F	B	C	A	A	E	E	D	D	D	D
Approach Vol, veh/h		1481			926			641			1062	
Approach Delay, s/veh		91.8			6.7			58.4			49.5	
Approach LOS		F			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	23.6	30.2	45.0	11.3	33.5	10.7	64.5
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	27.6	* 18	16.0	* 39	20.0	25.3	16.0	39.3
Max Q Clear Time (g_c+I1), s	14.9	16.7	6.3	41.3	7.1	22.6	5.2	2.7
Green Ext Time (p_c), s	0.6	0.7	0.2	0.0	0.2	1.5	0.1	8.5

Intersection Summary	
HCM 7th Control Delay, s/veh	56.5
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1684	47	90	855	75	166
Future Volume (veh/h)	1684	47	90	855	75	166
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1870	1841	1870	1885	1885
Adj Flow Rate, veh/h	1914	53	102	972	85	189
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	2	4	2	1	1
Cap, veh/h	2415	67	127	2785	243	216
Arrive On Green	0.90	0.90	0.07	0.78	0.14	0.14
Sat Flow, veh/h	3654	98	1753	3647	1795	1598
Grp Volume(v), veh/h	958	1009	102	972	85	189
Grp Sat Flow(s),veh/h/ln	1791	1867	1753	1777	1795	1598
Q Serve(g_s), s	21.8	22.6	6.9	9.8	5.2	13.9
Cycle Q Clear(g_c), s	21.8	22.6	6.9	9.8	5.2	13.9
Prop In Lane		0.05	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1215	1266	127	2785	243	216
V/C Ratio(X)	0.79	0.80	0.80	0.35	0.35	0.87
Avail Cap(c_a), veh/h	1215	1266	380	2785	389	346
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.50	0.50	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	3.0	3.0	54.8	3.9	47.1	50.9
Incr Delay (d2), s/veh	2.7	2.7	4.5	0.3	0.3	8.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.6	3.1	2.6	2.3	5.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.7	5.7	59.3	4.2	47.4	59.2
LnGrp LOS	A	A	E	A	D	E
Approach Vol, veh/h	1967			1074	274	
Approach Delay, s/veh	5.7			9.4	55.5	
Approach LOS	A			A	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	20.2	12.7	87.1		99.8
Change Period (Y+Rc), s	4.0	4.0	5.7		5.7
Max Green Setting (Gmax), s	26.0	26.0	38.3		84.3
Max Q Clear Time (g_c+I1), s	15.9	8.9	24.6		11.8
Green Ext Time (p_c), s	0.3	0.1	12.5		15.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.0
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	1505	138	375	649	134	161	524	691	311	519	88
Future Volume (veh/h)	208	1505	138	375	649	134	161	524	691	311	519	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1841	1811	1826	1826	1811	1826	1856	1885	1841	1856
Adj Flow Rate, veh/h	229	1654	0	412	713	0	177	576	0	342	570	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	4	6	5	5	6	5	3	1	4	3
Cap, veh/h	286	2101		506	1501		234	655		402	1178	
Arrive On Green	0.08	0.41	0.00	0.10	0.43	0.00	0.07	0.19	0.00	0.12	0.23	0.00
Sat Flow, veh/h	3483	5147	1560	4864	3469	1547	3346	3469	1572	3483	5025	1572
Grp Volume(v), veh/h	229	1654	0	412	713	0	177	576	0	342	570	0
Grp Sat Flow(s),veh/h/ln	1742	1716	1560	1621	1735	1547	1673	1735	1572	1742	1675	1572
Q Serve(g_s), s	7.8	33.6	0.0	9.9	17.6	0.0	6.2	19.4	0.0	11.6	11.8	0.0
Cycle Q Clear(g_c), s	7.8	33.6	0.0	9.9	17.6	0.0	6.2	19.4	0.0	11.6	11.8	0.0
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	286	2101		506	1501		234	655		402	1178	
V/C Ratio(X)	0.80	0.79		0.81	0.47		0.76	0.88		0.85	0.48	
Avail Cap(c_a), veh/h	357	2101		770	1501		446	694		464	1178	
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	0.00	1.00	1.00	0.00	0.87	0.87	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.1	31.0	0.0	52.6	24.3	0.0	54.8	47.3	0.0	52.0	39.7	0.0
Incr Delay (d2), s/veh	7.9	3.1	0.0	2.2	1.1	0.0	1.6	11.1	0.0	12.5	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	3.6	13.7	0.0	4.0	7.1	0.0	2.6	9.2	0.0	5.7	4.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.0	34.0	0.0	54.8	25.4	0.0	56.5	58.5	0.0	64.6	40.1	0.0
LnGrp LOS	E	C		D	C		E	E		E	D	
Approach Vol, veh/h		1883			1125			753			912	
Approach Delay, s/veh		37.4			36.2			58.0			49.3	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	28.7	18.5	55.0	12.4	34.1	15.6	57.9
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	5.7	6.0
Max Green Setting (Gmax), s	16.0	24.0	19.0	* 39	16.0	24.0	12.3	46.0
Max Q Clear Time (g_c+I1), s	13.6	21.4	11.9	35.6	8.2	13.8	9.8	19.6
Green Ext Time (p_c), s	0.3	1.2	0.5	3.3	0.2	3.5	0.1	7.0

Intersection Summary	
HCM 7th Control Delay, s/veh	42.8
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	246	1617	241	211	784	76	161	611	232	121	559	199
Future Volume (veh/h)	246	1617	241	211	784	76	161	611	232	121	559	199
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1841	1900	1796	1870	1870	1737	1856	1826
Adj Flow Rate, veh/h	276	1817	102	237	881	0	181	687	0	136	628	57
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	1	4	0	7	2	2	11	3	5
Cap, veh/h	335	1672	510	725	2276		237	807		189	697	300
Arrive On Green	0.10	0.33	0.33	0.21	0.45	0.00	0.07	0.23	0.00	0.06	0.20	0.20
Sat Flow, veh/h	3456	5106	1558	3483	5025	1610	3319	3554	1585	3209	3526	1519
Grp Volume(v), veh/h	276	1817	102	237	881	0	181	687	0	136	628	57
Grp Sat Flow(s),veh/h/ln	1728	1702	1558	1742	1675	1610	1659	1777	1585	1605	1763	1519
Q Serve(g_s), s	9.4	39.3	5.7	6.9	14.0	0.0	6.4	22.2	0.0	5.0	20.9	2.9
Cycle Q Clear(g_c), s	9.4	39.3	5.7	6.9	14.0	0.0	6.4	22.2	0.0	5.0	20.9	2.9
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	335	1672	510	725	2276		237	807		189	697	300
V/C Ratio(X)	0.82	1.09	0.20	0.33	0.39		0.76	0.85		0.72	0.90	0.19
Avail Cap(c_a), veh/h	461	1672	510	725	2276		443	807		428	705	304
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	40.3	29.0	40.4	21.8	0.0	54.7	44.4	0.0	55.5	47.0	24.1
Incr Delay (d2), s/veh	6.1	49.6	0.9	0.1	0.5	0.0	1.9	9.6	0.0	1.9	17.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	23.3	2.2	2.9	5.3	0.0	2.7	10.5	0.0	2.0	10.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.3	89.9	29.9	40.5	22.3	0.0	56.6	54.0	0.0	57.5	64.0	25.5
LnGrp LOS	E	F	C	D	C		E	D		E	E	C
Approach Vol, veh/h		2195			1118			868			821	
Approach Delay, s/veh		83.3			26.1			54.6			60.2	
Approach LOS		F			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	33.0	31.0	45.0	14.3	29.7	15.6	60.4
Change Period (Y+Rc), s	4.0	5.7	6.0	5.7	5.7	* 6	4.0	6.0
Max Green Setting (Gmax), s	16.0	24.3	19.0	39.3	16.0	* 24	16.0	44.0
Max Q Clear Time (g_c+I1), s	7.0	24.2	8.9	41.3	8.4	22.9	11.4	16.0
Green Ext Time (p_c), s	0.1	0.0	0.3	0.0	0.2	0.8	0.2	9.0

Intersection Summary	
HCM 7th Control Delay, s/veh	61.7
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	2022	10	21	914	85	52	23	44	142	17	64
Future Volume (veh/h)	14	2022	10	21	914	85	52	23	44	142	17	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1826	1870	1885	1870	1900	1870	1885	1900	1900
Adj Flow Rate, veh/h	16	2351	0	24	1063	0	60	27	0	165	20	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	2	0	5	2	1	2	0	2	1	0	0
Cap, veh/h	44	2225		403	3357		90	108		192	215	
Arrive On Green	0.02	0.44	0.00	0.23	0.66	0.00	0.05	0.06	0.00	0.11	0.11	0.00
Sat Flow, veh/h	1810	5106	1610	1739	5106	1598	1781	1900	1585	1795	1900	1610
Grp Volume(v), veh/h	16	2351	0	24	1063	0	60	27	0	165	20	0
Grp Sat Flow(s),veh/h/ln	1810	1702	1610	1739	1702	1598	1781	1900	1585	1795	1900	1610
Q Serve(g_s), s	1.0	52.3	0.0	1.3	10.8	0.0	4.0	1.6	0.0	10.8	1.1	0.0
Cycle Q Clear(g_c), s	1.0	52.3	0.0	1.3	10.8	0.0	4.0	1.6	0.0	10.8	1.1	0.0
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	44	2225		403	3357		90	108		192	215	
V/C Ratio(X)	0.37	1.06		0.06	0.32		0.67	0.25		0.86	0.09	
Avail Cap(c_a), veh/h	241	2225		403	3357		238	317		209	302	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.7	33.8	0.0	35.9	8.9	0.0	56.0	54.2	0.0	52.7	47.7	0.0
Incr Delay (d2), s/veh	1.9	36.1	0.0	0.0	0.2	0.0	3.2	0.9	0.0	25.1	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	0.5	27.5	0.0	0.5	3.6	0.0	1.9	0.8	0.0	6.2	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.6	69.9	0.0	36.0	9.1	0.0	59.2	55.1	0.0	77.8	47.9	0.0
LnGrp LOS	E	F		D	A		E	E		E	D	
Approach Vol, veh/h		2367			1087			87			185	
Approach Delay, s/veh		69.8			9.7			57.9			74.6	
Approach LOS		E			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.8	11.7	33.5	58.0	10.1	18.5	6.9	84.6
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	14.0	* 20	14.0	* 52	16.0	19.1	16.0	50.3
Max Q Clear Time (g_c+I1), s	12.8	3.6	3.3	54.3	6.0	3.1	3.0	12.8
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1

Intersection Summary	
HCM 7th Control Delay, s/veh	52.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	782	39	428	246	353	32	1111	1007	487	599	88
Future Volume (veh/h)	167	782	39	428	246	353	32	1111	1007	487	599	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1900	1870	1870	1870	1856	1870	1885	1870	1841	1870
Adj Flow Rate, veh/h	176	823	0	451	259	0	34	1169	0	513	631	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	0	2	2	2	3	2	1	2	4	2
Cap, veh/h	494	730		664	470		155	1234		599	1901	
Arrive On Green	0.14	0.14	0.00	0.13	0.13	0.00	0.05	0.24	0.00	0.06	0.12	0.00
Sat Flow, veh/h	3428	5066	1610	5023	3554	1585	3428	5106	1598	3456	5025	1585
Grp Volume(v), veh/h	176	823	0	451	259	0	34	1169	0	513	631	0
Grp Sat Flow(s),veh/h/ln	1714	1689	1610	1674	1777	1585	1714	1702	1598	1728	1675	1585
Q Serve(g_s), s	5.6	17.3	0.0	10.3	8.2	0.0	1.1	27.0	0.0	17.7	13.8	0.0
Cycle Q Clear(g_c), s	5.6	17.3	0.0	10.3	8.2	0.0	1.1	27.0	0.0	17.7	13.8	0.0
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	494	730		664	470		155	1234		599	1901	
V/C Ratio(X)	0.36	1.13		0.68	0.55		0.22	0.95		0.86	0.33	
Avail Cap(c_a), veh/h	494	730		850	601		457	1234		778	1901	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.92	0.92	0.00
Uniform Delay (d), s/veh	46.3	51.3	0.0	49.6	48.7	0.0	55.2	44.7	0.0	55.1	38.7	0.0
Incr Delay (d2), s/veh	0.7	74.0	0.0	2.3	1.7	0.0	0.3	14.9	0.0	6.9	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	2.4	12.1	0.0	4.3	3.7	0.0	0.5	12.7	0.0	8.7	6.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.1	125.4	0.0	51.9	50.5	0.0	55.5	59.7	0.0	62.0	39.1	0.0
LnGrp LOS	D	F		D	D		E	E		E	D	
Approach Vol, veh/h		999			710			1203			1144	
Approach Delay, s/veh		111.6			51.4			59.6			49.4	
Approach LOS		F			D			E			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	23.6	25.8	35.0	25.0	9.4	51.4
Change Period (Y+Rc), s	7.7	5.0	6.0	7.7	4.0	* 6
Max Green Setting (Gmax), s	20.3	27.0	29.0	17.3	16.0	* 41
Max Q Clear Time (g_c+I1), s	12.3	19.7	29.0	19.3	3.1	15.8
Green Ext Time (p_c), s	3.2	1.1	0.0	0.0	0.0	6.7

Intersection Summary	
HCM 7th Control Delay, s/veh	68.1
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	18	149	31	7	19	265	1164	57	168	951	151
Future Volume (veh/h)	214	18	149	31	7	19	265	1164	57	168	951	151
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1856	1856	1900	1900	1885	1870	1870	1900	1856	1885
Adj Flow Rate, veh/h	254	0	38	41	0	21	298	1308	64	189	1069	57
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	0	3	3	0	0	1	2	2	0	3	1
Cap, veh/h	360	0	105	200	0	90	364	2020	99	1385	3158	995
Arrive On Green	0.07	0.00	0.07	0.06	0.00	0.06	0.10	0.32	0.32	0.79	1.00	1.00
Sat Flow, veh/h	5302	0	1552	3534	0	1585	3483	6326	309	3510	5066	1596
Grp Volume(v), veh/h	254	0	38	41	0	21	298	997	375	189	1069	57
Grp Sat Flow(s),veh/h/ln	1767	0	1552	1767	0	1585	1742	1609	1809	1755	1689	1596
Q Serve(g_s), s	5.6	0.0	2.8	1.3	0.0	1.5	10.1	21.3	21.4	1.5	0.0	0.0
Cycle Q Clear(g_c), s	5.6	0.0	2.8	1.3	0.0	1.5	10.1	21.3	21.4	1.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	360	0	105	200	0	90	364	1541	578	1385	3158	995
V/C Ratio(X)	0.71	0.00	0.36	0.20	0.00	0.23	0.82	0.65	0.65	0.14	0.34	0.06
Avail Cap(c_a), veh/h	1016	0	297	589	0	264	755	1741	653	1385	3158	995
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.71	0.71	0.71	0.93	0.93	0.93
Uniform Delay (d), s/veh	54.8	0.0	53.4	54.0	0.0	54.1	52.6	35.0	35.1	7.8	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.8	0.2	0.0	0.5	1.3	1.5	4.0	0.0	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	2.5	0.0	1.1	0.6	0.0	0.6	4.5	8.5	10.0	0.6	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.7	0.0	54.2	54.2	0.0	54.6	53.9	36.6	39.1	7.8	0.3	0.1
LnGrp LOS	E		D	D		D	D	D	D	A	A	A
Approach Vol, veh/h		292			62			1670			1315	
Approach Delay, s/veh		55.5			54.3			40.2			1.4	
Approach LOS		E			D			D			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.0	44.0		12.1	16.5	80.5		10.8
Change Period (Y+Rc), s	5.7	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	14.3	43.3		23.0	26.0	33.3		20.0
Max Q Clear Time (g_c+I1), s	3.5	23.4		7.6	12.1	2.0		3.5
Green Ext Time (p_c), s	0.2	15.0		0.5	0.5	16.5		0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	26.5
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	37	346	0	0	0	0	1010	423	0	1089	524
Future Volume (veh/h)	86	37	346	0	0	0	0	1010	423	0	1089	524
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1870				0	1870	1870	0	1856	1870
Adj Flow Rate, veh/h	79	0	437				0	1135	475	0	1224	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	3	2				0	2	2	0	3	2
Cap, veh/h	285	0	506				0	2625	1097	0	3792	
Arrive On Green	0.16	0.00	0.16				0.00	1.00	1.00	0.00	1.00	0.00
Sat Flow, veh/h	1781	0	3170				0	3674	1465	0	5233	1585
Grp Volume(v), veh/h	79	0	437				0	1102	508	0	1224	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1567	0	1689	1585
Q Serve(g_s), s	4.7	0.0	16.1				0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.7	0.0	16.1				0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.93	0.00		1.00
Lane Grp Cap(c), veh/h	285	0	506				0	2548	1173	0	3792	
V/C Ratio(X)	0.28	0.00	0.86				0.00	0.43	0.43	0.00	0.32	
Avail Cap(c_a), veh/h	515	0	917				0	2548	1173	0	3792	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.92	0.92	0.00	0.92	0.00
Uniform Delay (d), s/veh	44.3	0.0	49.1				0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.7				0.0	0.5	1.1	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
%ile BackOfQ(50%),veh/ln	2.1	0.0	6.5				0.0	0.2	0.4	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.5	0.0	50.9				0.0	0.5	1.1	0.0	0.2	0.0
LnGrp LOS	D		D					A	A		A	
Approach Vol, veh/h		516						1610			1224	
Approach Delay, s/veh		49.9						0.7			0.2	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	95.5	24.5	95.5
Change Period (Y+Rc), s	5.7	5.3	5.7
Max Green Setting (Gmax), s	74.3	34.7	74.3
Max Q Clear Time (g_c+I1), s	2.0	18.1	2.0
Green Ext Time (p_c), s	34.6	1.0	16.4

Intersection Summary	
HCM 7th Control Delay, s/veh	8.1
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	296	297	920	188	101	1304
Future Volume (veh/h)	296	297	920	188	101	1304
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1841	1826	1870	1856	1826	1870
Adj Flow Rate, veh/h	318	319	989	0	109	1402
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	5	2	3	5	2
Cap, veh/h	653	570	3314		134	3878
Arrive On Green	0.13	0.13	1.00	0.00	0.08	0.76
Sat Flow, veh/h	4944	2723	5274	1572	1739	5274
Grp Volume(v), veh/h	318	319	989	0	109	1402
Grp Sat Flow(s),veh/h/ln	1648	1362	1702	1572	1739	1702
Q Serve(g_s), s	7.2	12.6	0.0	0.0	7.4	10.9
Cycle Q Clear(g_c), s	7.2	12.6	0.0	0.0	7.4	10.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	653	570	3314		134	3878
V/C Ratio(X)	0.49	0.56	0.30		0.81	0.36
Avail Cap(c_a), veh/h	1141	839	3314		377	3878
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.91	0.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	42.5	0.0	0.0	54.5	4.8
Incr Delay (d2), s/veh	0.2	0.3	0.2	0.0	4.4	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	4.3	0.1	0.0	3.3	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.5	42.8	0.2	0.0	58.9	5.0
LnGrp LOS	D	D	A		E	A
Approach Vol, veh/h	637		989			1511
Approach Delay, s/veh	45.7		0.2			8.9
Approach LOS	D		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.3	83.6			96.8	23.2
Change Period (Y+Rc), s	4.0	5.7			5.7	7.3
Max Green Setting (Gmax), s	26.6	49.3			79.3	27.7
Max Q Clear Time (g_c+I1), s	9.4	2.0			12.9	14.6
Green Ext Time (p_c), s	0.1	12.2			23.8	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	13.6
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

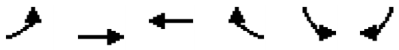
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	296	33	404	667	18	41	59	285	29	134	53
Future Volume (veh/h)	8	296	33	404	667	18	41	59	285	29	134	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1722	1678	1811	1870	1856	1811	1648	1693	1737	1796	1841	1870
Adj Flow Rate, veh/h	9	325	23	444	733	20	45	65	53	32	147	17
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	12	15	6	2	3	6	17	14	11	7	4	2
Cap, veh/h	51	673	324	490	1658	722	89	530	242	150	282	243
Arrive On Green	0.02	0.21	0.21	0.28	0.47	0.47	0.06	0.16	0.16	0.05	0.15	0.15
Sat Flow, veh/h	3182	3188	1535	1781	3526	1535	1570	3216	1472	3319	1841	1585
Grp Volume(v), veh/h	9	325	23	444	733	20	45	65	53	32	147	17
Grp Sat Flow(s),veh/h/ln	1591	1594	1535	1781	1763	1535	1570	1608	1472	1659	1841	1585
Q Serve(g_s), s	0.2	6.8	0.9	18.2	10.5	0.5	2.1	1.3	2.4	0.7	5.6	0.7
Cycle Q Clear(g_c), s	0.2	6.8	0.9	18.2	10.5	0.5	2.1	1.3	2.4	0.7	5.6	0.7
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	51	673	324	490	1658	722	89	530	242	150	282	243
V/C Ratio(X)	0.18	0.48	0.07	0.91	0.44	0.03	0.51	0.12	0.22	0.21	0.52	0.07
Avail Cap(c_a), veh/h	1681	3157	1520	1341	3492	1520	415	1359	622	877	851	733
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	36.8	26.2	23.9	26.5	13.4	10.8	34.7	27.0	27.4	34.8	29.5	27.4
Incr Delay (d2), s/veh	0.6	1.5	0.3	2.7	0.5	0.0	1.7	0.4	1.7	0.3	2.3	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	0.1	2.5	0.3	7.3	3.6	0.2	0.8	0.5	0.9	0.3	2.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.4	27.7	24.2	29.2	13.9	10.8	36.4	27.4	29.1	35.1	31.8	27.6
LnGrp LOS	D	C	C	C	B	B	D	C	C	D	C	C
Approach Vol, veh/h		357			1197			163			196	
Approach Delay, s/veh		27.7			19.5			30.4			32.0	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	18.8	25.8	22.7	9.3	17.9	6.2	42.3
Change Period (Y+Rc), s	5.0	6.3	5.0	6.7	5.0	6.3	5.0	6.7
Max Green Setting (Gmax), s	20.0	32.0	57.0	75.0	20.0	35.0	40.0	75.0
Max Q Clear Time (g_c+I1), s	2.7	4.4	20.2	8.8	4.1	7.6	2.2	12.5
Green Ext Time (p_c), s	0.0	1.3	0.6	5.2	0.0	1.4	0.0	13.8

Intersection Summary	
HCM 7th Control Delay, s/veh	23.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	132	493	749	77	151	342
Future Volume (veh/h)	132	493	749	77	151	342
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1604	1722	1841	1811	1826	1870
Adj Flow Rate, veh/h	139	519	788	81	159	360
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	20	12	4	6	5	2
Cap, veh/h	170	1850	1342	589	438	400
Arrive On Green	0.11	0.57	0.38	0.38	0.25	0.25
Sat Flow, veh/h	1527	3358	3589	1535	1739	1585
Grp Volume(v), veh/h	139	519	788	81	159	360
Grp Sat Flow(s),veh/h/ln	1527	1636	1749	1535	1739	1585
Q Serve(g_s), s	6.3	5.8	12.8	2.4	5.4	15.6
Cycle Q Clear(g_c), s	6.3	5.8	12.8	2.4	5.4	15.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	170	1850	1342	589	438	400
V/C Ratio(X)	0.82	0.28	0.59	0.14	0.36	0.90
Avail Cap(c_a), veh/h	429	2528	2702	1186	489	445
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	30.9	8.0	17.4	14.3	21.9	25.8
Incr Delay (d2), s/veh	3.7	0.2	0.9	0.2	0.2	18.7
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	1.6	4.6	0.8	2.1	14.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	34.6	8.2	18.3	14.5	22.1	44.5
LnGrp LOS	C	A	B	B	C	D
Approach Vol, veh/h		658	869		519	
Approach Delay, s/veh		13.8	18.0		37.6	
Approach LOS		B	B		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			48.2		22.9	12.9	35.3
Change Period (Y+Rc), s			8.0		5.0	5.0	8.0
Max Green Setting (Gmax), s			55.0		20.0	20.0	55.0
Max Q Clear Time (g_c+I1), s			7.8		17.6	8.3	14.8
Green Ext Time (p_c), s			7.2		0.3	0.1	12.6

Intersection Summary	
HCM 7th Control Delay, s/veh	21.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	570	33	11	660	51	20	23	7	92	36	120
Future Volume (veh/h)	67	570	33	11	660	51	20	23	7	92	36	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1767	1500	1633	1796	1811	1307	1648	1470	1826	1811	1856
Adj Flow Rate, veh/h	76	648	38	12	750	58	23	26	8	105	41	136
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	6	9	27	18	7	6	40	17	29	5	6	3
Cap, veh/h	147	1587	598	33	1396	625	46	154	116	171	280	241
Arrive On Green	0.09	0.47	0.47	0.02	0.41	0.41	0.04	0.09	0.09	0.10	0.15	0.15
Sat Flow, veh/h	1725	3357	1266	1555	3413	1527	1245	1648	1241	1739	1811	1563
Grp Volume(v), veh/h	76	648	38	12	750	58	23	26	8	105	41	136
Grp Sat Flow(s),veh/h/ln	1725	1678	1266	1555	1706	1527	1245	1648	1241	1739	1811	1563
Q Serve(g_s), s	2.5	7.3	1.0	0.4	9.7	1.4	1.1	0.8	0.3	3.4	1.1	4.7
Cycle Q Clear(g_c), s	2.5	7.3	1.0	0.4	9.7	1.4	1.1	0.8	0.3	3.4	1.1	4.7
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	147	1587	598	33	1396	625	46	154	116	171	280	241
V/C Ratio(X)	0.52	0.41	0.06	0.36	0.54	0.09	0.49	0.17	0.07	0.61	0.15	0.56
Avail Cap(c_a), veh/h	593	4325	1631	534	4397	1968	428	566	426	597	622	537
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	25.5	10.0	8.3	28.1	13.0	10.6	27.5	24.3	24.1	25.2	21.3	22.8
Incr Delay (d2), s/veh	1.1	0.3	0.1	2.5	0.6	0.1	3.0	1.1	0.5	1.3	0.3	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	0.9	2.1	0.2	0.2	3.0	0.4	0.3	0.4	0.1	1.4	0.5	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.5	10.4	8.4	30.6	13.7	10.7	30.5	25.4	24.6	26.5	21.6	25.4
LnGrp LOS	C	B	A	C	B	B	C	C	C	C	C	C
Approach Vol, veh/h		762			820			57			282	
Approach Delay, s/veh		11.9			13.7			27.3			25.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	10.0	5.2	33.2	6.2	13.6	9.0	29.5
Change Period (Y+Rc), s	4.0	* 4.6	4.0	5.7	4.0	4.6	4.0	5.7
Max Green Setting (Gmax), s	20.0	* 20	20.0	75.0	20.0	20.0	20.0	75.0
Max Q Clear Time (g_c+I1), s	5.4	2.8	2.4	9.3	3.1	6.7	4.5	11.7
Green Ext Time (p_c), s	0.1	0.1	0.0	9.6	0.0	0.6	0.1	11.9

Intersection Summary	
HCM 7th Control Delay, s/veh	15.1
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	243	389	42	209	309	217	47	923	266	368	943	344
Future Volume (veh/h)	243	389	42	209	309	217	47	923	266	368	943	344
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1678	1811	1693	1856	1781	1752	1737	1811	1856	1870	1826	1811
Adj Flow Rate, veh/h	264	423	46	227	336	60	51	1003	97	400	1025	125
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	15	6	14	3	8	10	11	6	3	2	5	6
Cap, veh/h	334	583	63	302	563	247	76	944	431	435	1640	882
Arrive On Green	0.11	0.19	0.19	0.09	0.17	0.17	0.05	0.27	0.27	0.24	0.47	0.47
Sat Flow, veh/h	3100	3132	339	3428	3385	1485	1654	3441	1572	1781	3469	1516
Grp Volume(v), veh/h	264	231	238	227	336	60	51	1003	97	400	1025	125
Grp Sat Flow(s),veh/h/ln	1550	1721	1750	1714	1692	1485	1654	1721	1572	1781	1735	1516
Q Serve(g_s), s	8.2	12.5	12.6	6.4	9.0	3.5	3.0	27.0	4.7	21.5	21.8	3.7
Cycle Q Clear(g_c), s	8.2	12.5	12.6	6.4	9.0	3.5	3.0	27.0	4.7	21.5	21.8	3.7
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	334	320	326	302	563	247	76	944	431	435	1640	882
V/C Ratio(X)	0.79	0.72	0.73	0.75	0.60	0.24	0.67	1.06	0.22	0.92	0.63	0.14
Avail Cap(c_a), veh/h	1039	524	533	801	1031	452	336	944	431	706	1640	882
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	42.8	37.7	37.7	43.8	38.0	35.6	46.2	35.7	27.6	36.3	19.4	9.4
Incr Delay (d2), s/veh	1.6	5.6	5.7	1.4	2.0	1.0	3.8	47.5	0.4	7.9	0.9	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	3.1	5.5	5.7	2.7	3.7	1.3	1.3	16.8	1.7	9.8	8.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.4	43.3	43.4	45.3	39.9	36.6	50.1	83.2	28.0	44.1	20.4	9.6
LnGrp LOS	D	D	D	D	D	D	D	F	C	D	C	A
Approach Vol, veh/h		733			623			1151			1550	
Approach Delay, s/veh		43.8			41.6			77.1			25.6	
Approach LOS		D			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	33.4	12.7	24.3	8.5	52.9	14.6	22.4
Change Period (Y+Rc), s	4.0	6.4	4.0	6.0	4.0	6.4	4.0	6.0
Max Green Setting (Gmax), s	39.6	27.0	23.0	30.0	20.0	35.0	33.0	30.0
Max Q Clear Time (g_c+I1), s	23.5	29.0	8.4	14.6	5.0	23.8	10.2	11.0
Green Ext Time (p_c), s	0.5	0.0	0.3	3.7	0.0	7.0	0.4	3.6

Intersection Summary	
HCM 7th Control Delay, s/veh	45.9
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	677	23	45	500	142	36	147	56	198	119	59
Future Volume (veh/h)	43	677	23	45	500	142	36	147	56	198	119	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1856	1841	1841	1826	1870	1811	1885	1826	1885	1826	1856
Adj Flow Rate, veh/h	44	698	24	46	515	0	37	152	13	204	123	61
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	3	4	4	5	2	6	1	5	1	5	3
Cap, veh/h	69	806	28	71	1571		43	178	246	230	138	389
Arrive On Green	0.04	0.45	0.45	0.04	0.45	0.00	0.12	0.12	0.12	0.21	0.21	0.21
Sat Flow, veh/h	1739	1783	61	1753	3469	1585	365	1501	1547	1105	666	1572
Grp Volume(v), veh/h	44	0	722	46	515	0	189	0	13	327	0	61
Grp Sat Flow(s),veh/h/ln	1739	0	1844	1753	1735	1585	1867	0	1547	1771	0	1572
Q Serve(g_s), s	2.8	0.0	40.0	2.9	10.8	0.0	11.3	0.0	0.8	20.4	0.0	3.4
Cycle Q Clear(g_c), s	2.8	0.0	40.0	2.9	10.8	0.0	11.3	0.0	0.8	20.4	0.0	3.4
Prop In Lane	1.00		0.03	1.00		1.00	0.20		1.00	0.62		1.00
Lane Grp Cap(c), veh/h	69	0	834	71	1571		221	0	246	368	0	389
V/C Ratio(X)	0.64	0.00	0.87	0.65	0.33		0.86	0.00	0.05	0.89	0.00	0.16
Avail Cap(c_a), veh/h	306	0	1121	309	1802		270	0	286	624	0	616
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	0.0	28.0	53.7	20.0	0.0	49.1	0.0	40.5	43.7	0.0	33.5
Incr Delay (d2), s/veh	3.6	0.0	7.3	3.7	0.2	0.0	17.2	0.0	0.0	4.5	0.0	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	1.3	0.0	18.0	1.3	4.2	0.0	6.2	0.0	0.3	9.2	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.3	0.0	35.3	57.4	20.2	0.0	66.3	0.0	40.6	48.2	0.0	33.5
LnGrp LOS	E		D	E	C		E		D	D		C
Approach Vol, veh/h		766			561			202			388	
Approach Delay, s/veh		36.6			23.2			64.7			45.9	
Approach LOS		D			C			E			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	18.0	8.6	57.3	29.6	8.5	57.4
Change Period (Y+Rc), s	4.6	4.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	16.4	20.0	69.0	40.0	20.0	59.0
Max Q Clear Time (g_c+I1), s	13.3	4.9	42.0	22.4	4.8	12.8
Green Ext Time (p_c), s	0.2	0.0	9.3	1.2	0.0	6.7

Intersection Summary	
HCM 7th Control Delay, s/veh	37.5
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	283	560	96	155	116	346	994	68	94	947	120
Future Volume (veh/h)	144	283	560	96	155	116	346	994	68	94	947	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1841	1856	1885	1841	1856	1781	1796	1885	1885	1856	1856
Adj Flow Rate, veh/h	157	308	133	104	168	22	376	1080	34	102	1029	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	4	3	1	4	3	8	7	1	1	3	3
Cap, veh/h	185	417	187	129	307	136	441	2873	923	196	2575	
Arrive On Green	0.10	0.12	0.12	0.07	0.09	0.09	0.13	0.59	0.59	0.06	0.51	0.00
Sat Flow, veh/h	1795	3497	1572	1795	3497	1550	3291	4904	1575	3483	5066	1572
Grp Volume(v), veh/h	157	308	133	104	168	22	376	1080	34	102	1029	0
Grp Sat Flow(s),veh/h/ln	1795	1749	1572	1795	1749	1550	1646	1635	1575	1742	1689	1572
Q Serve(g_s), s	10.3	10.2	9.8	6.8	5.5	1.6	13.4	14.0	1.1	3.4	15.0	0.0
Cycle Q Clear(g_c), s	10.3	10.2	9.8	6.8	5.5	1.6	13.4	14.0	1.1	3.4	15.0	0.0
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	185	417	187	129	307	136	441	2873	923	196	2575	
V/C Ratio(X)	0.85	0.74	0.71	0.81	0.55	0.16	0.85	0.38	0.04	0.52	0.40	
Avail Cap(c_a), veh/h	329	583	262	239	428	190	576	2873	923	464	2575	
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	0.84	0.84	0.00
Uniform Delay (d), s/veh	52.9	51.1	50.9	54.9	52.4	50.6	50.8	13.2	10.5	55.0	18.2	0.0
Incr Delay (d2), s/veh	4.1	4.8	8.4	4.4	3.2	1.2	9.5	0.4	0.1	0.7	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	4.7	4.6	4.3	3.2	2.5	0.7	6.0	4.8	0.4	1.5	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.0	55.8	59.3	59.3	55.6	51.8	60.3	13.6	10.6	55.7	18.6	0.0
LnGrp LOS	E	E	E	E	E	D	E	B	B	E	B	
Approach Vol, veh/h		598			294			1490			1131	
Approach Delay, s/veh		56.9			56.6			25.3			21.9	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	76.3	12.6	20.3	20.1	67.0	16.4	16.5
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	6.8	48.0	16.0	20.0	21.0	43.0	22.0	* 15
Max Q Clear Time (g_c+I1), s	5.4	16.0	8.8	12.2	15.4	17.0	12.3	7.5
Green Ext Time (p_c), s	0.1	9.8	0.1	2.1	0.7	10.4	0.1	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	32.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	256	75	26	455	423	194
Future Volume (veh/h)	256	75	26	455	423	194
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1885	1900	1781	1826	1885
Adj Flow Rate, veh/h	371	109	38	659	613	281
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69
Percent Heavy Veh, %	2	1	0	8	5	1
Cap, veh/h	487	437	79	1632	1097	489
Arrive On Green	0.27	0.27	0.04	0.48	0.32	0.32
Sat Flow, veh/h	1781	1598	1810	3474	3561	1548
Grp Volume(v), veh/h	371	109	38	659	613	281
Grp Sat Flow(s),veh/h/ln	1781	1598	1810	1692	1735	1548
Q Serve(g_s), s	7.0	2.0	0.8	4.6	5.4	5.6
Cycle Q Clear(g_c), s	7.0	2.0	0.8	4.6	5.4	5.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	487	437	79	1632	1097	489
V/C Ratio(X)	0.76	0.25	0.48	0.40	0.56	0.57
Avail Cap(c_a), veh/h	871	781	246	2574	1743	778
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	12.3	10.4	17.2	6.1	10.5	10.5
Incr Delay (d2), s/veh	2.5	0.3	4.5	0.2	0.4	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.3	0.8	1.4	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.8	10.7	21.7	6.3	10.9	11.6
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	480			697	894	
Approach Delay, s/veh	13.9			7.1	11.1	
Approach LOS	B			A	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	22.3		14.6	6.1	16.1
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	28.0		18.0	5.0	18.5
Max Q Clear Time (g_c+I1), s	6.6		9.0	2.8	7.6
Green Ext Time (p_c), s	4.3		1.1	0.0	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	10.4
HCM 7th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	49	160	148	428	478	18
Future Volume (veh/h)	49	160	148	428	478	18
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1796	1841	1900
Adj Flow Rate, veh/h	70	229	211	611	683	26
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Percent Heavy Veh, %	0	1	1	7	4	0
Cap, veh/h	353	311	273	1985	1112	488
Arrive On Green	0.19	0.19	0.15	0.58	0.32	0.32
Sat Flow, veh/h	1810	1598	1795	3503	3589	1534
Grp Volume(v), veh/h	70	229	211	611	683	26
Grp Sat Flow(s),veh/h/ln	1810	1598	1795	1706	1749	1534
Q Serve(g_s), s	1.3	5.4	4.5	3.7	6.7	0.5
Cycle Q Clear(g_c), s	1.3	5.4	4.5	3.7	6.7	0.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	353	311	273	1985	1112	488
V/C Ratio(X)	0.20	0.74	0.77	0.31	0.61	0.05
Avail Cap(c_a), veh/h	809	714	468	2796	1563	686
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	13.6	15.2	16.4	4.3	11.6	9.5
Incr Delay (d2), s/veh	0.3	3.4	4.7	0.1	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.9	1.8	0.5	1.9	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.8	18.6	21.1	4.4	12.2	9.6
LnGrp LOS	B	B	C	A	B	A
Approach Vol, veh/h	299			822	709	
Approach Delay, s/veh	17.5			8.7	12.1	
Approach LOS	B			A	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	27.9		12.4	10.6	17.3
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	33.0		18.0	10.5	18.0
Max Q Clear Time (g_c+I1), s	5.7		7.4	6.5	8.7
Green Ext Time (p_c), s	4.1		0.7	0.2	3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.4
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	113	80	71	48	58	32	413	54	23	237	7
Future Volume (veh/h)	17	113	80	71	48	58	32	413	54	23	237	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1885	1796	1811	1870	1900	1826	1841	1841	1811	1693
Adj Flow Rate, veh/h	20	136	96	86	58	70	39	498	65	28	286	8
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	2	1	7	6	2	0	5	4	4	6	14
Cap, veh/h	318	329	280	264	280	245	121	822	370	91	762	318
Arrive On Green	0.18	0.18	0.18	0.15	0.15	0.15	0.07	0.24	0.24	0.05	0.22	0.22
Sat Flow, veh/h	1810	1870	1595	1711	1811	1582	1810	3469	1560	1753	3441	1434
Grp Volume(v), veh/h	20	136	96	86	58	70	39	498	65	28	286	8
Grp Sat Flow(s),veh/h/ln	1810	1870	1595	1711	1811	1582	1810	1735	1560	1753	1721	1434
Q Serve(g_s), s	0.5	3.2	2.6	2.2	1.4	1.9	1.0	6.3	1.6	0.8	3.5	0.2
Cycle Q Clear(g_c), s	0.5	3.2	2.6	2.2	1.4	1.9	1.0	6.3	1.6	0.8	3.5	0.2
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	318	329	280	264	280	245	121	822	370	91	762	318
V/C Ratio(X)	0.06	0.41	0.34	0.33	0.21	0.29	0.32	0.61	0.18	0.31	0.38	0.03
Avail Cap(c_a), veh/h	730	754	643	690	730	638	730	2798	1258	707	2775	1157
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	17.0	18.2	17.9	18.7	18.3	18.5	22.1	16.9	15.1	22.7	16.4	15.1
Incr Delay (d2), s/veh	0.1	0.8	0.7	0.7	0.4	0.6	1.5	0.7	0.2	1.9	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	0.2	1.3	0.9	0.8	0.5	0.7	0.4	2.1	0.5	0.3	1.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.1	19.0	18.6	19.4	18.7	19.2	23.6	17.6	15.3	24.6	16.7	15.1
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		252			214			602			322	
Approach Delay, s/veh		18.7			19.1			17.7			17.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	17.8		12.7	7.3	17.0		12.6
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	2.5	8.3		5.2	3.0	5.5		4.2
Green Ext Time (p_c), s	0.0	3.4		1.0	0.0	1.8		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	18.0
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	20	224	36	32	8	179	416	18	4	361	22
Future Volume (veh/h)	102	20	224	36	32	8	179	416	18	4	361	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1697	1710	1710	1710	1710	1710	1710	1630	1710	1710	1643	1590
Adj Flow Rate, veh/h	136	27	299	48	43	11	239	555	24	5	481	29
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	1	0	0	0	0	0	0	6	0	0	5	9
Cap, veh/h	169	434	363	98	358	295	280	1267	591	15	769	330
Arrive On Green	0.10	0.25	0.25	0.06	0.21	0.21	0.17	0.41	0.41	0.01	0.25	0.25
Sat Flow, veh/h	1616	1710	1432	1629	1710	1410	1629	3097	1444	1629	3122	1339
Grp Volume(v), veh/h	136	27	299	48	43	11	239	555	24	5	481	29
Grp Sat Flow(s),veh/h/ln	1616	1710	1432	1629	1710	1410	1629	1548	1444	1629	1561	1339
Q Serve(g_s), s	5.9	0.9	14.2	2.1	1.5	0.4	10.3	9.3	0.7	0.2	9.9	1.2
Cycle Q Clear(g_c), s	5.9	0.9	14.2	2.1	1.5	0.4	10.3	9.3	0.7	0.2	9.9	1.2
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	169	434	363	98	358	295	280	1267	591	15	769	330
V/C Ratio(X)	0.80	0.06	0.82	0.49	0.12	0.04	0.85	0.44	0.04	0.33	0.63	0.09
Avail Cap(c_a), veh/h	560	546	457	452	474	391	565	1719	801	452	1733	743
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	31.5	20.4	25.4	32.8	23.1	22.7	28.9	15.3	12.8	35.5	24.2	20.9
Incr Delay (d2), s/veh	3.4	0.2	15.8	1.4	0.7	0.2	2.9	0.4	0.1	4.7	1.6	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	2.4	0.3	6.2	0.8	0.6	0.2	3.9	2.9	0.2	0.1	3.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.9	20.6	41.1	34.2	23.8	23.0	31.8	15.8	12.8	40.2	25.8	21.1
LnGrp LOS	C	C	D	C	C	C	C	B	B	D	C	C
Approach Vol, veh/h		462			102			818			515	
Approach Delay, s/veh		38.1			28.6			20.4			25.6	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	35.5	8.3	23.6	16.4	23.8	11.5	20.4
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	4.0	* 5.3
Max Green Setting (Gmax), s	20.0	40.0	20.0	23.0	25.0	40.0	25.0	* 20
Max Q Clear Time (g_c+I1), s	2.2	11.3	4.1	16.2	12.3	11.9	7.9	3.5
Green Ext Time (p_c), s	0.0	6.5	0.0	1.6	0.3	5.6	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	26.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	8	267	52	7	7	95	678	15	10	891	18
Future Volume (veh/h)	28	8	267	52	7	7	95	678	15	10	891	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1885	1900	1900	1900	1856	1856	1900	1900	1870	1737
Adj Flow Rate, veh/h	38	11	361	70	9	9	128	916	20	14	1204	24
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Percent Heavy Veh, %	0	0	1	0	0	0	3	3	0	0	2	11
Cap, veh/h	349	101	392	131	17	129	159	1594	726	41	1368	564
Arrive On Green	0.25	0.25	0.25	0.08	0.08	0.08	0.09	0.45	0.45	0.02	0.38	0.38
Sat Flow, veh/h	1418	411	1592	1612	207	1593	1767	3526	1605	1810	3554	1466
Grp Volume(v), veh/h	49	0	361	79	0	9	128	916	20	14	1204	24
Grp Sat Flow(s),veh/h/ln	1829	0	1592	1819	0	1593	1767	1763	1605	1810	1777	1466
Q Serve(g_s), s	2.0	0.0	21.1	4.0	0.0	0.5	6.8	18.3	0.7	0.7	30.1	1.0
Cycle Q Clear(g_c), s	2.0	0.0	21.1	4.0	0.0	0.5	6.8	18.3	0.7	0.7	30.1	1.0
Prop In Lane	0.78		1.00	0.89		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	450	0	392	147	0	129	159	1594	726	41	1368	564
V/C Ratio(X)	0.11	0.00	0.92	0.54	0.00	0.07	0.80	0.57	0.03	0.34	0.88	0.04
Avail Cap(c_a), veh/h	518	0	451	381	0	334	371	1594	726	379	1416	584
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	27.9	0.0	35.1	42.1	0.0	40.5	42.6	19.3	14.5	45.9	27.3	18.3
Incr Delay (d2), s/veh	0.0	0.0	21.4	1.1	0.0	0.1	3.6	0.7	0.0	1.8	7.0	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	0.0	10.4	1.8	0.0	0.2	3.0	6.9	0.2	0.3	12.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.9	0.0	56.5	43.2	0.0	40.6	46.2	20.1	14.5	47.7	34.3	18.4
LnGrp LOS	C		E	D		D	D	C	B	D	C	B
Approach Vol, veh/h		410			88			1064			1242	
Approach Delay, s/veh		53.1			43.0			23.1			34.2	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	49.1		28.4	12.6	42.7		11.7
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.0
Max Green Setting (Gmax), s	20.0	38.0		27.0	20.0	38.0		20.0
Max Q Clear Time (g_c+I1), s	2.7	20.3		23.1	8.8	32.1		6.0
Green Ext Time (p_c), s	0.0	8.9		0.4	0.1	4.6		0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	33.0
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	160	180	104	704	863	144
Future Volume (veh/h)	160	180	104	704	863	144
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1870	1885	1826	1841	1900
Adj Flow Rate, veh/h	182	205	118	800	981	164
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	2	1	5	4	0
Cap, veh/h	309	271	193	2234	1617	744
Arrive On Green	0.17	0.17	0.11	0.64	0.46	0.46
Sat Flow, veh/h	1810	1585	1795	3561	3589	1610
Grp Volume(v), veh/h	182	205	118	800	981	164
Grp Sat Flow(s),veh/h/ln	1810	1585	1795	1735	1749	1610
Q Serve(g_s), s	5.0	6.7	3.4	5.8	11.3	3.3
Cycle Q Clear(g_c), s	5.0	6.7	3.4	5.8	11.3	3.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	309	271	193	2234	1617	744
V/C Ratio(X)	0.59	0.76	0.61	0.36	0.61	0.22
Avail Cap(c_a), veh/h	1407	1232	598	2234	2201	1013
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	20.6	21.3	23.0	4.5	10.9	8.7
Incr Delay (d2), s/veh	0.7	1.6	3.1	0.2	0.7	0.3
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	0.1	1.4	1.0	3.2	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.3	23.0	26.1	4.6	11.6	9.0
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	387			918	1145	
Approach Delay, s/veh	22.2			7.4	11.2	
Approach LOS	C			A	B	

Timer - Assigned Phs	2	4	5	6
Phs Duration (G+Y+Rc), s	40.8	13.2	9.8	31.0
Change Period (Y+Rc), s	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	24.0	42.0	18.0	34.0
Max Q Clear Time (g_c+I1), s	7.8	8.7	5.4	13.3
Green Ext Time (p_c), s	7.4	0.6	0.2	11.7

Intersection Summary	
HCM 7th Control Delay, s/veh	11.5
HCM 7th LOS	B

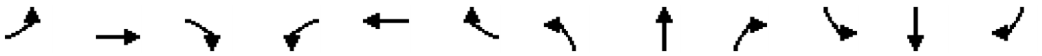
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	21	95	21	12	10	53	672	41	11	959	92
Future Volume (veh/h)	127	21	95	21	12	10	53	672	41	11	959	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1900	1870	1781	1678	1900	1826	1856
Adj Flow Rate, veh/h	146	24	109	24	14	11	61	772	47	13	1102	106
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	2	0	0	0	2	8	15	0	5	3
Cap, veh/h	212	222	185	82	48	111	141	1595	655	46	1449	655
Arrive On Green	0.12	0.12	0.12	0.07	0.07	0.07	0.08	0.47	0.47	0.03	0.42	0.42
Sat Flow, veh/h	1810	1900	1581	1163	679	1584	1781	3385	1389	1810	3469	1569
Grp Volume(v), veh/h	146	24	109	38	0	11	61	772	47	13	1102	106
Grp Sat Flow(s),veh/h/ln	1810	1900	1581	1842	0	1584	1781	1692	1389	1810	1735	1569
Q Serve(g_s), s	5.4	0.8	4.6	1.4	0.0	0.5	2.3	11.0	1.3	0.5	19.0	3.0
Cycle Q Clear(g_c), s	5.4	0.8	4.6	1.4	0.0	0.5	2.3	11.0	1.3	0.5	19.0	3.0
Prop In Lane	1.00		1.00	0.63		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	222	185	129	0	111	141	1595	655	46	1449	655
V/C Ratio(X)	0.69	0.11	0.59	0.29	0.00	0.10	0.43	0.48	0.07	0.28	0.76	0.16
Avail Cap(c_a), veh/h	515	541	450	524	0	451	507	2072	850	515	2123	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	29.8	27.7	29.4	31.0	0.0	30.6	30.8	12.7	10.2	33.6	17.5	12.8
Incr Delay (d2), s/veh	4.0	0.2	3.0	1.3	0.0	0.4	2.1	0.2	0.0	3.3	1.0	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	2.5	0.4	1.8	0.6	0.0	0.2	1.0	3.4	0.3	0.2	6.5	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.8	27.9	32.4	32.3	0.0	31.0	32.9	12.9	10.2	36.9	18.4	12.9
LnGrp LOS	C	C	C	C		C	C	B	B	D	B	B
Approach Vol, veh/h		279			49			880			1221	
Approach Delay, s/veh		32.7			32.0			14.2			18.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	39.1		14.1	9.6	35.3		11.2
Change Period (Y+Rc), s	4.0	6.0		5.9	4.0	6.0		6.3
Max Green Setting (Gmax), s	20.0	43.0		20.0	20.0	43.0		20.0
Max Q Clear Time (g_c+I1), s	2.5	13.0		7.4	4.3	21.0		3.4
Green Ext Time (p_c), s	0.0	5.6		0.7	0.1	8.1		0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	18.7
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	421	278	228	375	88	236	54	237	78	37	5
Future Volume (veh/h)	3	421	278	228	375	88	236	54	237	78	37	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1856	1900	1900	1885	1900	1900	1900	1885	1900	1900
Adj Flow Rate, veh/h	4	520	343	281	463	109	291	67	293	96	46	6
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	3	0	0	1	0	0	0	1	0	0
Cap, veh/h	10	996	431	394	1986	601	348	813	363	125	370	165
Arrive On Green	0.01	0.28	0.28	0.11	0.38	0.38	0.19	0.23	0.23	0.07	0.10	0.10
Sat Flow, veh/h	1810	3610	1561	3510	5187	1569	1810	3610	1610	1795	3610	1610
Grp Volume(v), veh/h	4	520	343	281	463	109	291	67	293	96	46	6
Grp Sat Flow(s),veh/h/ln	1810	1805	1561	1755	1729	1569	1810	1805	1610	1795	1805	1610
Q Serve(g_s), s	0.1	6.9	11.6	4.4	3.4	2.6	8.8	0.8	9.8	3.0	0.7	0.2
Cycle Q Clear(g_c), s	0.1	6.9	11.6	4.4	3.4	2.6	8.8	0.8	9.8	3.0	0.7	0.2
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	10	996	431	394	1986	601	348	813	363	125	370	165
V/C Ratio(X)	0.41	0.52	0.80	0.71	0.23	0.18	0.84	0.08	0.81	0.77	0.12	0.04
Avail Cap(c_a), veh/h	159	1144	495	433	1986	601	430	1424	635	304	1176	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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	17.4	19.1	24.3	11.9	11.6	22.1	17.4	20.8	26.0	23.2	23.0
Incr Delay (d2), s/veh	25.4	0.4	7.8	4.9	0.1	0.1	11.3	0.0	4.3	9.6	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.4	4.4	1.9	1.1	0.7	4.3	0.3	3.5	1.5	0.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.5	17.8	26.9	29.2	11.9	11.8	33.4	17.4	25.1	35.5	23.3	23.0
LnGrp LOS	D	B	C	C	B	B	C	B	C	D	C	C
Approach Vol, veh/h		867			853			651			148	
Approach Delay, s/veh		21.6			17.6			28.0			31.2	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	17.3	10.9	20.2	15.4	10.3	4.8	26.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.6	22.4	7.0	18.0	13.5	18.5	5.0	20.0
Max Q Clear Time (g_c+I1), s	5.0	11.8	6.4	13.6	10.8	2.7	2.1	5.4
Green Ext Time (p_c), s	0.1	1.0	0.1	1.8	0.2	0.1	0.0	2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	22.5
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	675	49	71	715	132	33	91	62	98	95	55
Future Volume (veh/h)	44	675	49	71	715	132	33	91	62	98	95	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1870	1900	1885	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	49	750	54	79	794	147	37	101	69	109	106	61
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	1	2	0	1	0	0	0	0	0	0	0
Cap, veh/h	94	1349	407	131	1453	455	76	271	222	156	356	293
Arrive On Green	0.05	0.26	0.26	0.07	0.28	0.28	0.04	0.14	0.14	0.09	0.19	0.19
Sat Flow, veh/h	1810	5147	1551	1810	5147	1610	1810	1900	1559	1810	1900	1564
Grp Volume(v), veh/h	49	750	54	79	794	147	37	101	69	109	106	61
Grp Sat Flow(s),veh/h/ln	1810	1716	1551	1810	1716	1610	1810	1900	1559	1810	1900	1564
Q Serve(g_s), s	1.1	5.2	1.1	1.7	5.4	3.0	0.8	2.0	1.6	2.4	2.0	1.4
Cycle Q Clear(g_c), s	1.1	5.2	1.1	1.7	5.4	3.0	0.8	2.0	1.6	2.4	2.0	1.4
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	94	1349	407	131	1453	455	76	271	222	156	356	293
V/C Ratio(X)	0.52	0.56	0.13	0.60	0.55	0.32	0.49	0.37	0.31	0.70	0.30	0.21
Avail Cap(c_a), veh/h	219	2247	677	219	2247	703	241	853	699	241	853	702
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	19.0	13.1	11.6	18.6	12.6	11.7	19.3	16.0	15.9	18.3	14.4	14.2
Incr Delay (d2), s/veh	4.4	0.4	0.1	4.4	0.3	0.4	4.8	0.9	0.8	5.5	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	0.5	1.5	0.3	0.7	1.4	0.8	0.4	0.8	0.5	1.1	0.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.4	13.5	11.8	23.0	12.9	12.1	24.1	16.9	16.6	23.8	14.9	14.5
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		853			1020			207			276	
Approach Delay, s/veh		14.0			13.5			18.1			18.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	10.4	7.5	15.3	6.2	12.2	6.6	16.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	18.5	5.0	18.0	5.5	18.5	5.0	18.0
Max Q Clear Time (g_c+I1), s	4.4	4.0	3.7	7.2	2.8	4.0	3.1	7.4
Green Ext Time (p_c), s	0.0	0.6	0.0	3.6	0.0	0.6	0.0	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	14.7
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	536	62	674	716	444	61	550	476	301	502	115
Future Volume (veh/h)	155	536	62	674	716	444	61	550	476	301	502	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1856	1885	1885	1900	1900	1885	1885	1885	1900	1856
Adj Flow Rate, veh/h	163	564	33	709	754	89	64	579	134	317	528	75
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	3	1	1	0	0	1	1	1	0	3
Cap, veh/h	495	883	266	820	1306	408	262	682	299	414	847	368
Arrive On Green	0.14	0.17	0.17	0.24	0.25	0.25	0.07	0.19	0.19	0.12	0.23	0.23
Sat Flow, veh/h	3510	5147	1547	3483	5147	1608	3510	3582	1572	3483	3610	1568
Grp Volume(v), veh/h	163	564	33	709	754	89	64	579	134	317	528	75
Grp Sat Flow(s),veh/h/ln	1755	1716	1547	1742	1716	1608	1755	1791	1572	1742	1805	1568
Q Serve(g_s), s	3.4	8.4	1.1	16.1	10.6	2.3	1.4	12.9	6.2	7.3	10.8	3.2
Cycle Q Clear(g_c), s	3.4	8.4	1.1	16.1	10.6	2.3	1.4	12.9	6.2	7.3	10.8	3.2
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	495	883	266	820	1306	408	262	682	299	414	847	368
V/C Ratio(X)	0.33	0.64	0.12	0.86	0.58	0.22	0.24	0.85	0.45	0.77	0.62	0.20
Avail Cap(c_a), veh/h	851	1248	375	2492	2559	800	468	682	299	1267	1445	628
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	31.9	31.8	15.3	30.3	26.9	10.1	36.0	32.2	29.5	35.2	28.3	25.4
Incr Delay (d2), s/veh	0.1	1.3	0.4	1.1	0.6	0.4	0.2	10.6	2.0	1.1	1.5	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	1.4	3.4	0.5	6.2	4.0	1.3	0.6	6.2	2.3	3.0	4.5	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.0	33.1	15.7	31.4	27.5	10.5	36.1	42.8	31.6	36.4	29.8	25.9
LnGrp LOS	C	C	B	C	C	B	D	D	C	D	C	C
Approach Vol, veh/h		760			1552			777			920	
Approach Delay, s/veh		32.1			28.3			40.3			31.7	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	21.7	24.4	20.6	12.2	25.3	18.0	26.9
Change Period (Y+Rc), s	6.0	6.0	5.0	6.4	6.0	6.0	6.4	* 6
Max Green Setting (Gmax), s	30.0	14.0	59.0	20.0	11.0	33.0	20.0	* 41
Max Q Clear Time (g_c+I1), s	19.3	14.9	18.1	10.4	3.4	12.8	5.4	12.6
Green Ext Time (p_c), s	0.5	0.0	1.3	3.6	0.0	5.9	0.2	7.9

Intersection Summary	
HCM 7th Control Delay, s/veh	32.1
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	1622	47	31	2065	246	23	7	28	196	3	36
Future Volume (veh/h)	39	1622	47	31	2065	246	23	7	28	196	3	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1885	1885	1900	1900	1900	1885	1900	1856
Adj Flow Rate, veh/h	43	1802	52	34	2294	273	26	8	31	257	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	1	0	0	1	1	0	0	0	1	0	3
Cap, veh/h	115	3141	957	72	3018	914	147	154	128	383	202	0
Arrive On Green	0.06	0.61	0.61	0.08	1.00	1.00	0.08	0.08	0.08	0.11	0.00	0.00
Sat Flow, veh/h	1810	5147	1569	1810	5147	1559	1810	1900	1579	3591	1900	0
Grp Volume(v), veh/h	43	1802	52	34	2294	273	26	8	31	257	0	0
Grp Sat Flow(s),veh/h/ln	1810	1716	1569	1810	1716	1559	1810	1900	1579	1795	1900	0
Q Serve(g_s), s	2.7	25.2	1.6	2.2	0.0	0.0	1.6	0.5	2.2	8.3	0.0	0.0
Cycle Q Clear(g_c), s	2.7	25.2	1.6	2.2	0.0	0.0	1.6	0.5	2.2	8.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	115	3141	957	72	3018	914	147	154	128	383	202	0
V/C Ratio(X)	0.37	0.57	0.05	0.48	0.76	0.30	0.18	0.05	0.24	0.67	0.00	0.00
Avail Cap(c_a), veh/h	241	3141	957	392	3018	914	232	244	203	601	318	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.70	0.70	0.70	0.56	0.56	0.56	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	53.9	14.0	9.4	54.1	0.0	0.0	51.4	50.9	51.7	51.6	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.5	0.1	1.0	1.0	0.5	0.2	0.1	0.4	0.8	0.0	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	1.2	8.9	0.5	1.0	0.3	0.1	0.7	0.2	0.9	3.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.4	14.6	9.5	55.1	1.0	0.5	51.6	50.9	52.0	52.4	0.0	0.0
LnGrp LOS	D	B	A	E	A	A	D	D	D	D		
Approach Vol, veh/h		1897			2601			65			257	
Approach Delay, s/veh		15.3			1.7			51.7			52.4	
Approach LOS		B			A			D			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	14.3	8.7	79.2	17.7	11.6	76.4
Change Period (Y+Rc), s	4.6	4.0	6.0	4.9	4.0	6.0
Max Green Setting (Gmax), s	15.4	26.0	39.0	20.1	16.0	49.0
Max Q Clear Time (g_c+I1), s	4.2	4.2	27.2	10.3	4.7	2.0
Green Ext Time (p_c), s	0.1	0.0	11.0	0.3	0.0	44.5

Intersection Summary	
HCM 7th Control Delay, s/veh	10.4
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	1465	172	359	1873	209	365	124	208	160	79	59
Future Volume (veh/h)	121	1465	172	359	1873	209	365	124	208	160	79	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1856	1900	1885	1885	1885	1900	1900	1870	1900	1900
Adj Flow Rate, veh/h	129	1559	183	382	1993	222	388	132	221	170	84	63
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	1	3	0	1	1	1	0	0	2	0	0
Cap, veh/h	289	2508	755	443	2734	837	446	503	223	287	341	147
Arrive On Green	0.16	0.97	0.97	0.25	1.00	1.00	0.13	0.14	0.14	0.08	0.09	0.09
Sat Flow, veh/h	3510	5147	1549	3510	5147	1575	3483	3610	1600	3456	3610	1557
Grp Volume(v), veh/h	129	1559	183	382	1993	222	388	132	221	170	84	63
Grp Sat Flow(s),veh/h/ln	1755	1716	1549	1755	1716	1575	1742	1805	1600	1728	1805	1557
Q Serve(g_s), s	4.0	2.3	0.5	12.5	0.0	0.0	13.1	3.9	16.6	5.7	2.6	4.6
Cycle Q Clear(g_c), s	4.0	2.3	0.5	12.5	0.0	0.0	13.1	3.9	16.6	5.7	2.6	4.6
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	289	2508	755	443	2734	837	446	503	223	287	341	147
V/C Ratio(X)	0.45	0.62	0.24	0.86	0.73	0.27	0.87	0.26	0.99	0.59	0.25	0.43
Avail Cap(c_a), veh/h	614	2508	755	1053	2734	837	522	503	223	605	581	250
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	0.65	0.65	0.65	0.92	0.92	0.92	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	0.8	0.8	43.9	0.0	0.0	51.3	46.1	51.6	53.1	50.4	51.3
Incr Delay (d2), s/veh	0.3	0.9	0.6	1.3	1.1	0.5	11.0	0.3	55.1	0.7	0.6	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	1.7	0.6	0.3	4.7	0.3	0.1	6.2	1.7	9.9	2.5	1.2	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.0	1.8	1.4	45.2	1.1	0.5	62.4	46.5	106.6	53.8	51.0	54.4
LnGrp LOS	D	A	A	D	A	A	E	D	F	D	D	D
Approach Vol, veh/h		1871			2597			741			317	
Approach Delay, s/veh		4.9			7.6			72.7			53.2	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	22.4	19.1	64.5	19.4	17.0	13.9	69.7
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	21.0	16.3	36.0	27.0	18.0	19.3	21.0	42.0
Max Q Clear Time (g_c+I1), s	17.7	18.6	14.5	4.3	15.1	6.6	6.0	2.0
Green Ext Time (p_c), s	0.2	0.0	0.6	19.2	0.2	0.7	0.2	37.4

Intersection Summary	
HCM 7th Control Delay, s/veh	18.0
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	1710	70	259	2281	30	46	10	130	26	12	9
Future Volume (veh/h)	37	1710	70	259	2281	30	46	10	130	26	12	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1885	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	39	1819	74	276	2427	32	57	0	138	28	13	10
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	1	0	0	1	0	0	0	0	0	0	0
Cap, veh/h	77	2895	894	331	3162	989	376	0	164	148	81	62
Arrive On Green	0.08	1.00	1.00	0.19	1.00	1.00	0.10	0.00	0.10	0.08	0.08	0.08
Sat Flow, veh/h	1810	5147	1589	3510	5147	1609	3619	0	1578	1810	993	764
Grp Volume(v), veh/h	39	1819	74	276	2427	32	57	0	138	28	0	23
Grp Sat Flow(s),veh/h/ln	1810	1716	1589	1755	1716	1609	1810	0	1578	1810	0	1757
Q Serve(g_s), s	2.5	0.0	0.0	9.1	0.0	0.0	1.7	0.0	10.3	1.7	0.0	1.5
Cycle Q Clear(g_c), s	2.5	0.0	0.0	9.1	0.0	0.0	1.7	0.0	10.3	1.7	0.0	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	77	2895	894	331	3162	989	376	0	164	148	0	144
V/C Ratio(X)	0.51	0.63	0.08	0.83	0.77	0.03	0.15	0.00	0.84	0.19	0.00	0.16
Avail Cap(c_a), veh/h	241	2895	894	468	3162	989	455	0	199	241	0	234
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.71	0.64	0.64	0.64	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	0.0	0.0	47.8	0.0	0.0	49.0	0.0	52.8	51.4	0.0	51.3
Incr Delay (d2), s/veh	1.4	0.7	0.1	4.1	1.2	0.0	0.1	0.0	20.0	0.2	0.0	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	1.1	0.2	0.0	3.7	0.3	0.0	0.8	0.0	4.9	0.8	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.1	0.7	0.1	51.8	1.2	0.0	49.0	0.0	72.8	51.6	0.0	51.5
LnGrp LOS	E	A	A	D	A	A	D		E	D		D
Approach Vol, veh/h		1932			2735			195			51	
Approach Delay, s/veh		1.8			6.3			65.8			51.5	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	17.4	15.3	73.5	13.8	9.1	79.7
Change Period (Y+Rc), s	4.9	4.0	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	15.1	16.0	54.0	16.0	16.0	54.0
Max Q Clear Time (g_c+I1), s	12.3	11.1	2.0	3.7	4.5	2.0
Green Ext Time (p_c), s	0.1	0.2	39.9	0.1	0.0	48.2

Intersection Summary	
HCM 7th Control Delay, s/veh	7.4
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	27	1846	0	2537	319	180	26
Future Volume (veh/h)	27	1846	0	2537	319	180	26
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00				0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1900	1885		1885	1885	1885	1900
Adj Flow Rate, veh/h	29	1964		2699	339	191	28
Peak Hour Factor	0.94	0.94		0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	1		1	1	1	0
Cap, veh/h	84	5297		3793	1152	348	161
Arrive On Green	0.09	1.00		0.74	0.74	0.10	0.10
Sat Flow, veh/h	1810	6749		5316	1564	3483	1610
Grp Volume(v), veh/h	29	1964		2699	339	191	28
Grp Sat Flow(s),veh/h/ln	1810	1621		1716	1564	1742	1610
Q Serve(g_s), s	1.8	0.0		34.8	8.7	6.3	1.9
Cycle Q Clear(g_c), s	1.8	0.0		34.8	8.7	6.3	1.9
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	84	5297		3793	1152	348	161
V/C Ratio(X)	0.34	0.37		0.71	0.29	0.55	0.17
Avail Cap(c_a), veh/h	241	5297		3793	1152	610	282
HCM Platoon Ratio	2.00	2.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.7	0.0		8.7	5.3	51.4	49.5
Incr Delay (d2), s/veh	0.7	0.2		1.2	0.6	0.5	0.2
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.1		10.3	2.5	2.8	1.8
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	53.4	0.2		9.9	6.0	51.9	49.7
LnGrp LOS	D	A		A	A	D	D
Approach Vol, veh/h		1993		3038		219	
Approach Delay, s/veh		0.9		9.5		51.6	
Approach LOS		A		A		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			104.0		16.0	9.6	94.4
Change Period (Y+Rc), s			6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s			69.0		21.0	16.0	69.0
Max Q Clear Time (g_c+I1), s			2.0		8.3	3.8	36.8
Green Ext Time (p_c), s			46.7		0.3	0.0	31.3

Intersection Summary	
HCM 7th Control Delay, s/veh	8.0
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	1626	309	340	2502	124	316	44	366	374	196	90
Future Volume (veh/h)	66	1626	309	340	2502	124	316	44	366	374	196	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1885	1870	1826	1885	1870	1900	1767	1870	1885	1856	1900
Adj Flow Rate, veh/h	70	1730	167	362	2662	60	336	47	0	398	209	96
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	1	2	5	1	2	0	9	2	1	3	0
Cap, veh/h	258	2563	780	415	2809	865	394	269		460	353	159
Arrive On Green	0.08	0.50	0.50	0.12	0.55	0.55	0.11	0.08	0.00	0.13	0.10	0.10
Sat Flow, veh/h	3428	5147	1565	3374	5147	1585	3510	3357	1585	3483	3526	1587
Grp Volume(v), veh/h	70	1730	167	362	2662	60	336	47	0	398	209	96
Grp Sat Flow(s),veh/h/ln	1714	1716	1565	1687	1716	1585	1755	1678	1585	1742	1763	1587
Q Serve(g_s), s	2.3	30.5	7.2	12.6	58.4	2.1	11.3	1.6	0.0	13.4	6.8	7.0
Cycle Q Clear(g_c), s	2.3	30.5	7.2	12.6	58.4	2.1	11.3	1.6	0.0	13.4	6.8	7.0
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	258	2563	780	415	2809	865	394	269		460	353	159
V/C Ratio(X)	0.27	0.67	0.21	0.87	0.95	0.07	0.85	0.17		0.86	0.59	0.60
Avail Cap(c_a), veh/h	457	2563	780	450	2809	865	468	420		610	608	274
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	0.74	0.74	0.74	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	22.8	16.9	51.7	25.6	12.9	52.3	51.5	0.0	51.0	51.7	51.7
Incr Delay (d2), s/veh	0.2	1.4	0.6	11.6	6.7	0.1	10.9	0.6	0.0	8.0	5.7	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	11.8	2.6	5.9	23.0	0.7	5.4	0.7	0.0	6.3	3.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.6	24.2	17.6	63.3	32.3	13.0	63.2	52.1	0.0	59.0	57.3	64.5
LnGrp LOS	D	C	B	E	C	B	E	D		E	E	E
Approach Vol, veh/h		1967			3084			383			703	
Approach Delay, s/veh		24.7			35.6			61.9			59.3	
Approach LOS		C			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	15.6	18.8	65.8	17.5	18.0	13.0	71.5
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	21.0	15.0	16.0	48.0	16.0	* 21	16.0	48.0
Max Q Clear Time (g_c+I1), s	15.4	3.6	14.6	32.5	13.3	9.0	4.3	60.4
Green Ext Time (p_c), s	0.4	0.2	0.1	14.2	0.2	2.6	0.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	36.4
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 7th Edition methodology does not support current ring-barrier structure.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑	↱	↰↰	↑↑	↱	↰↰		↱↱	↰	↑↑	↱
Traffic Volume (veh/h)	0	2152	259	313	1193	221	541	1	563	171	355	465
Future Volume (veh/h)	0	2152	259	313	1193	221	541	1	563	171	355	465
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	1885	1900	1900	1885	1885	1870	1856
Adj Flow Rate, veh/h	0	2242	270	326	1243	0	564	1	586	178	370	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	1	1	1	1	0	0	1	1	2	3
Cap, veh/h	0	2727	664	391	2028		556	0	759	225	446	
Arrive On Green	0.00	0.42	0.42	0.11	0.57	0.00	0.16	0.16	0.16	0.13	0.13	0.00
Sat Flow, veh/h	0	6749	1578	3483	3582	1598	3510	0	2801	1795	3554	1572
Grp Volume(v), veh/h	0	2242	270	326	1243	0	564	0	586	178	370	0
Grp Sat Flow(s),veh/h/ln	0	1621	1578	1742	1791	1598	1755	0	1401	1795	1777	1572
Q Serve(g_s), s	0.0	36.7	14.4	11.0	27.7	0.0	19.0	0.0	19.0	11.6	12.2	0.0
Cycle Q Clear(g_c), s	0.0	36.7	14.4	11.0	27.7	0.0	19.0	0.0	19.0	11.6	12.2	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2727	664	391	2028		556	0	759	225	446	
V/C Ratio(X)	0.00	0.82	0.41	0.83	0.61		1.01	0.00	0.77	0.79	0.83	
Avail Cap(c_a), veh/h	0	2727	664	755	2028		556	0	759	239	474	
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)	0.00	0.83	0.83	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	30.8	24.3	52.2	17.3	0.0	50.5	0.0	40.4	50.9	51.2	0.0
Incr Delay (d2), s/veh	0.0	2.5	1.5	1.8	1.4	0.0	41.9	0.0	4.5	17.8	12.6	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	0.0	14.5	5.6	4.8	10.8	0.0	11.5	0.0	8.2	6.3	6.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	33.2	25.8	54.0	18.7	0.0	92.4	0.0	44.8	68.8	63.9	0.0
LnGrp LOS		C	C	D	B		F		D	E	E	
Approach Vol, veh/h		2512			1569			1150			548	
Approach Delay, s/veh		32.4			26.0			68.2			65.5	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	2	3	4	6	8
Phs Duration (G+Y+Rc), s	25.0	17.5	56.5	21.0	74.0
Change Period (Y+Rc), s	6.0	4.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	19.0	26.0	37.0	16.0	67.0
Max Q Clear Time (g_c+I1), s	21.0	13.0	38.7	14.2	29.7
Green Ext Time (p_c), s	0.0	0.5	0.0	0.8	21.6

Intersection Summary	
HCM 7th Control Delay, s/veh	40.9
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	7	0	0	0	0	3	0	0	0
Future Volume (veh/h)	0	0	0	7	0	0	0	0	3	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1411	1900	1900	1900
Adj Flow Rate, veh/h	0	0	0	11	0	0	0	0	5	0	0	0
Peak Hour Factor	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	33	0	0	0
Cap, veh/h	13	25	11	27	54	24	25	1270	421	25	1270	566
Arrive On Green	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00
Sat Flow, veh/h	1810	3610	1610	1810	3610	1610	3510	3610	1196	3510	3610	1610
Grp Volume(v), veh/h	0	0	0	11	0	0	0	0	5	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1610	1755	1805	1196	1755	1805	1610
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	13	25	11	27	54	24	25	1270	421	25	1270	566
V/C Ratio(X)	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Avail Cap(c_a), veh/h	637	4572	2039	2355	8001	3569	1235	5207	1725	1235	5207	2322
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)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	0.0	16.4	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0
LnGrp LOS				B					A			
Approach Vol, veh/h		0			11			5			0	
Approach Delay, s/veh		0.0			16.4			3.0			0.0	
Approach LOS					B			A				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	9.5	4.7	0.0	0.0	9.5	0.0	4.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	20.5	18.5	18.0	5.0	20.5	5.0	31.5
Max Q Clear Time (g_c+I1), s	0.0	2.0	2.1	0.0	0.0	0.0	0.0	0.0
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 7th Control Delay, s/veh	12.2
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	119	25	86	132	375	31	160	67	414	137	17
Future Volume (veh/h)	14	119	25	86	132	375	31	160	67	414	137	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1693	1885	1841	1900	1870	1885	1856	1856	1885	1870	1796	1900
Adj Flow Rate, veh/h	15	125	26	91	139	395	33	168	71	436	144	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	14	1	4	0	2	1	3	3	1	2	7	0
Cap, veh/h	100	913	397	354	1149	510	82	382	169	479	1176	546
Arrive On Green	0.03	0.25	0.25	0.10	0.32	0.32	0.05	0.11	0.11	0.27	0.34	0.34
Sat Flow, veh/h	3127	3582	1560	3510	3554	1577	1767	3526	1560	1781	3413	1584
Grp Volume(v), veh/h	15	125	26	91	139	395	33	168	71	436	144	18
Grp Sat Flow(s),veh/h/ln	1564	1791	1560	1755	1777	1577	1767	1763	1560	1781	1706	1584
Q Serve(g_s), s	0.4	2.1	1.0	1.8	2.1	17.3	1.4	3.4	3.2	18.1	2.2	0.6
Cycle Q Clear(g_c), s	0.4	2.1	1.0	1.8	2.1	17.3	1.4	3.4	3.2	18.1	2.2	0.6
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	100	913	397	354	1149	510	82	382	169	479	1176	546
V/C Ratio(X)	0.15	0.14	0.07	0.26	0.12	0.77	0.40	0.44	0.42	0.91	0.12	0.03
Avail Cap(c_a), veh/h	1064	2124	925	1195	2107	935	173	1398	619	653	2314	1074
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	36.0	22.0	21.6	31.7	18.2	23.3	35.4	31.9	31.8	27.0	17.1	16.6
Incr Delay (d2), s/veh	0.3	0.2	0.2	0.1	0.1	6.1	1.2	2.0	4.1	11.5	0.2	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	0.1	0.8	0.3	0.7	0.8	6.6	0.6	1.5	1.3	8.6	0.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.2	22.2	21.7	31.9	18.3	29.5	36.6	33.9	35.9	38.5	17.4	16.7
LnGrp LOS	D	C	C	C	B	C	D	C	D	D	B	B
Approach Vol, veh/h		166			625			272			598	
Approach Delay, s/veh		23.4			27.3			34.7			32.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.6	14.0	11.7	25.2	7.5	32.0	6.5	30.4
Change Period (Y+Rc), s	5.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	20.6	30.3	26.0	45.3	7.5	51.8	26.0	45.3
Max Q Clear Time (g_c+I1), s	20.1	5.4	3.8	4.1	3.4	4.2	2.4	19.3
Green Ext Time (p_c), s	0.5	2.4	0.1	1.8	0.0	3.3	0.0	5.4

Intersection Summary	
HCM 7th Control Delay, s/veh	30.1
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	667	9	69	707	131	16	81	72	113	79	62
Future Volume (veh/h)	50	667	9	69	707	131	16	81	72	113	79	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1900	1900	1900	1900	1856	1900	1900	1900
Adj Flow Rate, veh/h	57	758	10	78	803	149	18	92	82	128	90	70
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	1	0	0	0	0	3	0	0	0
Cap, veh/h	159	1305	581	180	1131	210	37	187	186	152	107	83
Arrive On Green	0.09	0.36	0.36	0.10	0.37	0.37	0.12	0.12	0.12	0.19	0.19	0.19
Sat Flow, veh/h	1810	3610	1608	1795	3027	562	308	1576	1572	792	557	433
Grp Volume(v), veh/h	57	758	10	78	479	473	110	0	82	288	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1608	1795	1805	1784	1885	0	1572	1782	0	0
Q Serve(g_s), s	2.5	14.2	0.3	3.4	18.9	18.9	4.6	0.0	4.0	13.0	0.0	0.0
Cycle Q Clear(g_c), s	2.5	14.2	0.3	3.4	18.9	18.9	4.6	0.0	4.0	13.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.31	0.16		1.00	0.44		0.24
Lane Grp Cap(c), veh/h	159	1305	581	180	675	667	223	0	186	342	0	0
V/C Ratio(X)	0.36	0.58	0.02	0.43	0.71	0.71	0.49	0.00	0.44	0.84	0.00	0.00
Avail Cap(c_a), veh/h	434	1731	771	431	931	920	452	0	377	705	0	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.8	21.5	17.1	35.3	22.3	22.3	34.4	0.0	34.2	32.5	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.7	0.0	0.6	2.5	2.5	0.6	0.0	0.6	2.2	0.0	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	1.1	5.8	0.1	1.5	8.0	8.0	2.1	0.0	1.5	5.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.3	22.2	17.1	35.9	24.8	24.8	35.0	0.0	34.8	34.6	0.0	0.0
LnGrp LOS	D	C	B	D	C	C	D		C	C		
Approach Vol, veh/h		825			1030			192			288	
Approach Delay, s/veh		23.1			25.6			34.9			34.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	15.2	12.4	35.8	20.0	11.3	36.9
Change Period (Y+Rc), s	5.3	4.0	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	20.0	20.0	40.0	33.0	20.0	43.0
Max Q Clear Time (g_c+I1), s	6.6	5.4	16.2	15.0	4.5	20.9
Green Ext Time (p_c), s	0.4	0.1	8.8	1.1	0.0	10.3

Intersection Summary	
HCM 7th Control Delay, s/veh	26.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	511	468	451	683	122	549	899	458	162	814	89
Future Volume (veh/h)	79	511	468	451	683	122	549	899	458	162	814	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1870	1900	1900	1900	1885	1885	1900	1856	1900
Adj Flow Rate, veh/h	83	538	307	475	719	55	578	946	177	171	857	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1	2	0	0	0	1	1	0	3	0
Cap, veh/h	250	960	421	532	1266	556	536	1748	543	230	1279	401
Arrive On Green	0.07	0.27	0.27	0.15	0.35	0.35	0.15	0.34	0.34	0.07	0.25	0.25
Sat Flow, veh/h	3510	3582	1571	3456	3610	1587	3510	5147	1598	3510	5066	1588
Grp Volume(v), veh/h	83	538	307	475	719	55	578	946	177	171	857	31
Grp Sat Flow(s),veh/h/ln	1755	1791	1571	1728	1805	1587	1755	1716	1598	1755	1689	1588
Q Serve(g_s), s	2.7	15.3	21.0	15.9	19.0	2.7	18.0	17.5	9.7	5.6	17.9	1.8
Cycle Q Clear(g_c), s	2.7	15.3	21.0	15.9	19.0	2.7	18.0	17.5	9.7	5.6	17.9	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	250	960	421	532	1266	556	536	1748	543	230	1279	401
V/C Ratio(X)	0.33	0.56	0.73	0.89	0.57	0.10	1.08	0.54	0.33	0.74	0.67	0.08
Avail Cap(c_a), veh/h	298	1498	657	586	1807	794	536	2122	659	357	1848	579
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	52.1	37.2	39.3	48.9	31.0	25.8	49.9	31.5	28.9	54.1	39.7	33.6
Incr Delay (d2), s/veh	0.3	0.9	4.1	14.2	0.6	0.1	61.7	0.4	0.5	1.8	1.2	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	1.2	6.6	8.3	7.7	8.1	1.0	12.2	7.0	3.7	2.5	7.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.4	38.1	43.4	63.1	31.6	25.9	111.7	31.9	29.5	55.9	40.9	33.8
LnGrp LOS	D	D	D	E	C	C	F	C	C	E	D	C
Approach Vol, veh/h		928			1249			1701			1059	
Approach Delay, s/veh		41.1			43.4			58.8			43.1	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	46.4	22.1	37.6	22.0	36.2	12.4	47.3
Change Period (Y+Rc), s	4.0	6.4	4.0	* 6	4.0	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	12.0	48.6	20.0	* 49	18.0	* 43	10.0	59.0
Max Q Clear Time (g_c+I1), s	7.7	19.5	17.9	23.0	20.0	19.9	4.7	21.0
Green Ext Time (p_c), s	0.1	11.8	0.3	8.0	0.0	9.8	0.0	8.1

Intersection Summary	
HCM 7th Control Delay, s/veh	48.2
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	1015	173	203	1165	226	242	276	174	223	393	124
Future Volume (veh/h)	106	1015	173	203	1165	226	242	276	174	223	393	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.96	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1885	1885	1885	1900	1885	1885	1900	1856	1885	1870
Adj Flow Rate, veh/h	110	1057	180	211	1214	235	252	288	181	232	409	129
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	3	1	1	1	0	1	1	0	3	1	2
Cap, veh/h	196	1245	549	675	1806	800	306	644	279	286	678	289
Arrive On Green	0.06	0.35	0.35	0.39	1.00	1.00	0.09	0.18	0.18	0.08	0.19	0.19
Sat Flow, veh/h	3456	3526	1555	3483	3582	1586	3483	3582	1552	3428	3582	1526
Grp Volume(v), veh/h	110	1057	180	211	1214	235	252	288	181	232	409	129
Grp Sat Flow(s),veh/h/ln	1728	1763	1555	1742	1791	1586	1742	1791	1552	1714	1791	1526
Q Serve(g_s), s	3.7	33.2	7.5	5.1	0.0	0.0	8.5	8.6	13.0	8.0	12.5	9.0
Cycle Q Clear(g_c), s	3.7	33.2	7.5	5.1	0.0	0.0	8.5	8.6	13.0	8.0	12.5	9.0
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	196	1245	549	675	1806	800	306	644	279	286	678	289
V/C Ratio(X)	0.56	0.85	0.33	0.31	0.67	0.29	0.82	0.45	0.65	0.81	0.60	0.45
Avail Cap(c_a), veh/h	202	1340	591	675	1806	800	319	1045	453	314	1045	445
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.77	0.83	0.83	0.83	0.89	0.89	0.89	0.83	0.83	0.83
Uniform Delay (d), s/veh	55.1	35.9	15.5	31.2	0.0	0.0	53.8	43.9	45.7	54.1	44.5	43.1
Incr Delay (d2), s/veh	1.5	5.8	1.2	0.1	1.0	0.3	12.8	0.7	3.8	10.3	1.2	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	1.6	14.6	3.7	2.0	0.2	0.1	4.2	3.8	5.2	3.8	5.6	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.6	41.6	16.7	31.3	1.0	0.3	66.6	44.7	49.6	64.3	45.7	44.6
LnGrp LOS	E	D	B	C	A	A	E	D	D	E	D	D
Approach Vol, veh/h		1347			1660			721			770	
Approach Delay, s/veh		39.5			4.7			53.5			51.2	
Approach LOS		D			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	27.3	28.9	48.1	14.6	28.4	10.8	66.2
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	10.0	* 35	9.0	* 46	11.0	35.0	7.0	47.6
Max Q Clear Time (g_c+I1), s	10.0	15.0	7.1	35.2	10.5	14.5	5.7	2.0
Green Ext Time (p_c), s	0.0	3.8	0.1	7.1	0.0	4.7	0.0	21.9

Intersection Summary	
HCM 7th Control Delay, s/veh	30.9
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1409	29	101	1566	41	100
Future Volume (veh/h)	1409	29	101	1566	41	100
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1900	1885	1900	1870	1900
Adj Flow Rate, veh/h	1499	31	107	1666	44	106
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	0	1	0	2	0
Cap, veh/h	2596	54	133	3021	147	133
Arrive On Green	1.00	1.00	0.07	0.84	0.08	0.08
Sat Flow, veh/h	3652	73	1795	3705	1781	1610
Grp Volume(v), veh/h	747	783	107	1666	44	106
Grp Sat Flow(s),veh/h/ln	1777	1855	1795	1805	1781	1610
Q Serve(g_s), s	0.0	0.0	7.0	16.8	2.8	7.8
Cycle Q Clear(g_c), s	0.0	0.0	7.0	16.8	2.8	7.8
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1296	1353	133	3021	147	133
V/C Ratio(X)	0.58	0.58	0.80	0.55	0.30	0.80
Avail Cap(c_a), veh/h	1296	1353	389	3021	386	349
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	54.7	3.0	51.8	54.1
Incr Delay (d2), s/veh	1.4	1.4	4.3	0.7	0.4	4.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	3.3	3.2	1.3	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	1.4	1.4	59.0	3.7	52.2	58.2
LnGrp LOS	A	A	E	A	D	E
Approach Vol, veh/h	1530			1773	150	
Approach Delay, s/veh	1.4			7.0	56.5	
Approach LOS	A			A	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	13.9	12.9	93.2		106.1
Change Period (Y+Rc), s	4.0	4.0	5.7		5.7
Max Green Setting (Gmax), s	26.0	26.0	38.3		84.3
Max Q Clear Time (g_c+I1), s	9.8	9.0	2.0		18.8
Green Ext Time (p_c), s	0.2	0.1	22.4		36.5

Intersection Summary	
HCM 7th Control Delay, s/veh	6.7
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1273	124	759	1259	180	283	488	590	420	882	153
Future Volume (veh/h)	150	1273	124	759	1259	180	283	488	590	420	882	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1870	1870	1885	1885	1856	1900	1826	1885	1900	1885	1870
Adj Flow Rate, veh/h	156	1326	0	791	1311	0	295	508	0	438	919	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	1	1	3	0	5	1	0	1	2
Cap, veh/h	211	1686		890	1597		357	589		495	1077	
Arrive On Green	0.06	0.33	0.00	0.18	0.45	0.00	0.10	0.17	0.00	0.14	0.21	0.00
Sat Flow, veh/h	3374	5106	1585	5063	3582	1572	3510	3469	1598	3510	5147	1585
Grp Volume(v), veh/h	156	1326	0	791	1311	0	295	508	0	438	919	0
Grp Sat Flow(s),veh/h/ln	1687	1702	1585	1688	1791	1572	1755	1735	1598	1755	1716	1585
Q Serve(g_s), s	5.5	28.2	0.0	18.3	38.4	0.0	9.9	17.1	0.0	14.7	20.6	0.0
Cycle Q Clear(g_c), s	5.5	28.2	0.0	18.3	38.4	0.0	9.9	17.1	0.0	14.7	20.6	0.0
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	211	1686		890	1597		357	589		495	1077	
V/C Ratio(X)	0.74	0.79		0.89	0.82		0.83	0.86		0.88	0.85	
Avail Cap(c_a), veh/h	346	1686		1013	1597		527	636		527	1077	
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	0.00	1.00	1.00	0.00	0.87	0.87	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.3	36.4	0.0	48.3	29.1	0.0	52.9	48.5	0.0	50.6	45.7	0.0
Incr Delay (d2), s/veh	1.9	3.8	0.0	8.3	4.9	0.0	3.8	10.4	0.0	15.7	7.0	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	2.3	11.8	0.0	8.2	16.5	0.0	4.5	8.1	0.0	7.4	9.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.2	40.2	0.0	56.6	34.0	0.0	56.7	58.9	0.0	66.3	52.7	0.0
LnGrp LOS	E	D		E	C		E	E		E	D	
Approach Vol, veh/h		1482			2102			803			1357	
Approach Delay, s/veh		41.9			42.5			58.1			57.1	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.9	26.4	27.1	45.6	16.2	31.1	13.2	59.5
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	5.7	6.0
Max Green Setting (Gmax), s	18.9	22.0	24.0	* 34	18.0	22.0	12.3	46.0
Max Q Clear Time (g_c+I1), s	16.7	19.1	20.3	30.2	11.9	22.6	7.5	40.4
Green Ext Time (p_c), s	0.2	1.1	0.8	3.3	0.3	0.0	0.1	4.3

Intersection Summary	
HCM 7th Control Delay, s/veh	48.0
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	248	1718	222	389	1627	95	190	377	287	163	685	312
Future Volume (veh/h)	248	1718	222	389	1627	95	190	377	287	163	685	312
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1870	1885	1885	1885	1885	1885	1900	1841	1870	1885
Adj Flow Rate, veh/h	253	1753	88	397	1660	0	194	385	0	166	699	77
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	2	1	1	1	1	1	0	4	2	1
Cap, veh/h	313	1728	525	713	2393		254	772		223	681	305
Arrive On Green	0.09	0.34	0.34	0.20	0.46	0.00	0.07	0.22	0.00	0.07	0.19	0.19
Sat Flow, veh/h	3483	5147	1563	3483	5147	1598	3483	3582	1610	3401	3554	1593
Grp Volume(v), veh/h	253	1753	88	397	1660	0	194	385	0	166	699	77
Grp Sat Flow(s),veh/h/ln	1742	1716	1563	1742	1716	1598	1742	1791	1610	1700	1777	1593
Q Serve(g_s), s	8.6	40.3	4.8	12.3	30.6	0.0	6.6	11.3	0.0	5.8	23.0	3.9
Cycle Q Clear(g_c), s	8.6	40.3	4.8	12.3	30.6	0.0	6.6	11.3	0.0	5.8	23.0	3.9
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	313	1728	525	713	2393		254	772		223	681	305
V/C Ratio(X)	0.81	1.01	0.17	0.56	0.69		0.77	0.50		0.74	1.03	0.25
Avail Cap(c_a), veh/h	464	1728	525	713	2393		464	772		453	681	305
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	39.8	28.0	42.8	25.4	0.0	54.6	41.4	0.0	55.1	48.5	25.4
Incr Delay (d2), s/veh	3.8	25.2	0.7	0.6	1.7	0.0	1.8	1.2	0.0	1.8	41.3	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	3.8	20.1	1.8	5.2	12.0	0.0	2.9	5.0	0.0	2.5	13.8	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.4	65.1	28.7	43.4	27.0	0.0	56.4	42.6	0.0	56.9	89.8	27.4
LnGrp LOS	E	F	C	D	C		E	D		E	F	C
Approach Vol, veh/h		2094			2057			579			942	
Approach Delay, s/veh		62.6			30.2			47.3			78.9	
Approach LOS		E			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	31.6	30.6	46.0	14.4	29.0	14.8	61.8
Change Period (Y+Rc), s	4.0	5.7	6.0	5.7	5.7	* 6	4.0	6.0
Max Green Setting (Gmax), s	16.0	23.3	19.0	40.3	16.0	* 23	16.0	45.0
Max Q Clear Time (g_c+I1), s	7.8	13.3	14.3	42.3	8.6	25.0	10.6	32.6
Green Ext Time (p_c), s	0.2	2.8	0.4	0.0	0.2	0.0	0.2	9.8

Intersection Summary	
HCM 7th Control Delay, s/veh	52.0
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	2057	20	37	2096	80	38	7	44	57	3	20
Future Volume (veh/h)	13	2057	20	37	2096	80	38	7	44	57	3	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1856	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	13	2121	0	38	2161	0	39	7	0	59	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	0	3	0	0	0	0	0	0	0	0
Cap, veh/h	37	2239		514	3732		77	104		91	119	
Arrive On Green	0.02	0.43	0.00	0.29	0.72	0.00	0.04	0.05	0.00	0.05	0.06	0.00
Sat Flow, veh/h	1810	5147	1610	1767	5187	1610	1810	1900	1610	1810	1900	1610
Grp Volume(v), veh/h	13	2121	0	38	2161	0	39	7	0	59	3	0
Grp Sat Flow(s),veh/h/ln	1810	1716	1610	1767	1729	1610	1810	1900	1610	1810	1900	1610
Q Serve(g_s), s	0.9	47.5	0.0	1.9	24.0	0.0	2.5	0.4	0.0	3.8	0.2	0.0
Cycle Q Clear(g_c), s	0.9	47.5	0.0	1.9	24.0	0.0	2.5	0.4	0.0	3.8	0.2	0.0
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	37	2239		514	3732		77	104		91	119	
V/C Ratio(X)	0.35	0.95		0.07	0.58		0.51	0.07		0.65	0.03	
Avail Cap(c_a), veh/h	241	2243		514	3732		241	317		241	302	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.0	32.6	0.0	30.8	8.1	0.0	56.2	53.8	0.0	56.0	52.8	0.0
Incr Delay (d2), s/veh	2.1	10.1	0.0	0.0	0.7	0.0	1.9	0.2	0.0	2.9	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	0.4	20.5	0.0	0.8	7.4	0.0	1.2	0.2	0.0	1.8	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.1	42.7	0.0	30.9	8.8	0.0	58.2	54.0	0.0	58.9	52.9	0.0
LnGrp LOS	E	D		C	A		E	D		E	D	
Approach Vol, veh/h		2134			2199			46			62	
Approach Delay, s/veh		42.8			9.1			57.5			58.6	
Approach LOS		D			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	11.5	40.6	57.9	9.1	12.4	6.5	92.0
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	6.0	* 20	14.0	* 52	16.0	19.1	16.0	50.3
Max Q Clear Time (g_c+I1), s	5.8	2.4	3.9	49.5	4.5	2.2	2.9	26.0
Green Ext Time (p_c), s	0.0	0.0	0.0	2.7	0.0	0.0	0.0	21.3

Intersection Summary	
HCM 7th Control Delay, s/veh	26.5
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	274	537	23	912	502	765	46	1195	842	544	1304	175
Future Volume (veh/h)	274	537	23	912	502	765	46	1195	842	544	1304	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1885	1900	1900	1678	1870	1900	1900	1885	1870
Adj Flow Rate, veh/h	282	554	0	940	518	0	47	1232	0	561	1344	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	0	1	0	0	15	2	0	0	1	2
Cap, veh/h	475	691		941	671		368	1454		585	1683	
Arrive On Green	0.14	0.14	0.00	0.19	0.19	0.00	0.12	0.28	0.00	0.06	0.11	0.00
Sat Flow, veh/h	3510	5106	1610	5063	3610	1610	3100	5106	1610	3510	5147	1585
Grp Volume(v), veh/h	282	554	0	940	518	0	47	1232	0	561	1344	0
Grp Sat Flow(s),veh/h/ln	1755	1702	1610	1688	1805	1610	1550	1702	1610	1755	1716	1585
Q Serve(g_s), s	9.1	12.6	0.0	22.3	16.4	0.0	1.6	27.3	0.0	19.1	30.6	0.0
Cycle Q Clear(g_c), s	9.1	12.6	0.0	22.3	16.4	0.0	1.6	27.3	0.0	19.1	30.6	0.0
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	475	691		941	671		368	1454		585	1683	
V/C Ratio(X)	0.59	0.80		1.00	0.77		0.13	0.85		0.96	0.80	
Avail Cap(c_a), veh/h	506	736		941	671		413	1532		585	1771	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.70	0.70	0.00
Uniform Delay (d), s/veh	48.8	50.3	0.0	48.8	46.4	0.0	47.3	40.4	0.0	56.3	49.7	0.0
Incr Delay (d2), s/veh	2.4	6.7	0.0	29.1	6.1	0.0	0.1	4.7	0.0	21.6	2.9	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	4.0	5.7	0.0	11.6	7.7	0.0	0.6	11.6	0.0	10.7	14.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.2	57.0	0.0	77.9	52.6	0.0	47.4	45.2	0.0	77.9	52.5	0.0
LnGrp LOS	D	E		E	D		D	D		E	D	
Approach Vol, veh/h		836			1458			1279			1905	
Approach Delay, s/veh		55.1			68.9			45.2			60.0	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	28.0	25.0	40.2	23.9	20.2	44.9
Change Period (Y+Rc), s	5.7	5.0	6.0	7.7	6.0	* 5.7
Max Green Setting (Gmax), s	22.3	20.0	36.0	17.3	16.0	* 41
Max Q Clear Time (g_c+I1), s	24.3	21.1	29.3	14.6	3.6	32.6
Green Ext Time (p_c), s	0.0	0.0	4.8	1.6	0.0	6.6

Intersection Summary	
HCM 7th Control Delay, s/veh	58.2
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	408	10	359	100	14	118	381	1719	14	100	1522	201
Future Volume (veh/h)	408	10	359	100	14	118	381	1719	14	100	1522	201
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1885	1693	1870	1885	1885	1796	1870	1885	1870
Adj Flow Rate, veh/h	437	0	85	116	0	124	401	1809	15	105	1602	70
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	1	1	14	2	1	1	7	2	1	2
Cap, veh/h	557	0	162	349	0	153	468	2352	19	988	2664	809
Arrive On Green	0.10	0.00	0.10	0.10	0.00	0.10	0.13	0.35	0.35	0.57	1.00	1.00
Sat Flow, veh/h	5386	0	1570	3591	0	1580	3483	6683	55	3456	5147	1562
Grp Volume(v), veh/h	437	0	85	116	0	124	401	1317	507	105	1602	70
Grp Sat Flow(s),veh/h/ln	1795	0	1570	1795	0	1580	1742	1621	1874	1728	1716	1562
Q Serve(g_s), s	9.5	0.0	6.2	3.6	0.0	9.2	13.5	28.9	28.9	1.7	0.0	0.0
Cycle Q Clear(g_c), s	9.5	0.0	6.2	3.6	0.0	9.2	13.5	28.9	28.9	1.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	557	0	162	349	0	153	468	1712	660	988	2664	809
V/C Ratio(X)	0.78	0.00	0.52	0.33	0.00	0.81	0.86	0.77	0.77	0.11	0.60	0.09
Avail Cap(c_a), veh/h	1032	0	301	598	0	263	755	1755	676	988	2664	809
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.69	0.69	0.69	0.88	0.88	0.88
Uniform Delay (d), s/veh	52.5	0.0	51.0	50.5	0.0	53.1	50.8	34.6	34.6	18.7	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.0	0.2	0.0	3.8	2.1	2.4	5.9	0.0	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	4.3	0.0	2.5	1.6	0.0	3.8	6.0	11.6	14.1	0.6	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.4	0.0	52.0	50.8	0.0	56.9	52.9	36.9	40.5	18.7	0.9	0.2
LnGrp LOS	D		D	D		E	D	D	D	B	A	A
Approach Vol, veh/h		522			240			2225			1777	
Approach Delay, s/veh		53.2			53.9			40.6			1.9	
Approach LOS		D			D			D			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	47.9		16.4	20.1	67.8		15.7
Change Period (Y+Rc), s	5.7	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	14.3	43.3		23.0	26.0	33.3		20.0
Max Q Clear Time (g_c+I1), s	13.7	30.9		11.5	15.5	2.0		11.2
Green Ext Time (p_c), s	0.1	11.4		0.9	0.6	24.1		0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	28.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	6	290	0	0	0	0	1894	454	0	1717	306
Future Volume (veh/h)	152	6	290	0	0	0	0	1894	454	0	1717	306
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1900	1885				0	1885	1870	0	1885	1885
Adj Flow Rate, veh/h	107	0	360				0	1973	473	0	1789	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	0	1				0	1	2	0	1	1
Cap, veh/h	239	0	429				0	3220	742	0	3984	
Arrive On Green	0.13	0.00	0.13				0.00	1.00	1.00	0.00	1.00	0.00
Sat Flow, veh/h	1781	0	3195				0	4330	958	0	5316	1598
Grp Volume(v), veh/h	107	0	360				0	1613	833	0	1789	0
Grp Sat Flow(s),veh/h/ln	1781	0	1598				0	1716	1687	0	1716	1598
Q Serve(g_s), s	6.6	0.0	13.2				0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.6	0.0	13.2				0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.57	0.00		1.00
Lane Grp Cap(c), veh/h	239	0	429				0	2656	1306	0	3984	
V/C Ratio(X)	0.45	0.00	0.84				0.00	0.61	0.64	0.00	0.45	
Avail Cap(c_a), veh/h	515	0	924				0	2656	1306	0	3984	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.79	0.79	0.00	0.88	0.00
Uniform Delay (d), s/veh	47.8	0.0	50.7				0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	1.7				0.0	0.8	1.9	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
%ile BackOfQ(50%),veh/ln	3.0	0.0	5.4				0.0	0.3	0.7	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.3	0.0	52.4				0.0	0.8	1.9	0.0	0.3	0.0
LnGrp LOS	D		D					A	A		A	
Approach Vol, veh/h		467						2446			1789	
Approach Delay, s/veh		51.5						1.2			0.3	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	98.6	21.4	98.6
Change Period (Y+Rc), s	5.7	5.3	5.7
Max Green Setting (Gmax), s	74.3	34.7	74.3
Max Q Clear Time (g_c+I1), s	2.0	15.2	2.0
Green Ext Time (p_c), s	60.4	0.9	32.3

Intersection Summary	
HCM 7th Control Delay, s/veh	5.9
HCM 7th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	381	342	1601	446	188	1626
Future Volume (veh/h)	381	342	1601	446	188	1626
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	393	353	1651	0	194	1676
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	1	1	1	1	1
Cap, veh/h	743	416	3017		223	3828
Arrive On Green	0.15	0.15	1.00	0.00	0.12	0.74
Sat Flow, veh/h	5023	2812	5316	1598	1795	5316
Grp Volume(v), veh/h	393	353	1651	0	194	1676
Grp Sat Flow(s),veh/h/ln	1674	1406	1716	1598	1795	1716
Q Serve(g_s), s	8.7	14.7	0.0	0.0	12.7	14.8
Cycle Q Clear(g_c), s	8.7	14.7	0.0	0.0	12.7	14.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	743	416	3017		223	3828
V/C Ratio(X)	0.53	0.85	0.55		0.87	0.44
Avail Cap(c_a), veh/h	950	532	3017		389	3828
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.73	0.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	49.8	0.0	0.0	51.6	5.8
Incr Delay (d2), s/veh	0.2	8.3	0.5	0.0	4.1	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	5.6	0.1	0.0	5.8	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	47.5	58.1	0.5	0.0	55.7	6.2
LnGrp LOS	D	E	A		E	A
Approach Vol, veh/h	746		1651			1870
Approach Delay, s/veh	52.5		0.5			11.3
Approach LOS	D		A			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	18.9	76.1				95.0	25.0
Change Period (Y+Rc), s	4.0	5.7				5.7	7.3
Max Green Setting (Gmax), s	26.6	54.3				84.3	22.7
Max Q Clear Time (g_c+I1), s	14.7	2.0				16.8	16.7
Green Ext Time (p_c), s	0.2	26.7				32.3	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	14.4
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

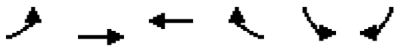
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	720	49	292	458	33	58	103	349	23	56	29
Future Volume (veh/h)	38	720	49	292	458	33	58	103	349	23	56	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1900	1856	1826	1856	1870	1900	1885	1900	1826	1856
Adj Flow Rate, veh/h	41	774	53	314	492	35	62	111	119	25	60	31
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	2	0	3	5	3	2	0	1	0	5	3
Cap, veh/h	171	1299	589	353	1788	810	109	521	230	127	218	188
Arrive On Green	0.05	0.37	0.37	0.20	0.52	0.52	0.06	0.14	0.14	0.04	0.12	0.12
Sat Flow, veh/h	3428	3554	1610	1767	3469	1572	1781	3610	1598	3510	1826	1572
Grp Volume(v), veh/h	41	774	53	314	492	35	62	111	119	25	60	31
Grp Sat Flow(s),veh/h/ln	1714	1777	1610	1767	1735	1572	1781	1805	1598	1755	1826	1572
Q Serve(g_s), s	1.0	16.0	2.0	15.6	7.2	1.0	3.1	2.5	6.2	0.6	2.7	1.6
Cycle Q Clear(g_c), s	1.0	16.0	2.0	15.6	7.2	1.0	3.1	2.5	6.2	0.6	2.7	1.6
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	171	1299	589	353	1788	810	109	521	230	127	218	188
V/C Ratio(X)	0.24	0.60	0.09	0.89	0.28	0.04	0.57	0.21	0.52	0.20	0.28	0.17
Avail Cap(c_a), veh/h	1517	2949	1336	1114	2879	1305	394	1278	566	777	707	609
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	41.3	23.3	18.8	35.2	12.4	10.9	41.3	34.1	35.8	42.3	36.3	35.8
Incr Delay (d2), s/veh	0.3	1.2	0.2	3.1	0.2	0.1	1.7	0.8	6.7	0.3	1.1	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	0.4	6.3	0.7	6.6	2.5	0.3	1.3	1.1	2.7	0.3	1.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.6	24.5	19.0	38.3	12.6	10.9	43.0	34.9	42.5	42.6	37.3	36.4
LnGrp LOS	D	C	B	D	B	B	D	C	D	D	D	D
Approach Vol, veh/h		868			841			292			116	
Approach Delay, s/veh		24.9			22.1			39.7			38.2	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	19.3	23.0	39.7	10.5	17.1	9.5	53.3
Change Period (Y+Rc), s	5.0	6.3	5.0	6.7	5.0	6.3	5.0	6.7
Max Green Setting (Gmax), s	20.0	32.0	57.0	75.0	20.0	35.0	40.0	75.0
Max Q Clear Time (g_c+I1), s	2.6	8.2	17.6	18.0	5.1	4.7	3.0	9.2
Green Ext Time (p_c), s	0.0	2.6	0.4	15.1	0.0	0.6	0.1	8.5

Intersection Summary	
HCM 7th Control Delay, s/veh	26.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	224	886	640	121	113	135
Future Volume (veh/h)	224	886	640	121	113	135
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1870	1826	1870	1900	1856
Adj Flow Rate, veh/h	233	923	667	126	118	141
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	5	2	0	3
Cap, veh/h	290	2262	1336	610	228	198
Arrive On Green	0.16	0.64	0.39	0.39	0.13	0.13
Sat Flow, veh/h	1810	3647	3561	1585	1810	1572
Grp Volume(v), veh/h	233	923	667	126	118	141
Grp Sat Flow(s),veh/h/ln	1810	1777	1735	1585	1810	1572
Q Serve(g_s), s	6.8	7.0	8.0	2.9	3.3	4.7
Cycle Q Clear(g_c), s	6.8	7.0	8.0	2.9	3.3	4.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	290	2262	1336	610	228	198
V/C Ratio(X)	0.80	0.41	0.50	0.21	0.52	0.71
Avail Cap(c_a), veh/h	661	3568	3483	1591	661	574
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	22.2	4.9	12.8	11.3	22.4	23.0
Incr Delay (d2), s/veh	2.0	0.3	0.6	0.4	0.7	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	2.6	1.3	2.5	0.9	1.4	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	24.2	5.1	13.4	11.6	23.0	24.7
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h		1156	793		259	
Approach Delay, s/veh		9.0	13.1		24.0	
Approach LOS		A	B		C	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			42.9		11.9	13.8	29.1
Change Period (Y+Rc), s			8.0		5.0	5.0	8.0
Max Green Setting (Gmax), s			55.0		20.0	20.0	55.0
Max Q Clear Time (g_c+I1), s			9.0		6.7	8.8	10.0
Green Ext Time (p_c), s			15.0		0.3	0.2	11.1

Intersection Summary	
HCM 7th Control Delay, s/veh	12.2
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	868	21	6	676	92	27	24	8	71	29	65
Future Volume (veh/h)	86	868	21	6	676	92	27	24	8	71	29	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1752	1900	1796	1900	1515	1781	1722	1900	1900	1722
Adj Flow Rate, veh/h	91	923	22	6	719	98	29	26	9	76	31	69
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	3	10	0	7	0	26	8	12	0	0	12
Cap, veh/h	168	1724	726	20	1385	653	65	160	131	156	248	191
Arrive On Green	0.09	0.49	0.49	0.01	0.41	0.41	0.05	0.09	0.09	0.09	0.13	0.13
Sat Flow, veh/h	1781	3526	1485	1810	3413	1610	1443	1781	1459	1810	1900	1459
Grp Volume(v), veh/h	91	923	22	6	719	98	29	26	9	76	31	69
Grp Sat Flow(s),veh/h/ln	1781	1763	1485	1810	1706	1610	1443	1781	1459	1810	1900	1459
Q Serve(g_s), s	2.8	10.2	0.4	0.2	9.0	2.2	1.1	0.8	0.3	2.3	0.8	2.4
Cycle Q Clear(g_c), s	2.8	10.2	0.4	0.2	9.0	2.2	1.1	0.8	0.3	2.3	0.8	2.4
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	168	1724	726	20	1385	653	65	160	131	156	248	191
V/C Ratio(X)	0.54	0.54	0.03	0.30	0.52	0.15	0.44	0.16	0.07	0.49	0.12	0.36
Avail Cap(c_a), veh/h	631	4680	1971	641	4531	2138	511	631	517	641	673	517
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	24.4	10.0	7.5	27.7	12.6	10.6	26.3	23.8	23.5	24.6	21.7	22.4
Incr Delay (d2), s/veh	1.0	0.5	0.0	3.0	0.6	0.2	1.8	1.0	0.5	0.9	0.3	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	1.1	2.9	0.1	0.1	2.7	0.6	0.4	0.3	0.1	0.9	0.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.4	10.5	7.5	30.7	13.2	10.8	28.0	24.8	24.0	25.5	22.0	23.8
LnGrp LOS	C	B	A	C	B	B	C	C	C	C	C	C
Approach Vol, veh/h		1036			823			64			176	
Approach Delay, s/veh		11.8			13.1			26.1			24.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	9.7	4.6	33.3	6.6	12.0	9.3	28.6
Change Period (Y+Rc), s	4.0	* 4.6	4.0	5.7	4.0	4.6	4.0	5.7
Max Green Setting (Gmax), s	20.0	* 20	20.0	75.0	20.0	20.0	20.0	75.0
Max Q Clear Time (g_c+I1), s	4.3	2.8	2.2	12.2	3.1	4.4	4.8	11.0
Green Ext Time (p_c), s	0.1	0.1	0.0	15.4	0.0	0.3	0.1	11.7

Intersection Summary	
HCM 7th Control Delay, s/veh	13.8
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	438	52	328	411	360	51	1006	252	300	1063	319
Future Volume (veh/h)	370	438	52	328	411	360	51	1006	252	300	1063	319
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1856	1811	1885	1841	1885	1900	1885	1900	1885	1870	1826
Adj Flow Rate, veh/h	389	461	55	345	433	171	54	1059	47	316	1119	74
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	3	6	1	4	1	0	1	0	1	2	5
Cap, veh/h	470	641	76	427	652	294	85	978	440	352	1500	859
Arrive On Green	0.14	0.20	0.20	0.12	0.19	0.19	0.05	0.27	0.27	0.20	0.42	0.42
Sat Flow, veh/h	3401	3174	377	3483	3497	1577	1810	3582	1610	1795	3554	1528
Grp Volume(v), veh/h	389	255	261	345	433	171	54	1059	47	316	1119	74
Grp Sat Flow(s),veh/h/ln	1700	1763	1788	1742	1749	1577	1810	1791	1610	1795	1777	1528
Q Serve(g_s), s	11.0	13.4	13.5	9.5	11.4	9.8	2.9	27.0	2.2	17.0	26.3	2.2
Cycle Q Clear(g_c), s	11.0	13.4	13.5	9.5	11.4	9.8	2.9	27.0	2.2	17.0	26.3	2.2
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	470	356	361	427	652	294	85	978	440	352	1500	859
V/C Ratio(X)	0.83	0.72	0.72	0.81	0.66	0.58	0.64	1.08	0.11	0.90	0.75	0.09
Avail Cap(c_a), veh/h	1135	517	524	1198	1061	478	476	978	440	708	1500	859
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	41.5	36.8	36.9	42.2	37.3	36.7	46.3	35.9	26.9	38.8	24.1	10.0
Incr Delay (d2), s/veh	1.4	5.0	5.0	1.4	2.3	3.5	2.9	53.8	0.2	3.4	2.3	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	4.5	6.0	6.1	4.0	4.8	3.9	1.3	18.3	0.8	7.4	10.5	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.9	41.8	41.9	43.6	39.6	40.2	49.2	89.7	27.1	42.2	26.4	10.1
LnGrp LOS	D	D	D	D	D	D	D	F	C	D	C	B
Approach Vol, veh/h		905			949			1160			1509	
Approach Delay, s/veh		42.3			41.2			85.3			28.9	
Approach LOS		D			D			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.4	33.4	16.1	26.0	8.6	48.1	17.7	24.4
Change Period (Y+Rc), s	4.0	6.4	4.0	6.0	4.0	6.4	4.0	6.0
Max Green Setting (Gmax), s	19.0	27.0	34.0	29.0	26.0	40.0	33.0	30.0
Max Q Clear Time (g_c+I1), s	19.0	29.0	11.5	15.5	4.9	28.3	13.0	13.4
Green Ext Time (p_c), s	0.4	0.0	0.6	3.9	0.0	7.6	0.7	5.1

Intersection Summary	
HCM 7th Control Delay, s/veh	48.6
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	734	27	36	871	217	42	132	25	157	103	75
Future Volume (veh/h)	81	734	27	36	871	217	42	132	25	157	103	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1900	1856	1885	1900	1870	1900	1900	1885	1870	1856
Adj Flow Rate, veh/h	85	773	28	38	917	0	44	139	26	165	108	79
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	3	1	0	2	0	0	1	2	3
Cap, veh/h	108	880	32	65	1672		54	170	250	189	124	362
Arrive On Green	0.06	0.49	0.49	0.04	0.47	0.00	0.12	0.12	0.12	0.17	0.17	0.17
Sat Flow, veh/h	1781	1794	65	1767	3582	1610	451	1426	1598	1097	718	1544
Grp Volume(v), veh/h	85	0	801	38	917	0	183	0	26	273	0	79
Grp Sat Flow(s),veh/h/ln	1781	0	1859	1767	1791	1610	1877	0	1598	1815	0	1544
Q Serve(g_s), s	5.4	0.0	43.9	2.4	20.9	0.0	10.8	0.0	1.6	16.7	0.0	4.7
Cycle Q Clear(g_c), s	5.4	0.0	43.9	2.4	20.9	0.0	10.8	0.0	1.6	16.7	0.0	4.7
Prop In Lane	1.00		0.03	1.00		1.00	0.24		1.00	0.60		1.00
Lane Grp Cap(c), veh/h	108	0	912	65	1672		224	0	250	313	0	362
V/C Ratio(X)	0.78	0.00	0.88	0.58	0.55		0.82	0.00	0.10	0.87	0.00	0.22
Avail Cap(c_a), veh/h	360	0	1126	357	1856		353	0	360	510	0	529
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.7	0.0	26.0	54.0	21.8	0.0	48.9	0.0	41.2	45.9	0.0	35.3
Incr Delay (d2), s/veh	4.6	0.0	8.2	3.1	0.5	0.0	3.9	0.0	0.1	5.2	0.0	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	2.5	0.0	19.8	1.1	8.3	0.0	5.2	0.0	0.6	7.9	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.4	0.0	34.2	57.0	22.3	0.0	52.9	0.0	41.3	51.2	0.0	35.4
LnGrp LOS	E		C	E	C		D		D	D		D
Approach Vol, veh/h		886			955			209			352	
Approach Delay, s/veh		36.4			23.7			51.4			47.6	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	18.2	8.2	61.9	25.6	10.9	59.2
Change Period (Y+Rc), s	4.6	4.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	21.4	23.0	69.0	32.0	23.0	59.0
Max Q Clear Time (g_c+I1), s	12.8	4.4	45.9	18.7	7.4	22.9
Green Ext Time (p_c), s	0.4	0.0	10.0	0.9	0.1	12.9

Intersection Summary	
HCM 7th Control Delay, s/veh	34.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	232	466	130	339	115	611	1114	72	135	1338	172
Future Volume (veh/h)	161	232	466	130	339	115	611	1114	72	135	1338	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1885	1885	1870	1870	1885	1885	1870	1885
Adj Flow Rate, veh/h	168	242	89	135	353	21	636	1160	29	141	1394	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	1	1	2	2	1	1	2	1
Cap, veh/h	195	483	210	162	419	181	708	2803	862	201	2052	
Arrive On Green	0.11	0.14	0.14	0.09	0.12	0.12	0.20	0.55	0.55	0.06	0.40	0.00
Sat Flow, veh/h	1781	3554	1546	1781	3582	1546	3456	5106	1571	3483	5106	1598
Grp Volume(v), veh/h	168	242	89	135	353	21	636	1160	29	141	1394	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1546	1781	1791	1546	1728	1702	1571	1742	1702	1598
Q Serve(g_s), s	11.1	7.6	6.3	8.9	11.6	1.5	21.5	15.9	1.0	4.8	27.0	0.0
Cycle Q Clear(g_c), s	11.1	7.6	6.3	8.9	11.6	1.5	21.5	15.9	1.0	4.8	27.0	0.0
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	195	483	210	162	419	181	708	2803	862	201	2052	
V/C Ratio(X)	0.86	0.50	0.42	0.83	0.84	0.12	0.90	0.41	0.03	0.70	0.68	
Avail Cap(c_a), veh/h	267	483	210	238	439	189	806	2803	862	522	2052	
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	0.50	0.50	0.00
Uniform Delay (d), s/veh	52.5	48.1	47.5	53.7	51.9	47.4	46.5	15.8	12.4	55.5	29.5	0.0
Incr Delay (d2), s/veh	14.5	1.4	2.3	10.2	15.0	0.6	11.9	0.5	0.1	0.8	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	5.6	3.4	0.1	4.4	6.0	0.6	10.1	5.9	0.4	2.1	10.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.1	49.5	49.9	63.9	66.9	48.0	58.4	16.3	12.5	56.3	30.5	0.0
LnGrp LOS	E	D	D	E	E	D	E	B	B	E	C	
Approach Vol, veh/h		499			509			1825			1535	
Approach Delay, s/veh		55.5			65.3			30.9			32.8	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	71.9	14.9	22.3	28.6	54.2	17.2	20.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	18.0	50.0	16.0	16.0	28.0	40.0	18.0	* 15
Max Q Clear Time (g_c+I1), s	6.8	17.9	10.9	9.6	23.5	29.0	13.1	13.6
Green Ext Time (p_c), s	0.2	10.7	0.1	1.3	1.1	7.9	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	38.4
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	123	33	33	407	400	138
Future Volume (veh/h)	123	33	33	407	400	138
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1870	1885
Adj Flow Rate, veh/h	154	41	41	509	500	172
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0	0	2	1
Cap, veh/h	256	228	89	1903	1111	483
Arrive On Green	0.14	0.14	0.05	0.53	0.31	0.31
Sat Flow, veh/h	1810	1610	1810	3705	3647	1544
Grp Volume(v), veh/h	154	41	41	509	500	172
Grp Sat Flow(s),veh/h/ln	1810	1610	1810	1805	1777	1544
Q Serve(g_s), s	2.2	0.6	0.6	2.1	3.1	2.3
Cycle Q Clear(g_c), s	2.2	0.6	0.6	2.1	3.1	2.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	256	228	89	1903	1111	483
V/C Ratio(X)	0.60	0.18	0.46	0.27	0.45	0.36
Avail Cap(c_a), veh/h	1198	1066	359	3718	2366	1028
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	10.9	10.3	12.6	3.5	7.5	7.2
Incr Delay (d2), s/veh	2.3	0.4	3.7	0.1	0.3	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.6	0.3	0.1	0.6	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.2	10.6	16.3	3.6	7.8	7.7
LnGrp LOS	B	B	B	A	A	A
Approach Vol, veh/h	195			550	672	
Approach Delay, s/veh	12.7			4.6	7.7	
Approach LOS	B			A	A	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	18.8		8.4	5.8	13.0
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	28.0		18.0	5.4	18.1
Max Q Clear Time (g_c+I1), s	4.1		4.2	2.6	5.1
Green Ext Time (p_c), s	3.2		0.4	0.0	3.1

Intersection Summary	
HCM 7th Control Delay, s/veh	7.2
HCM 7th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	36	76	146	404	417	19
Future Volume (veh/h)	36	76	146	404	417	19
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1870	1900
Adj Flow Rate, veh/h	44	93	178	493	509	23
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	2	0
Cap, veh/h	207	184	236	2091	1051	470
Arrive On Green	0.11	0.11	0.13	0.58	0.30	0.30
Sat Flow, veh/h	1810	1610	1810	3705	3647	1588
Grp Volume(v), veh/h	44	93	178	493	509	23
Grp Sat Flow(s),veh/h/ln	1810	1610	1810	1805	1777	1588
Q Serve(g_s), s	0.6	1.6	2.8	2.0	3.5	0.3
Cycle Q Clear(g_c), s	0.6	1.6	2.8	2.0	3.5	0.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	207	184	236	2091	1051	470
V/C Ratio(X)	0.21	0.50	0.75	0.24	0.48	0.05
Avail Cap(c_a), veh/h	1108	986	647	4054	2177	973
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	11.8	12.2	12.3	3.0	8.5	7.4
Incr Delay (d2), s/veh	0.5	2.1	4.9	0.1	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.5	1.1	0.0	0.8	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	12.3	14.4	17.2	3.1	8.9	7.4
LnGrp LOS	B	B	B	A	A	A
Approach Vol, veh/h	137			671	532	
Approach Delay, s/veh	13.7			6.8	8.8	
Approach LOS	B			A	A	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	21.5		7.9	8.3	13.2
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	33.0		18.0	10.5	18.0
Max Q Clear Time (g_c+I1), s	4.0		3.6	4.8	5.5
Green Ext Time (p_c), s	3.2		0.3	0.2	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	8.3
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	40	45	62	66	50	47	326	73	70	478	9
Future Volume (veh/h)	4	40	45	62	66	50	47	326	73	70	478	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1870	1900	1870	1900	1856	1870	1900
Adj Flow Rate, veh/h	4	43	48	66	70	53	50	347	78	74	509	10
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	0	3	2	0
Cap, veh/h	240	252	213	304	320	267	145	761	344	182	843	381
Arrive On Green	0.13	0.13	0.13	0.17	0.17	0.17	0.08	0.21	0.21	0.10	0.24	0.24
Sat Flow, veh/h	1810	1900	1610	1810	1900	1585	1810	3554	1606	1767	3554	1607
Grp Volume(v), veh/h	4	43	48	66	70	53	50	347	78	74	509	10
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1585	1810	1777	1606	1767	1777	1607
Q Serve(g_s), s	0.1	1.0	1.3	1.6	1.6	1.4	1.3	4.2	2.0	1.9	6.3	0.2
Cycle Q Clear(g_c), s	0.1	1.0	1.3	1.6	1.6	1.4	1.3	4.2	2.0	1.9	6.3	0.2
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	240	252	213	304	320	267	145	761	344	182	843	381
V/C Ratio(X)	0.02	0.17	0.22	0.22	0.22	0.20	0.34	0.46	0.23	0.41	0.60	0.03
Avail Cap(c_a), veh/h	731	768	650	731	768	640	731	2871	1298	714	2871	1298
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	18.7	19.1	19.2	17.8	17.8	17.7	21.5	16.9	16.1	20.8	16.8	14.5
Incr Delay (d2), s/veh	0.0	0.3	0.5	0.4	0.3	0.4	1.4	0.4	0.3	1.4	0.7	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	0.0	0.4	0.5	0.6	0.6	0.5	0.5	1.4	0.6	0.7	2.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.7	19.4	19.7	18.1	18.1	18.1	22.9	17.4	16.4	22.2	17.5	14.5
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		95			189			475			593	
Approach Delay, s/veh		19.5			18.1			17.8			18.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	16.6		10.6	8.0	17.7		13.2
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	3.3	6.2		3.3	3.3	8.3		3.6
Green Ext Time (p_c), s	0.1	2.4		0.3	0.1	3.3		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	18.1
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	6	133	22	5	6	182	424	36	7	505	47
Future Volume (veh/h)	30	6	133	22	5	6	182	424	36	7	505	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1670	1710	1710	1710	1710	1710	1710	1683	1710	1710	1697	1683
Adj Flow Rate, veh/h	32	6	143	24	5	6	196	456	39	8	543	51
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	0	0	0	0	0	0	2	0	0	1	2
Cap, veh/h	80	241	203	64	223	188	244	1357	614	24	932	402
Arrive On Green	0.05	0.14	0.14	0.04	0.13	0.13	0.15	0.42	0.42	0.01	0.29	0.29
Sat Flow, veh/h	1590	1710	1443	1629	1710	1443	1629	3198	1447	1629	3224	1392
Grp Volume(v), veh/h	32	6	143	24	5	6	196	456	39	8	543	51
Grp Sat Flow(s),veh/h/ln	1590	1710	1443	1629	1710	1443	1629	1599	1447	1629	1612	1392
Q Serve(g_s), s	1.0	0.2	4.8	0.7	0.1	0.2	5.9	4.9	0.8	0.2	7.3	1.4
Cycle Q Clear(g_c), s	1.0	0.2	4.8	0.7	0.1	0.2	5.9	4.9	0.8	0.2	7.3	1.4
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	80	241	203	64	223	188	244	1357	614	24	932	402
V/C Ratio(X)	0.40	0.02	0.70	0.37	0.02	0.03	0.80	0.34	0.06	0.33	0.58	0.13
Avail Cap(c_a), veh/h	627	1349	1138	803	1349	1138	803	1450	656	642	1271	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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	18.8	20.8	23.7	19.2	19.3	20.8	9.8	8.6	24.7	15.4	13.3
Incr Delay (d2), s/veh	1.2	0.1	8.0	1.3	0.1	0.1	2.3	0.5	0.1	3.0	2.6	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	0.4	0.1	1.8	0.3	0.1	0.1	2.0	1.3	0.2	0.1	2.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.6	18.9	28.7	25.1	19.3	19.4	23.2	10.3	8.8	27.7	18.0	13.9
LnGrp LOS	C	B	C	C	B	B	C	B	A	C	B	B
Approach Vol, veh/h		181			35			691			602	
Approach Delay, s/veh		27.7			23.3			13.9			17.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	12.6	4.7	26.8	6.0	13.2	11.6	20.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	4.0	* 5.3
Max Green Setting (Gmax), s	20.0	40.0	20.0	23.0	25.0	40.0	25.0	* 20
Max Q Clear Time (g_c+I1), s	3.0	2.2	2.2	6.9	2.7	6.8	7.9	9.3
Green Ext Time (p_c), s	0.0	0.0	0.0	5.5	0.0	1.0	0.2	5.3

Intersection Summary	
HCM 7th Control Delay, s/veh	17.3
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	0	115	47	1	2	170	855	54	10	827	30
Future Volume (veh/h)	20	0	115	47	1	2	170	855	54	10	827	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1900	1885	1885	1900	1900	1885	1900
Adj Flow Rate, veh/h	21	0	120	49	1	2	177	891	56	10	861	31
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	2	0	0	0	1	1	0	0	1	0
Cap, veh/h	208	0	182	138	3	125	223	1769	774	32	1388	619
Arrive On Green	0.11	0.00	0.11	0.08	0.08	0.08	0.12	0.49	0.49	0.02	0.39	0.39
Sat Flow, veh/h	1810	0	1581	1775	36	1606	1795	3582	1567	1810	3582	1598
Grp Volume(v), veh/h	21	0	120	50	0	2	177	891	56	10	861	31
Grp Sat Flow(s),veh/h/ln	1810	0	1581	1811	0	1606	1795	1791	1567	1810	1791	1598
Q Serve(g_s), s	0.7	0.0	4.6	1.7	0.0	0.1	6.1	10.7	1.2	0.3	12.4	0.8
Cycle Q Clear(g_c), s	0.7	0.0	4.6	1.7	0.0	0.1	6.1	10.7	1.2	0.3	12.4	0.8
Prop In Lane	1.00		1.00	0.98		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	0	182	141	0	125	223	1769	774	32	1388	619
V/C Ratio(X)	0.10	0.00	0.66	0.36	0.00	0.02	0.79	0.50	0.07	0.31	0.62	0.05
Avail Cap(c_a), veh/h	566	0	495	567	0	503	562	2523	1104	566	2242	1000
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	25.3	0.0	27.1	28.0	0.0	27.2	27.2	10.9	8.5	31.0	15.8	12.2
Incr Delay (d2), s/veh	0.1	0.0	1.5	0.6	0.0	0.0	2.4	0.4	0.1	2.0	0.8	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	0.3	0.0	1.8	0.7	0.0	0.0	2.5	3.3	0.3	0.2	4.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.4	0.0	28.6	28.5	0.0	27.2	29.6	11.3	8.6	33.0	16.6	12.3
LnGrp LOS	C		C	C		C	C	B	A	C	B	B
Approach Vol, veh/h		141			52			1124			902	
Approach Delay, s/veh		28.1			28.5			14.1			16.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	37.6		12.2	11.9	30.8		9.0
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.0
Max Green Setting (Gmax), s	20.0	45.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	2.7	12.7		6.6	8.1	14.4		3.7
Green Ext Time (p_c), s	0.0	12.1		0.2	0.2	10.3		0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	16.3
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	128	139	151	927	1019	153
Future Volume (veh/h)	128	139	151	927	1019	153
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1870	1900	1885	1841	1900
Adj Flow Rate, veh/h	138	149	162	997	1096	165
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	2	0	1	4	0
Cap, veh/h	239	211	213	2450	1724	777
Arrive On Green	0.13	0.13	0.12	0.68	0.49	0.49
Sat Flow, veh/h	1795	1585	1810	3676	3589	1575
Grp Volume(v), veh/h	138	149	162	997	1096	165
Grp Sat Flow(s),veh/h/ln	1795	1585	1810	1791	1749	1575
Q Serve(g_s), s	3.9	4.9	4.7	6.7	12.6	3.2
Cycle Q Clear(g_c), s	3.9	4.9	4.7	6.7	12.6	3.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	239	211	213	2450	1724	777
V/C Ratio(X)	0.58	0.71	0.76	0.41	0.64	0.21
Avail Cap(c_a), veh/h	1380	1219	596	2450	2177	980
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	22.2	22.7	23.4	3.8	10.2	7.8
Incr Delay (d2), s/veh	0.8	1.6	5.5	0.2	0.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.1	2.1	0.9	3.5	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	23.1	24.3	28.9	4.0	11.0	8.1
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	287			1159	1261	
Approach Delay, s/veh	23.7			7.5	10.6	
Approach LOS	C			A	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	43.4		11.3	10.4	32.9
Change Period (Y+Rc), s	6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s	24.0		42.0	18.0	34.0
Max Q Clear Time (g_c+I1), s	8.7		6.9	6.7	14.6
Green Ext Time (p_c), s	8.8		0.4	0.3	12.3

Intersection Summary	
HCM 7th Control Delay, s/veh	10.7
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	29	79	39	26	20	79	941	53	17	979	188
Future Volume (veh/h)	138	29	79	39	26	20	79	941	53	17	979	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1885	1885	1900	1900	1870	1900
Adj Flow Rate, veh/h	147	31	84	41	28	21	84	1001	56	18	1041	200
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	1	1	0	0	2	0
Cap, veh/h	207	217	184	102	69	149	162	1618	709	61	1404	620
Arrive On Green	0.11	0.11	0.11	0.09	0.09	0.09	0.09	0.45	0.45	0.03	0.40	0.40
Sat Flow, veh/h	1810	1900	1610	1096	749	1610	1795	3582	1570	1810	3554	1570
Grp Volume(v), veh/h	147	31	84	69	0	21	84	1001	56	18	1041	200
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1845	0	1610	1795	1791	1570	1810	1777	1570
Q Serve(g_s), s	5.7	1.1	3.5	2.5	0.0	0.9	3.2	15.3	1.5	0.7	18.1	6.4
Cycle Q Clear(g_c), s	5.7	1.1	3.5	2.5	0.0	0.9	3.2	15.3	1.5	0.7	18.1	6.4
Prop In Lane	1.00		1.00	0.59		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	207	217	184	171	0	149	162	1618	709	61	1404	620
V/C Ratio(X)	0.71	0.14	0.46	0.40	0.00	0.14	0.52	0.62	0.08	0.30	0.74	0.32
Avail Cap(c_a), veh/h	502	527	446	511	0	446	498	2134	936	502	2118	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	30.8	28.8	29.9	30.9	0.0	30.1	31.3	15.0	11.2	34.0	18.7	15.1
Incr Delay (d2), s/veh	4.5	0.3	1.8	1.5	0.0	0.4	2.6	0.4	0.0	2.7	0.8	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	2.6	0.5	1.4	1.2	0.0	0.3	1.4	5.2	0.4	0.3	6.5	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.3	29.1	31.6	32.4	0.0	30.5	33.9	15.4	11.3	36.7	19.5	15.4
LnGrp LOS	D	C	C	C		C	C	B	B	D	B	B
Approach Vol, veh/h		262			90			1141			1259	
Approach Delay, s/veh		33.4			32.0			16.6			19.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	38.6		14.2	10.5	34.5		13.0				
Change Period (Y+Rc), s	4.0	6.0		5.9	4.0	6.0		6.3				
Max Green Setting (Gmax), s	20.0	43.0		20.0	20.0	43.0		20.0				
Max Q Clear Time (g_c+I1), s	2.7	17.3		7.7	5.2	20.1		4.5				
Green Ext Time (p_c), s	0.0	7.4		0.6	0.1	8.0		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	19.8
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Appendix G
Opening Year With Project Conditions
Synchro Reports

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	426	279	301	605	85	346	167	470	145	173	13
v/c Ratio	0.65	0.51	0.58	0.36	0.12	0.88	0.19	0.67	0.59	0.35	0.03
Control Delay (s/veh)	31.3	7.3	34.3	14.7	0.3	55.0	23.1	11.8	40.4	29.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.3	7.3	34.3	14.7	0.3	55.0	23.1	11.8	40.4	29.7	0.2
Queue Length 50th (ft)	88	0	62	59	0	146	32	38	59	36	0
Queue Length 95th (ft)	133	42	101	89	0	#297	53	101	114	60	0
Internal Link Dist (ft)	728			4495			1990			816	
Turn Bay Length (ft)		200	200		200	200		200	200		200
Base Capacity (vph)	797	604	577	1681	730	392	1039	759	289	784	496
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.46	0.52	0.36	0.12	0.88	0.16	0.62	0.50	0.22	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	349	229	247	496	70	284	137	385	119	142	11
Future Volume (veh/h)	0	349	229	247	496	70	284	137	385	119	142	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1648	1826	1885	1441	1752	1767	1722	1870	1856	1826	1767
Adj Flow Rate, veh/h	0	426	279	301	605	85	346	167	470	145	173	13
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	17	5	1	31	10	9	12	2	3	5	9
Cap, veh/h	3	698	343	407	1590	599	385	978	474	183	602	260
Arrive On Green	0.00	0.22	0.22	0.12	0.40	0.40	0.23	0.30	0.30	0.10	0.17	0.17
Sat Flow, veh/h	1810	3131	1539	3483	3933	1480	1682	3272	1585	1767	3469	1497
Grp Volume(v), veh/h	0	426	279	301	605	85	346	167	470	145	173	13
Grp Sat Flow(s),veh/h/ln	1810	1566	1539	1742	1311	1480	1682	1636	1585	1767	1735	1497
Q Serve(g_s), s	0.0	8.6	12.0	5.8	7.6	2.5	14.0	2.6	20.7	5.6	3.0	0.5
Cycle Q Clear(g_c), s	0.0	8.6	12.0	5.8	7.6	2.5	14.0	2.6	20.7	5.6	3.0	0.5
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	3	698	343	407	1590	599	385	978	474	183	602	260
V/C Ratio(X)	0.00	0.61	0.81	0.74	0.38	0.14	0.90	0.17	0.99	0.79	0.29	0.05
Avail Cap(c_a), veh/h	210	806	396	578	1590	599	397	978	474	291	789	340
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)	0.00	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	0.0	24.4	25.8	29.8	14.7	13.2	26.2	18.1	24.4	30.6	25.1	24.1
Incr Delay (d2), s/veh	0.0	1.0	10.8	3.0	0.2	0.1	22.2	0.1	39.2	7.4	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	0.0	2.9	5.0	2.4	1.9	0.7	7.4	0.9	11.9	2.6	1.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	25.5	36.6	32.9	14.8	13.3	48.4	18.2	63.7	38.0	25.4	24.2
LnGrp LOS		C	D	C	B	B	D	B	E	D	C	C
Approach Vol, veh/h		705			991			983			331	
Approach Delay, s/veh		29.9			20.2			50.6			30.9	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	25.4	12.7	20.1	20.5	16.6	0.0	32.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	20.9	11.6	18.0	16.5	15.9	8.1	21.5
Max Q Clear Time (g_c+I1), s	7.6	22.7	7.8	14.0	16.0	5.0	0.0	9.6
Green Ext Time (p_c), s	0.1	0.0	0.4	1.4	0.1	0.6	0.0	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	33.5
HCM 7th LOS	C

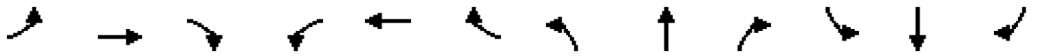
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	98	742	141	76	823	65	84	226	122	160	299	79
v/c Ratio	0.55	0.58	0.25	0.48	0.70	0.12	0.47	0.56	0.25	0.68	0.53	0.14
Control Delay (s/veh)	44.4	22.1	3.0	42.4	25.2	0.5	39.2	28.3	2.5	46.5	25.0	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.4	22.1	3.0	42.4	25.2	0.5	39.2	28.3	2.5	46.5	25.0	0.6
Queue Length 50th (ft)	38	90	0	30	105	0	32	81	0	62	108	0
Queue Length 95th (ft)	#102	131	18	#81	151	0	#81	134	10	#153	170	0
Internal Link Dist (ft)		4495			2724			1145			1436	
Turn Bay Length (ft)	200		200	200		200	200		200	200		200
Base Capacity (vph)	177	1520	626	158	1369	584	184	598	628	238	656	609
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.49	0.23	0.48	0.60	0.11	0.46	0.38	0.19	0.67	0.46	0.13

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	638	121	65	708	56	72	194	105	138	257	68
Future Volume (veh/h)	84	638	121	65	708	56	72	194	105	138	257	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1781	1900	1900	1693	1796	1885	1885	1885	1841	1870	1841
Adj Flow Rate, veh/h	98	742	141	76	823	65	84	226	122	160	299	79
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	5	8	0	0	14	7	1	1	1	4	2	4
Cap, veh/h	124	1312	433	97	1163	382	108	371	302	202	471	346
Arrive On Green	0.07	0.27	0.27	0.05	0.25	0.25	0.06	0.20	0.20	0.12	0.25	0.25
Sat Flow, veh/h	1739	4863	1604	1810	4621	1516	1795	1885	1534	1753	1870	1375
Grp Volume(v), veh/h	98	742	141	76	823	65	84	226	122	160	299	79
Grp Sat Flow(s),veh/h/ln	1739	1621	1604	1810	1540	1516	1795	1885	1534	1753	1870	1375
Q Serve(g_s), s	3.0	7.2	3.9	2.3	8.9	1.8	2.5	6.0	3.8	4.9	7.8	2.5
Cycle Q Clear(g_c), s	3.0	7.2	3.9	2.3	8.9	1.8	2.5	6.0	3.8	4.9	7.8	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	124	1312	433	97	1163	382	108	371	302	202	471	346
V/C Ratio(X)	0.79	0.57	0.33	0.78	0.71	0.17	0.78	0.61	0.40	0.79	0.63	0.23
Avail Cap(c_a), veh/h	190	1633	539	168	1476	484	197	636	518	256	700	514
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	25.0	17.2	16.0	25.6	18.7	16.0	25.4	20.1	19.2	23.6	18.3	16.3
Incr Delay (d2), s/veh	11.5	0.4	0.4	12.8	1.1	0.2	11.5	1.6	0.9	12.4	1.4	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	1.5	2.3	1.2	1.2	2.7	0.5	1.3	2.5	1.2	2.5	3.1	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.5	17.6	16.5	38.5	19.8	16.2	36.9	21.7	20.1	36.0	19.7	16.6
LnGrp LOS	D	B	B	D	B	B	D	C	C	D	B	B
Approach Vol, veh/h		981			964			432			538	
Approach Delay, s/veh		19.3			21.0			24.2			24.1	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	15.8	7.9	19.8	8.3	18.8	8.9	18.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	8.0	18.5	5.1	18.4	6.0	20.5	6.0	17.5
Max Q Clear Time (g_c+I1), s	6.9	8.0	4.3	9.2	4.5	9.8	5.0	10.9
Green Ext Time (p_c), s	0.0	1.2	0.0	3.5	0.0	1.5	0.0	2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	21.5
HCM 7th LOS	C

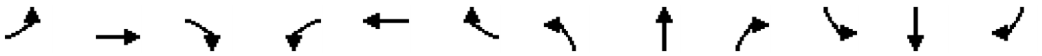
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	119	701	97	472	693	261	108	458	422	460	639	127
v/c Ratio	0.19	0.74	0.26	0.75	0.70	0.49	0.24	0.56	0.61	0.75	0.70	0.25
Control Delay (s/veh)	41.2	49.3	3.1	51.4	47.1	9.0	43.8	40.8	7.8	52.2	42.3	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	41.2	49.3	3.1	51.4	47.1	9.0	43.8	40.8	7.8	52.2	42.3	4.7
Queue Length 50th (ft)	37	171	0	162	165	0	35	148	0	158	206	0
Queue Length 95th (ft)	69	#276	8	242	252	70	64	227	75	239	323	30
Internal Link Dist (ft)		988			7301			2779			2172	
Turn Bay Length (ft)	235		245	230		235	245		250	240		250
Base Capacity (vph)	1256	952	373	1267	1032	538	851	1067	772	978	1077	582
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.74	0.26	0.37	0.67	0.49	0.13	0.43	0.55	0.47	0.59	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	617	85	415	610	230	95	403	371	405	562	112
Future Volume (veh/h)	105	617	85	415	610	230	95	403	371	405	562	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1604	1856	1856	1900	1678	1841	1870	1900	1856	1841
Adj Flow Rate, veh/h	119	701	36	472	693	50	108	458	113	460	639	85
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	2	20	3	3	0	15	4	2	0	3	4
Cap, veh/h	531	984	262	569	991	315	322	735	332	558	936	413
Arrive On Green	0.15	0.19	0.19	0.17	0.20	0.20	0.10	0.21	0.21	0.16	0.27	0.27
Sat Flow, veh/h	3510	5106	1359	3428	5066	1610	3100	3497	1583	3510	3526	1558
Grp Volume(v), veh/h	119	701	36	472	693	50	108	458	113	460	639	85
Grp Sat Flow(s),veh/h/ln	1755	1702	1359	1714	1689	1610	1550	1749	1583	1755	1763	1558
Q Serve(g_s), s	2.6	11.0	1.3	11.4	11.0	1.4	2.8	10.2	5.2	10.9	14.0	3.6
Cycle Q Clear(g_c), s	2.6	11.0	1.3	11.4	11.0	1.4	2.8	10.2	5.2	10.9	14.0	3.6
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	531	984	262	569	991	315	322	735	332	558	936	413
V/C Ratio(X)	0.22	0.71	0.14	0.83	0.70	0.16	0.34	0.62	0.34	0.82	0.68	0.21
Avail Cap(c_a), veh/h	817	1194	318	1596	1297	412	721	1343	608	1226	1354	598
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	32.0	32.5	13.8	34.7	32.2	11.3	35.8	30.9	28.9	35.0	28.3	24.5
Incr Delay (d2), s/veh	0.1	2.1	0.4	1.2	1.5	0.3	0.2	1.7	1.2	1.2	1.7	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	1.0	4.4	0.6	4.5	4.3	0.8	1.0	4.2	1.9	4.5	5.7	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.1	34.6	14.2	35.9	33.7	11.7	36.0	32.5	30.0	36.2	30.0	25.0
LnGrp LOS	C	C	B	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		856			1215			679			1184	
Approach Delay, s/veh		33.4			33.7			32.7			32.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.7	24.0	19.3	23.0	14.9	28.8	19.4	22.8
Change Period (Y+Rc), s	6.0	6.0	5.0	6.4	6.0	6.0	6.4	* 6
Max Green Setting (Gmax), s	30.0	33.0	40.0	20.1	20.0	33.0	20.0	* 22
Max Q Clear Time (g_c+I1), s	12.9	12.2	13.4	13.0	4.8	16.0	4.6	13.0
Green Ext Time (p_c), s	0.8	5.5	0.8	3.5	0.1	6.6	0.1	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	33.0
HCM 7th LOS	C

Notes

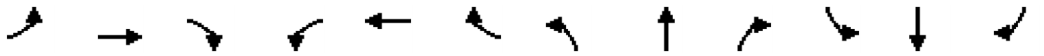
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	61	1998	168	55	1602	156	113	45	154	254	249
v/c Ratio	0.39	0.80	0.21	0.43	0.67	0.20	0.59	0.23	0.50	0.82	0.82
Control Delay (s/veh)	59.3	30.8	10.8	48.0	39.1	19.8	63.2	50.9	13.3	66.8	64.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.3	30.8	10.8	48.0	39.1	19.8	63.2	50.9	13.3	66.8	64.9
Queue Length 50th (ft)	46	468	30	40	326	31	85	33	0	200	187
Queue Length 95th (ft)	83	#646	79	m73	498	m109	132	62	49	260	247
Internal Link Dist (ft)		7301			1456			739			739
Turn Bay Length (ft)	270		200	340		250	120		120	200	
Base Capacity (vph)	240	2502	784	240	2404	792	303	307	396	366	356
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.80	0.21	0.23	0.67	0.20	0.37	0.15	0.39	0.69	0.70

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1678	141	46	1346	131	95	38	129	288	84	50
Future Volume (veh/h)	51	1678	141	46	1346	131	95	38	129	288	84	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		0.75	1.00		0.76
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1885	1900	1841	1870	1885	1826	1870	1885	1841	1900
Adj Flow Rate, veh/h	61	1998	168	55	1602	156	113	45	154	252	228	60
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	0	2	1	0	4	2	1	5	2	1	4	0
Cap, veh/h	131	2226	660	89	2073	635	262	267	173	371	270	71
Arrive On Green	0.07	0.44	0.44	0.10	0.83	0.83	0.15	0.15	0.15	0.21	0.21	0.21
Sat Flow, veh/h	1810	5106	1513	1810	5025	1539	1795	1826	1188	1795	1309	344
Grp Volume(v), veh/h	61	1998	168	55	1602	156	113	45	154	252	0	288
Grp Sat Flow(s),veh/h/ln	1810	1702	1513	1810	1675	1539	1795	1826	1188	1795	0	1653
Q Serve(g_s), s	3.9	43.5	8.5	3.5	18.5	2.7	6.9	2.6	15.3	15.5	0.0	20.1
Cycle Q Clear(g_c), s	3.9	43.5	8.5	3.5	18.5	2.7	6.9	2.6	15.3	15.5	0.0	20.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	131	2226	660	89	2073	635	262	267	173	371	0	342
V/C Ratio(X)	0.47	0.90	0.25	0.62	0.77	0.25	0.43	0.17	0.89	0.68	0.00	0.84
Avail Cap(c_a), veh/h	241	2226	660	241	2073	635	305	310	202	376	0	346
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.64	0.64	0.64	0.77	0.77	0.77	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.4	31.4	21.5	53.0	7.8	6.4	46.7	44.9	50.3	43.9	0.0	45.7
Incr Delay (d2), s/veh	0.6	4.2	0.6	2.0	2.2	0.7	0.4	0.1	29.3	4.0	0.0	16.0
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	17.5	3.0	1.6	3.2	0.9	3.1	1.2	5.8	7.3	0.0	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.0	35.5	22.1	55.1	10.0	7.1	47.1	45.0	79.6	47.9	0.0	61.7
LnGrp LOS	D	D	C	E	B	A	D	D	E	D		E
Approach Vol, veh/h		2227			1813			312			540	
Approach Delay, s/veh		35.0			11.1			62.9			55.3	
Approach LOS		D			B			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.1	9.9	58.3		29.7	12.7	55.5				
Change Period (Y+Rc), s		4.6	4.0	6.0		4.9	4.0	6.0				
Max Green Setting (Gmax), s		20.4	16.0	39.0		25.1	16.0	39.0				
Max Q Clear Time (g_c+I1), s		17.3	5.5	45.5		22.1	5.9	20.5				
Green Ext Time (p_c), s		0.3	0.0	0.0		0.5	0.0	16.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	30.2
HCM 7th LOS	C

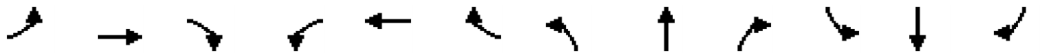
Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	102	1893	256	228	1252	81	340	137	286	278	168	82
v/c Ratio	0.35	0.79	0.30	0.68	0.52	0.11	0.97	0.26	0.76	0.72	0.28	0.24
Control Delay (s/veh)	73.0	13.2	0.6	65.5	21.9	9.6	84.5	41.2	35.3	61.9	42.9	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	73.0	13.2	0.6	65.5	21.9	9.6	84.5	41.2	35.3	61.9	42.9	6.1
Queue Length 50th (ft)	43	245	0	96	161	10	144	49	119	108	61	0
Queue Length 95th (ft)	m56	#241	m0	#171	273	49	#239	m71	m186	152	83	28
Internal Link Dist (ft)		1456			1020			9706			1307	
Turn Bay Length (ft)	250		525	235		240	230		240	270		265
Base Capacity (vph)	303	2387	866	334	2391	717	352	813	491	452	953	488
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.79	0.30	0.68	0.52	0.11	0.97	0.17	0.58	0.62	0.18	0.17

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	1704	230	205	1127	73	306	123	257	250	151	74
Future Volume (veh/h)	92	1704	230	205	1127	73	306	123	257	250	151	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1856	1826	1678	1885	1826	1870	1870	1885	1885
Adj Flow Rate, veh/h	102	1893	256	228	1252	81	340	137	286	278	168	82
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	2	2	3	5	15	1	5	2	2	1	1
Cap, veh/h	281	2345	714	257	2261	642	354	708	318	337	716	309
Arrive On Green	0.16	0.92	0.92	0.15	0.91	0.91	0.10	0.20	0.20	0.10	0.20	0.20
Sat Flow, veh/h	3483	5106	1556	3428	4985	1415	3483	3469	1559	3456	3582	1546
Grp Volume(v), veh/h	102	1893	256	228	1252	81	340	137	286	278	168	82
Grp Sat Flow(s),veh/h/ln	1742	1702	1556	1714	1662	1415	1742	1735	1559	1728	1791	1546
Q Serve(g_s), s	3.1	14.0	2.4	7.8	5.6	0.7	11.7	3.9	21.4	9.5	4.7	5.4
Cycle Q Clear(g_c), s	3.1	14.0	2.4	7.8	5.6	0.7	11.7	3.9	21.4	9.5	4.7	5.4
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	281	2345	714	257	2261	642	354	708	318	337	716	309
V/C Ratio(X)	0.36	0.81	0.36	0.89	0.55	0.13	0.96	0.19	0.90	0.83	0.23	0.27
Avail Cap(c_a), veh/h	305	2345	714	257	2261	642	354	821	369	455	955	412
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.53	0.53	0.53	0.90	0.90	0.90	0.81	0.81	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	3.2	2.7	50.5	3.3	3.1	53.7	39.6	46.5	53.2	40.3	40.6
Incr Delay (d2), s/veh	0.2	1.7	0.7	25.9	0.9	0.4	32.6	0.1	19.3	6.6	0.3	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	1.8	0.7	4.0	1.3	0.3	6.6	1.7	9.7	4.4	2.1	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.7	4.9	3.5	76.4	4.2	3.4	86.3	39.7	65.8	59.8	40.6	41.3
LnGrp LOS	D	A	A	E	A	A	F	D	E	E	D	D
Approach Vol, veh/h		2251			1561			763			528	
Approach Delay, s/veh		6.7			14.7			70.2			50.8	
Approach LOS		A			B			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	30.2	13.0	61.1	16.2	29.7	13.7	60.4
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	15.8	28.4	9.0	47.1	12.2	32.0	10.5	45.6
Max Q Clear Time (g_c+I1), s	11.5	23.4	9.8	16.0	13.7	7.4	5.1	7.6
Green Ext Time (p_c), s	0.2	1.1	0.0	28.2	0.0	1.9	0.1	25.9

Intersection Summary	
HCM 7th Control Delay, s/veh	23.2
HCM 7th LOS	C

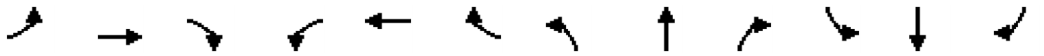
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	33	2240	111	200	1433	35	17	17	160	54	35
v/c Ratio	0.29	0.77	0.12	0.62	0.45	0.03	0.10	0.10	0.53	0.30	0.18
Control Delay (s/veh)	76.3	11.0	0.4	58.0	14.7	2.2	49.9	49.8	14.3	55.0	31.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	76.3	11.0	0.4	58.0	14.7	2.2	49.9	49.8	14.3	55.0	31.4
Queue Length 50th (ft)	27	497	0	85	259	0	12	12	0	39	11
Queue Length 95th (ft)	m37	689	m0	125	185	m6	36	36	63	81	44
Internal Link Dist (ft)		1020			810			638			90
Turn Bay Length (ft)	225		250	250		425			250		
Base Capacity (vph)	240	2927	919	453	3182	1047	215	223	341	240	249
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.77	0.12	0.44	0.45	0.03	0.08	0.08	0.47	0.23	0.14

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



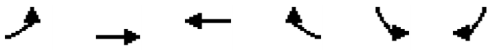
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	2106	104	188	1347	33	21	11	150	51	15	18
Future Volume (veh/h)	31	2106	104	188	1347	33	21	11	150	51	15	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1841	1856	1826	1900	1900	1900	1885	1900	1900	1900
Adj Flow Rate, veh/h	33	2240	111	200	1433	35	17	19	160	54	16	19
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	4	3	5	0	0	0	1	0	0	0
Cap, veh/h	70	2849	858	255	2958	935	209	219	184	172	75	89
Arrive On Green	0.08	1.00	1.00	0.15	1.00	1.00	0.12	0.12	0.12	0.09	0.09	0.09
Sat Flow, veh/h	1810	5106	1538	3428	4985	1576	1810	1900	1598	1810	791	940
Grp Volume(v), veh/h	33	2240	111	200	1433	35	17	19	160	54	0	35
Grp Sat Flow(s),veh/h/ln	1810	1702	1538	1714	1662	1576	1810	1900	1598	1810	0	1731
Q Serve(g_s), s	2.1	0.0	0.0	6.7	0.0	0.0	1.0	1.1	11.8	3.3	0.0	2.2
Cycle Q Clear(g_c), s	2.1	0.0	0.0	6.7	0.0	0.0	1.0	1.1	11.8	3.3	0.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	70	2849	858	255	2958	935	209	219	184	172	0	164
V/C Ratio(X)	0.47	0.79	0.13	0.78	0.48	0.04	0.08	0.09	0.87	0.31	0.00	0.21
Avail Cap(c_a), veh/h	241	2849	858	457	2958	935	228	239	201	241	0	231
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.53	0.53	0.53	0.86	0.86	0.86	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.1	0.0	0.0	50.1	0.0	0.0	47.4	47.4	52.2	50.7	0.0	50.2
Incr Delay (d2), s/veh	1.0	1.2	0.2	1.7	0.5	0.1	0.1	0.1	27.5	0.4	0.0	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	0.9	0.3	0.0	2.7	0.1	0.0	0.5	0.5	6.0	1.5	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.1	1.2	0.2	51.9	0.5	0.1	47.5	47.5	79.7	51.1	0.0	50.4
LnGrp LOS	E	A	A	D	A	A	D	D	E	D		D
Approach Vol, veh/h		2384			1668			196			89	
Approach Delay, s/veh		1.9			6.6			73.7			50.8	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	18.7	12.9	72.9	15.4	8.7	77.2
Change Period (Y+Rc), s	4.9	4.0	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	15.1	16.0	54.0	16.0	16.0	54.0
Max Q Clear Time (g_c+I1), s	13.8	8.7	2.0	5.3	4.1	2.0
Green Ext Time (p_c), s	0.0	0.2	46.8	0.1	0.0	30.3

Intersection Summary	
HCM 7th Control Delay, s/veh	8.0
HCM 7th LOS	A

Notes

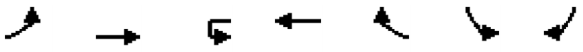
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	37	2502	1709	156	418	47
v/c Ratio	0.28	0.52	0.50	0.14	0.75	0.17
Control Delay (s/veh)	76.9	1.6	13.7	5.1	56.4	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	76.9	1.6	13.7	5.1	56.4	12.5
Queue Length 50th (ft)	30	25	202	0	161	0
Queue Length 95th (ft)	m44	34	359	61	202	32
Internal Link Dist (ft)		810	900		572	
Turn Bay Length (ft)	240			230	240	240
Base Capacity (vph)	233	4849	3410	1151	758	365
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.52	0.50	0.14	0.55	0.13

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	33	2252	0	1538	140	376	42
Future Volume (veh/h)	33	2252	0	1538	140	376	42
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
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
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1856	1870		1826	1885	1900	1826
Adj Flow Rate, veh/h	37	2502		1709	156	418	47
Peak Hour Factor	0.90	0.90		0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	2		5	1	0	5
Cap, veh/h	94	5004		3445	1104	488	215
Arrive On Green	0.11	1.00		0.69	0.69	0.14	0.14
Sat Flow, veh/h	1767	6696		5149	1598	3510	1547
Grp Volume(v), veh/h	37	2502		1709	156	418	47
Grp Sat Flow(s),veh/h/ln	1767	1609		1662	1598	1755	1547
Q Serve(g_s), s	2.3	0.0		19.3	4.0	14.0	3.2
Cycle Q Clear(g_c), s	2.3	0.0		19.3	4.0	14.0	3.2
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	94	5004		3445	1104	488	215
V/C Ratio(X)	0.39	0.50		0.50	0.14	0.86	0.22
Avail Cap(c_a), veh/h	236	5004		3445	1104	761	335
HCM Platoon Ratio	2.00	2.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.59	0.59		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	0.0		8.7	6.3	50.5	45.9
Incr Delay (d2), s/veh	0.6	0.2		0.5	0.3	3.6	0.2
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.1		6.0	1.2	6.4	2.9
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	52.4	0.2		9.2	6.6	54.1	46.1
LnGrp LOS	D	A		A	A	D	D
Approach Vol, veh/h		2539		1865		465	
Approach Delay, s/veh		1.0		9.0		53.3	
Approach LOS		A		A		D	

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				99.3		20.7	10.4	88.9
Change Period (Y+Rc), s				6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s				64.0		26.0	16.0	64.0
Max Q Clear Time (g_c+I1), s				2.0		16.0	4.3	21.3
Green Ext Time (p_c), s				55.2		0.7	0.0	30.8

Intersection Summary		
HCM 7th Control Delay, s/veh	9.0	
HCM 7th LOS	A	

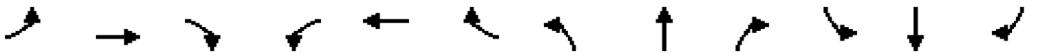
Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	88	2235	242	348	1692	258	215	90	444	140	54	26
v/c Ratio	0.31	0.90	0.29	0.74	0.60	0.26	0.49	0.25	0.30	0.45	0.15	0.09
Control Delay (s/veh)	56.2	24.2	6.3	59.3	19.2	2.6	78.2	63.9	1.5	55.6	49.2	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.2	24.2	6.3	59.3	19.2	2.6	78.2	63.9	1.5	55.6	49.2	0.6
Queue Length 50th (ft)	32	208	9	135	309	0	91	31	21	53	20	0
Queue Length 95th (ft)	63	#801	69	178	413	43	m121	m34	m40	86	40	0
Internal Link Dist (ft)		1195			2603			7676			1328	
Turn Bay Length (ft)	235		200	425		525	180		200	230		165
Base Capacity (vph)	462	2493	843	600	2830	990	506	446	1477	409	446	329
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.90	0.29	0.58	0.60	0.26	0.42	0.20	0.30	0.34	0.12	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	2079	225	324	1574	240	200	84	413	130	50	24
Future Volume (veh/h)	82	2079	225	324	1574	240	200	84	413	130	50	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1885	1870	1841	1856	1811	1826	1781	1693	1811	1900
Adj Flow Rate, veh/h	88	2235	64	348	1692	127	215	90	0	140	54	26
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	2	1	2	4	3	6	5	8	14	6	0
Cap, veh/h	275	2739	846	410	2895	895	279	275		310	327	153
Arrive On Green	0.08	0.54	0.54	0.12	0.58	0.58	0.08	0.08	0.00	0.10	0.09	0.09
Sat Flow, veh/h	3483	5106	1577	3456	5025	1553	3346	3469	1510	3127	3441	1610
Grp Volume(v), veh/h	88	2235	64	348	1692	127	215	90	0	140	54	26
Grp Sat Flow(s),veh/h/ln	1742	1702	1577	1728	1675	1553	1673	1735	1510	1564	1721	1610
Q Serve(g_s), s	2.9	43.3	2.4	11.8	25.8	4.5	7.6	2.9	0.0	5.1	1.7	1.8
Cycle Q Clear(g_c), s	2.9	43.3	2.4	11.8	25.8	4.5	7.6	2.9	0.0	5.1	1.7	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	275	2739	846	410	2895	895	279	275		310	327	153
V/C Ratio(X)	0.32	0.82	0.08	0.85	0.58	0.14	0.77	0.33		0.45	0.17	0.17
Avail Cap(c_a), veh/h	464	2739	846	605	2895	895	446	434		417	450	211
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	0.81	0.81	0.81	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	22.9	13.4	51.8	16.2	11.7	53.9	52.2	0.0	51.0	49.9	50.0
Incr Delay (d2), s/veh	0.2	2.8	0.2	4.1	0.7	0.3	1.7	1.3	0.0	0.4	0.9	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	1.2	16.5	0.8	5.2	9.2	1.5	3.2	1.3	0.0	2.0	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.5	25.8	13.6	55.9	17.0	12.0	55.6	53.6	0.0	51.4	50.8	51.8
LnGrp LOS	D	C	B	E	B	B	E	D		D	D	D
Approach Vol, veh/h		2387			2167			305			220	
Approach Delay, s/veh		26.4			22.9			55.0			51.3	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	15.5	18.2	70.4	14.0	17.4	13.5	75.1
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	16.0	15.0	21.0	48.0	16.0	* 16	16.0	53.0
Max Q Clear Time (g_c+I1), s	7.1	4.9	13.8	45.3	9.6	3.8	4.9	27.8
Green Ext Time (p_c), s	0.1	0.4	0.4	2.7	0.2	0.5	0.1	22.6

Intersection Summary	
HCM 7th Control Delay, s/veh	27.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	2618	292	9	1563	37	1106
v/c Ratio	0.57	0.21	0.11	0.45	0.41	0.71
Control Delay (s/veh)	2.5	1.4	83.9	0.4	62.1	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.5	1.4	83.9	0.4	62.1	2.7
Queue Length 50th (ft)	170	24	10	0	22	0
Queue Length 95th (ft)	248	48	32	0	65	0
Internal Link Dist (ft)	2603			1016		
Turn Bay Length (ft)		130	210			
Base Capacity (vph)	4592	1391	1029	3505	1001	1565
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.21	0.01	0.45	0.04	0.71

Intersection Summary

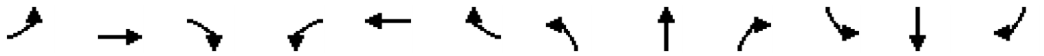
HCM 7th Edition methodology does not support current ring-barrier structure.

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	2374	387	333	992	153	259	516	103	520	407
v/c Ratio	1.00	0.52	0.73	0.52	0.10	0.67	0.61	0.30	0.77	0.27
Control Delay (s/veh)	55.7	13.1	59.2	18.8	0.1	59.4	12.6	45.0	55.0	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	55.7	13.1	59.2	18.8	0.1	59.4	12.6	45.0	55.0	0.4
Queue Length 50th (ft)	~569	72	129	252	0	101	52	68	200	0
Queue Length 95th (ft)	#703	181	171	310	0	139	79	127	#310	0
Internal Link Dist (ft)	1016			1173					847	
Turn Bay Length (ft)		230	175		290	250	250	200		165
Base Capacity (vph)	2381	745	589	1925	1579	538	1059	339	672	1519
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.52	0.57	0.52	0.10	0.48	0.49	0.30	0.77	0.27

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2184	356	306	913	141	238	0	475	95	478	374
Future Volume (veh/h)	0	2184	356	306	913	141	238	0	475	95	478	374
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1870	1841	1870	1885	1856	0	1856	1870	1856	1826
Adj Flow Rate, veh/h	0	2374	387	333	992	0	259	0	516	103	520	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	3	2	4	2	1	3	0	3	2	3	5
Cap, veh/h	0	3782	939	394	2636		0	0	0	282	558	
Arrive On Green	0.00	0.59	0.59	0.12	0.74	0.00	0.00	0.00	0.00	0.16	0.16	0.00
Sat Flow, veh/h	0	6643	1584	3401	3554	1598		0		1781	3526	1547
Grp Volume(v), veh/h	0	2374	387	333	992	0		0.0		103	520	0
Grp Sat Flow(s),veh/h/ln	0	1596	1584	1700	1777	1598				1781	1763	1547
Q Serve(g_s), s	0.0	29.0	15.8	11.5	12.0	0.0				6.2	17.5	0.0
Cycle Q Clear(g_c), s	0.0	29.0	15.8	11.5	12.0	0.0				6.2	17.5	0.0
Prop In Lane	0.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3782	939	394	2636					282	558	
V/C Ratio(X)	0.00	0.63	0.41	0.85	0.38					0.37	0.93	
Avail Cap(c_a), veh/h	0	3782	939	595	2636					282	558	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.80	0.80	1.00	1.00	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	15.9	13.2	52.0	5.6	0.0				45.1	49.9	0.0
Incr Delay (d2), s/veh	0.0	0.6	1.1	4.4	0.4	0.0				1.5	23.1	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
%ile BackOfQ(50%),veh/ln	0.0	10.3	5.8	5.0	3.6	0.0				2.9	9.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	16.5	14.3	56.4	6.0	0.0				46.7	73.0	0.0
LnGrp LOS		B	B	E	A					D	E	
Approach Vol, veh/h		2761			1325						623	
Approach Delay, s/veh		16.2			18.6						68.6	
Approach LOS		B			B						E	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		17.9	77.1		25.0		95.0					
Change Period (Y+Rc), s		4.0	6.0		6.0		6.0					
Max Green Setting (Gmax), s		21.0	39.0		19.0		64.0					
Max Q Clear Time (g_c+I1), s		13.5	31.0		19.5		14.0					
Green Ext Time (p_c), s		0.4	8.0		0.0		18.5					

Intersection Summary	
HCM 7th Control Delay, s/veh	23.8
HCM 7th LOS	C

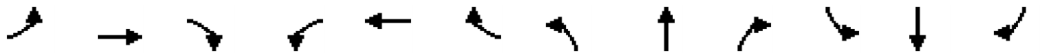
Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	NBR
Lane Group Flow (vph)	11	9
v/c Ratio	0.04	0.01
Control Delay (s/veh)	10.6	0.0
Queue Delay	0.0	0.0
Total Delay (s/veh)	10.6	0.0
Queue Length 50th (ft)	1	0
Queue Length 95th (ft)	5	0
Internal Link Dist (ft)		
Turn Bay Length (ft)	200	200
Base Capacity (vph)	895	923
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.01	0.01

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	5	0	0	0	0	4	0	0	0
Future Volume (veh/h)	0	0	0	5	0	0	0	0	4	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1307	1900	1900	1900	1900	789	1900	1900	1900
Adj Flow Rate, veh/h	0	0	0	11	0	0	0	0	9	0	0	0
Peak Hour Factor	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Percent Heavy Veh, %	0	0	0	40	0	0	0	0	75	0	0	0
Cap, veh/h	13	25	11	19	54	24	25	1270	235	25	1270	566
Arrive On Green	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00
Sat Flow, veh/h	1810	3610	1610	1245	3610	1610	3510	3610	668	3510	3610	1610
Grp Volume(v), veh/h	0	0	0	11	0	0	0	0	9	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1245	1805	1610	1755	1805	668	1755	1805	1610
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
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	13	25	11	19	54	24	25	1270	235	25	1270	566
V/C Ratio(X)	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
Avail Cap(c_a), veh/h	637	4572	2039	1621	8001	3569	1235	5207	964	1235	5207	2322
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)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	26.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	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	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	0.0	33.4	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0
LnGrp LOS				C					A			
Approach Vol, veh/h		0			11			9			0	
Approach Delay, s/veh		0.0			33.4			3.1			0.0	
Approach LOS					C			A				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	9.5	4.7	0.0	0.0	9.5	0.0	4.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	20.5	18.5	18.0	5.0	20.5	5.0	31.5
Max Q Clear Time (g_c+I1), s	0.0	2.1	2.1	0.0	0.0	0.0	0.0	0.0
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 7th Control Delay, s/veh	19.7
HCM 7th LOS	B

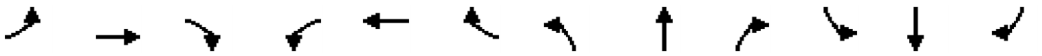
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	63	232	42	101	177	408	46	303	141	539	389	70
v/c Ratio	0.17	0.33	0.11	0.26	0.25	0.64	0.29	0.58	0.39	0.90	0.24	0.09
Control Delay (s/veh)	52.0	36.4	0.6	51.4	35.2	8.8	56.6	45.1	10.6	52.5	18.9	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.0	36.4	0.6	51.4	35.2	8.8	56.6	45.1	10.6	52.5	18.9	2.1
Queue Length 50th (ft)	15	57	0	25	43	0	23	82	0	257	70	0
Queue Length 95th (ft)	55	124	0	78	95	28	84	172	34	#752	160	5
Internal Link Dist (ft)		3422			3725			6925			3346	
Turn Bay Length (ft)	240		250	240		250	240		245	240		250
Base Capacity (vph)	1098	763	408	1191	834	677	827	523	364	965	1624	815
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.30	0.10	0.08	0.21	0.60	0.06	0.58	0.39	0.56	0.24	0.09

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	183	33	80	140	322	36	239	111	426	307	55
Future Volume (veh/h)	50	183	33	80	140	322	36	239	111	426	307	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.92	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1678	1885	1870	1856	1811	1767	1900	1870	1796	1900
Adj Flow Rate, veh/h	63	232	42	101	177	408	46	303	141	539	389	70
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	15	1	2	3	6	9	0	2	7	0
Cap, veh/h	294	674	264	353	731	323	97	418	184	583	1392	635
Arrive On Green	0.09	0.19	0.19	0.10	0.21	0.21	0.06	0.12	0.12	0.33	0.41	0.41
Sat Flow, veh/h	3456	3554	1394	3483	3554	1568	1725	3357	1478	1781	3413	1558
Grp Volume(v), veh/h	63	232	42	101	177	408	46	303	141	539	389	70
Grp Sat Flow(s),veh/h/ln	1728	1777	1394	1742	1777	1568	1725	1678	1478	1781	1706	1558
Q Serve(g_s), s	1.3	4.5	2.0	2.1	3.3	16.3	2.0	6.9	7.3	23.1	6.0	2.2
Cycle Q Clear(g_c), s	1.3	4.5	2.0	2.1	3.3	16.3	2.0	6.9	7.3	23.1	6.0	2.2
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	294	674	264	353	731	323	97	418	184	583	1392	635
V/C Ratio(X)	0.21	0.34	0.16	0.29	0.24	1.26	0.47	0.72	0.77	0.93	0.28	0.11
Avail Cap(c_a), veh/h	1178	674	264	1275	731	323	893	436	192	1034	1392	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	27.8	26.8	32.9	26.3	31.5	36.2	33.4	33.6	25.7	15.7	14.5
Incr Delay (d2), s/veh	0.1	0.8	0.7	0.2	0.4	141.6	1.3	7.7	20.2	4.1	0.5	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	0.5	1.8	0.7	0.9	1.3	18.3	0.8	3.1	3.5	9.5	2.2	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.9	28.6	27.5	33.1	26.7	173.1	37.6	41.0	53.8	29.8	16.2	14.9
LnGrp LOS	C	C	C	C	C	F	D	D	D	C	B	B
Approach Vol, veh/h		337			686			490			998	
Approach Delay, s/veh		29.4			114.7			44.4			23.4	
Approach LOS		C			F			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.9	15.6	12.0	20.7	8.5	38.0	10.8	22.0
Change Period (Y+Rc), s	5.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	46.0	10.3	29.0	14.3	41.0	16.3	27.0	16.3
Max Q Clear Time (g_c+I1), s	25.1	9.3	4.1	6.5	4.0	8.0	3.3	18.3
Green Ext Time (p_c), s	0.8	0.4	0.1	1.5	0.0	3.8	0.1	0.0

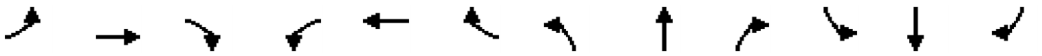
Intersection Summary	
HCM 7th Control Delay, s/veh	53.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	94	921	15	85	637	130	158	361
v/c Ratio	0.46	0.72	0.02	0.45	0.58	0.52	0.45	0.81
Control Delay (s/veh)	59.8	37.5	0.1	60.5	34.7	54.7	11.4	54.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.8	37.5	0.1	60.5	34.7	54.7	11.4	54.4
Queue Length 50th (ft)	63	281	0	57	176	87	0	230
Queue Length 95th (ft)	132	463	0	123	304	155	42	383
Internal Link Dist (ft)		3725			4857	8570		1281
Turn Bay Length (ft)	200		185	225			135	
Base Capacity (vph)	349	1491	690	330	1448	382	455	587
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.62	0.02	0.26	0.44	0.34	0.35	0.61

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	746	12	69	479	37	19	87	128	106	118	68
Future Volume (veh/h)	76	746	12	69	479	37	19	87	128	106	118	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1811	1856	1856	1737	1885	1870	1885	1870	1856
Adj Flow Rate, veh/h	94	921	15	85	591	46	23	107	158	131	146	84
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	1	0	6	3	3	11	1	2	1	2	3
Cap, veh/h	177	1233	548	165	1131	88	41	190	196	149	166	95
Arrive On Green	0.10	0.34	0.34	0.10	0.34	0.34	0.12	0.12	0.12	0.23	0.23	0.23
Sat Flow, veh/h	1810	3582	1594	1725	3312	257	331	1538	1585	640	714	411
Grp Volume(v), veh/h	94	921	15	85	314	323	130	0	158	361	0	0
Grp Sat Flow(s),veh/h/ln	1810	1791	1594	1725	1763	1806	1869	0	1585	1764	0	0
Q Serve(g_s), s	4.6	21.1	0.6	4.4	13.3	13.3	6.1	0.0	9.0	18.4	0.0	0.0
Cycle Q Clear(g_c), s	4.6	21.1	0.6	4.4	13.3	13.3	6.1	0.0	9.0	18.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.14	0.18		1.00	0.36		0.23
Lane Grp Cap(c), veh/h	177	1233	548	165	602	617	231	0	196	409	0	0
V/C Ratio(X)	0.53	0.75	0.03	0.52	0.52	0.52	0.56	0.00	0.81	0.88	0.00	0.00
Avail Cap(c_a), veh/h	389	1541	686	371	815	835	402	0	341	626	0	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	39.9	26.9	20.2	40.0	24.5	24.5	38.3	0.0	39.6	34.5	0.0	0.0
Incr Delay (d2), s/veh	0.9	2.1	0.0	0.9	1.2	1.2	0.8	0.0	2.9	6.4	0.0	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	2.1	9.1	0.2	1.9	5.6	5.7	2.8	0.0	3.6	8.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.8	29.0	20.2	40.9	25.7	25.7	39.1	0.0	42.6	40.9	0.0	0.0
LnGrp LOS	D	C	C	D	C	C	D		D	D		
Approach Vol, veh/h		1030			722			288			361	
Approach Delay, s/veh		30.0			27.5			41.0			40.9	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	16.8	12.9	37.7	25.6	13.1	37.5
Change Period (Y+Rc), s	5.3	4.0	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	20.0	20.0	40.0	33.0	20.0	43.0
Max Q Clear Time (g_c+I1), s	11.0	6.4	23.1	20.4	6.6	15.3
Green Ext Time (p_c), s	0.5	0.1	8.9	1.2	0.1	7.1

Intersection Summary	
HCM 7th Control Delay, s/veh	32.2
HCM 7th LOS	C

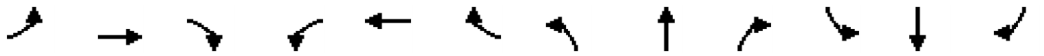
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	87	837	453	328	274	93	373	654	500	183	929	78
v/c Ratio	0.42	0.65	0.63	0.82	0.19	0.13	0.90	0.44	0.76	0.73	0.72	0.15
Control Delay (s/veh)	74.1	44.2	24.3	81.3	28.9	3.3	88.8	41.9	30.1	85.0	53.5	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	74.1	44.2	24.3	81.3	28.9	3.3	88.8	41.9	30.1	85.0	53.5	0.6
Queue Length 50th (ft)	43	368	189	162	90	0	188	187	228	91	301	0
Queue Length 95th (ft)	72	448	318	214	125	24	#289	220	364	133	341	0
Internal Link Dist (ft)		4857			8222			3488			3803	
Turn Bay Length (ft)	240		240	250		250	240		240	230		240
Base Capacity (vph)	224	1281	717	444	1453	691	415	1556	670	269	1416	543
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.65	0.63	0.74	0.19	0.13	0.90	0.42	0.75	0.68	0.66	0.14

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	745	403	292	244	83	332	582	445	163	827	69
Future Volume (veh/h)	77	745	403	292	244	83	332	582	445	163	827	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1885	1900	1826	1856	1796	1781	1781	1841	1826	1826	1841
Adj Flow Rate, veh/h	87	837	257	328	274	40	373	654	184	183	929	26
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	4	1	0	5	3	7	8	8	4	5	5	4
Cap, veh/h	199	1404	623	373	1566	676	395	1430	453	227	1203	376
Arrive On Green	0.06	0.39	0.39	0.11	0.44	0.44	0.12	0.29	0.29	0.07	0.24	0.24
Sat Flow, veh/h	3401	3582	1590	3374	3526	1522	3291	4863	1540	3374	4985	1560
Grp Volume(v), veh/h	87	837	257	328	274	40	373	654	184	183	929	26
Grp Sat Flow(s),veh/h/ln	1700	1791	1590	1687	1763	1522	1646	1621	1540	1687	1662	1560
Q Serve(g_s), s	3.7	27.8	17.6	14.4	7.0	2.2	16.9	16.5	14.4	8.0	26.1	1.9
Cycle Q Clear(g_c), s	3.7	27.8	17.6	14.4	7.0	2.2	16.9	16.5	14.4	8.0	26.1	1.9
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	199	1404	623	373	1566	676	395	1430	453	227	1203	376
V/C Ratio(X)	0.44	0.60	0.41	0.88	0.17	0.06	0.94	0.46	0.41	0.81	0.77	0.07
Avail Cap(c_a), veh/h	227	1404	623	450	1566	676	395	1576	499	270	1429	447
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)	0.67	0.67	0.67	0.90	0.90	0.90	1.00	1.00	1.00	0.67	0.67	0.67
Uniform Delay (d), s/veh	68.2	36.2	33.1	65.7	25.1	23.8	65.5	43.2	42.4	69.0	53.1	43.9
Incr Delay (d2), s/veh	0.4	1.3	1.4	12.8	0.2	0.2	31.0	0.4	0.9	8.3	2.0	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	1.6	12.1	6.9	6.7	3.0	0.8	8.7	6.6	5.5	3.7	10.9	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.6	37.4	34.4	78.5	25.3	23.9	96.5	43.5	43.4	77.3	55.0	44.0
LnGrp LOS	E	D	C	E	C	C	F	D	D	E	E	D
Approach Vol, veh/h		1181			642			1211			1138	
Approach Delay, s/veh		39.1			52.4			59.8			58.4	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	50.5	20.6	64.8	22.0	42.6	12.8	72.6
Change Period (Y+Rc), s	4.0	6.4	4.0	* 6	4.0	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	12.0	48.6	20.0	* 49	18.0	* 43	10.0	59.0
Max Q Clear Time (g_c+I1), s	10.0	18.5	16.4	29.8	18.9	28.1	5.7	9.0
Green Ext Time (p_c), s	0.1	8.3	0.2	9.7	0.0	8.1	0.0	2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	52.4
HCM 7th LOS	D

Notes

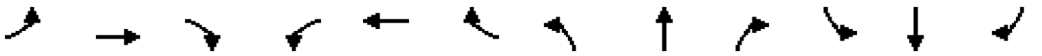
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	92	1309	230	189	688	213	148	446	234	380	648	127
v/c Ratio	0.41	0.89	0.30	0.58	0.46	0.27	0.54	0.73	0.50	0.69	0.72	0.27
Control Delay (s/veh)	58.8	43.2	4.7	61.9	24.6	10.6	60.1	54.9	9.6	46.3	38.4	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.8	43.2	4.7	61.9	24.6	10.6	60.1	54.9	9.6	46.3	38.4	3.1
Queue Length 50th (ft)	36	496	0	80	288	67	57	168	0	152	198	0
Queue Length 95th (ft)	61	#737	54	118	352	167	89	#251	69	153	251	m6
Internal Link Dist (ft)		8222			2007			6530			9706	
Turn Bay Length (ft)	240		375	400		260	240		230	215		280
Base Capacity (vph)	448	1468	775	462	1502	787	561	612	468	772	902	477
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.89	0.30	0.41	0.46	0.27	0.26	0.73	0.50	0.49	0.72	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	1165	205	168	612	190	132	397	208	338	577	113
Future Volume (veh/h)	82	1165	205	168	612	190	132	397	208	338	577	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.89	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1885	1885	1885	1826	1841	1841	1870	1900	1870	1870	1856
Adj Flow Rate, veh/h	92	1309	86	189	688	80	148	446	47	380	648	34
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	4	1	1	1	5	4	4	2	0	2	2	3
Cap, veh/h	189	1173	510	711	1700	763	206	531	214	446	825	321
Arrive On Green	0.06	0.33	0.33	0.41	0.98	0.98	0.06	0.15	0.15	0.13	0.23	0.23
Sat Flow, veh/h	3401	3582	1557	3483	3469	1557	3401	3554	1432	3456	3554	1382
Grp Volume(v), veh/h	92	1309	86	189	688	80	148	446	47	380	648	34
Grp Sat Flow(s),veh/h/ln	1700	1791	1557	1742	1735	1557	1700	1777	1432	1728	1777	1382
Q Serve(g_s), s	3.2	39.3	3.7	4.3	0.8	0.1	5.1	14.7	3.5	12.9	20.6	2.3
Cycle Q Clear(g_c), s	3.2	39.3	3.7	4.3	0.8	0.1	5.1	14.7	3.5	12.9	20.6	2.3
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	189	1173	510	711	1700	763	206	531	214	446	825	321
V/C Ratio(X)	0.49	1.12	0.17	0.27	0.40	0.10	0.72	0.84	0.22	0.85	0.79	0.11
Avail Cap(c_a), veh/h	453	1173	510	711	1700	763	567	542	218	778	825	321
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	0.94	0.94	0.94	0.87	0.87	0.87	0.91	0.91	0.91
Uniform Delay (d), s/veh	55.0	40.4	17.9	29.5	0.6	0.2	55.4	49.7	44.9	51.1	43.3	36.3
Incr Delay (d2), s/veh	0.5	60.4	0.5	0.1	0.3	0.1	1.5	10.5	0.8	1.7	5.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	26.3	1.8	1.7	0.2	0.1	2.2	7.2	1.2	5.6	9.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.5	100.8	18.4	29.6	0.9	0.3	56.9	60.2	45.7	52.8	48.3	36.5
LnGrp LOS	E	F	B	C	A	A	E	E	D	D	D	D
Approach Vol, veh/h		1487			957			641			1062	
Approach Delay, s/veh		93.2			6.5			58.4			49.5	
Approach LOS		F			A			E			D	

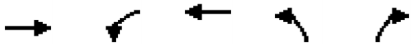
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	23.6	30.2	45.0	11.3	33.5	10.7	64.5
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	27.0	* 18	16.0	* 39	20.0	25.3	16.0	39.3
Max Q Clear Time (g_c+I1), s	14.9	16.7	6.3	41.3	7.1	22.6	5.2	2.8
Green Ext Time (p_c), s	0.6	0.7	0.2	0.0	0.2	1.5	0.1	8.9

Intersection Summary	
HCM 7th Control Delay, s/veh	56.6
HCM 7th LOS	E

Notes

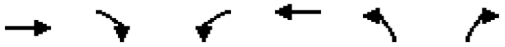
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1972	102	1002	85	189
v/c Ratio	0.79	0.61	0.34	0.55	0.61
Control Delay (s/veh)	20.4	56.2	9.8	65.5	16.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.4	56.2	9.8	65.5	16.1
Queue Length 50th (ft)	374	76	253	64	0
Queue Length 95th (ft)	733	122	341	112	63
Internal Link Dist (ft)	2007		2391	1091	
Turn Bay Length (ft)		300			200
Base Capacity (vph)	2503	376	2947	387	489
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.79	0.27	0.34	0.22	0.39

Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1689	47	90	882	75	166
Future Volume (veh/h)	1689	47	90	882	75	166
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1870	1841	1870	1885	1885
Adj Flow Rate, veh/h	1919	53	102	1002	85	189
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	2	4	2	1	1
Cap, veh/h	2415	66	127	2785	243	216
Arrive On Green	0.90	0.90	0.07	0.78	0.14	0.14
Sat Flow, veh/h	3655	98	1753	3647	1795	1598
Grp Volume(v), veh/h	961	1011	102	1002	85	189
Grp Sat Flow(s),veh/h/ln	1791	1867	1753	1777	1795	1598
Q Serve(g_s), s	22.0	22.8	6.9	10.2	5.2	13.9
Cycle Q Clear(g_c), s	22.0	22.8	6.9	10.2	5.2	13.9
Prop In Lane		0.05	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1215	1267	127	2785	243	216
V/C Ratio(X)	0.79	0.80	0.80	0.36	0.35	0.87
Avail Cap(c_a), veh/h	1215	1267	380	2785	389	346
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.49	0.49	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	3.0	3.0	54.8	3.9	47.1	50.9
Incr Delay (d2), s/veh	2.7	2.7	4.5	0.4	0.3	8.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.6	3.1	2.7	2.3	5.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.6	5.7	59.3	4.3	47.4	59.2
LnGrp LOS	A	A	E	A	D	E
Approach Vol, veh/h	1972			1104	274	
Approach Delay, s/veh	5.7			9.4	55.5	
Approach LOS	A			A	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	20.2	12.7	87.1		99.8
Change Period (Y+Rc), s	4.0	4.0	5.7		5.7
Max Green Setting (Gmax), s	26.0	26.0	38.3		84.3
Max Q Clear Time (g_c+I1), s	15.9	8.9	24.8		12.2
Green Ext Time (p_c), s	0.3	0.1	12.4		15.7

Intersection Summary	
HCM 7th Control Delay, s/veh	11.0
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

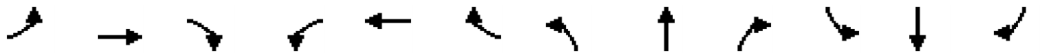
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	229	1659	152	412	743	147	177	576	759	342	570	97
v/c Ratio	0.70	0.89	0.23	0.71	0.55	0.21	0.60	0.81	1.52	0.78	0.47	0.19
Control Delay (s/veh)	56.8	46.7	8.8	67.4	40.4	18.5	62.9	43.2	263.7	63.8	52.9	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.8	46.7	8.8	67.4	40.4	18.5	62.9	43.2	263.7	63.8	52.9	8.3
Queue Length 50th (ft)	97	376	12	119	238	32	51	231	~691	136	154	10
Queue Length 95th (ft)	m123	#560	m37	156	355	94	80	#313	#931	189	203	28
Internal Link Dist (ft)		820			525			7673			496	
Turn Bay Length (ft)	245		600	250		250	225		235	215		225
Base Capacity (vph)	355	1870	665	760	1347	692	440	710	499	462	1213	502
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.89	0.23	0.54	0.55	0.21	0.40	0.81	1.52	0.74	0.47	0.19

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	1510	138	375	676	134	161	524	691	311	519	88
Future Volume (veh/h)	208	1510	138	375	676	134	161	524	691	311	519	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1841	1811	1826	1826	1811	1826	1856	1885	1841	1856
Adj Flow Rate, veh/h	229	1659	0	412	743	0	177	576	0	342	570	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	4	6	5	5	6	5	3	1	4	3
Cap, veh/h	286	2101		506	1501		234	655		402	1178	
Arrive On Green	0.08	0.41	0.00	0.10	0.43	0.00	0.07	0.19	0.00	0.12	0.23	0.00
Sat Flow, veh/h	3483	5147	1560	4864	3469	1547	3346	3469	1572	3483	5025	1572
Grp Volume(v), veh/h	229	1659	0	412	743	0	177	576	0	342	570	0
Grp Sat Flow(s),veh/h/ln	1742	1716	1560	1621	1735	1547	1673	1735	1572	1742	1675	1572
Q Serve(g_s), s	7.8	33.8	0.0	9.9	18.6	0.0	6.2	19.4	0.0	11.6	11.8	0.0
Cycle Q Clear(g_c), s	7.8	33.8	0.0	9.9	18.6	0.0	6.2	19.4	0.0	11.6	11.8	0.0
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	286	2101		506	1501		234	655		402	1178	
V/C Ratio(X)	0.80	0.79		0.81	0.49		0.76	0.88		0.85	0.48	
Avail Cap(c_a), veh/h	357	2101		770	1501		446	694		464	1178	
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	0.00	1.00	1.00	0.00	0.87	0.87	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.1	31.0	0.0	52.6	24.6	0.0	54.8	47.3	0.0	52.0	39.7	0.0
Incr Delay (d2), s/veh	7.9	3.1	0.0	2.2	1.2	0.0	1.6	11.1	0.0	12.5	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	3.6	13.8	0.0	4.0	7.5	0.0	2.6	9.2	0.0	5.7	4.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.0	34.1	0.0	54.8	25.7	0.0	56.5	58.5	0.0	64.6	40.1	0.0
LnGrp LOS	E	C		D	C		E	E		E	D	
Approach Vol, veh/h		1888			1155			753			912	
Approach Delay, s/veh		37.5			36.1			58.0			49.3	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	28.7	18.5	55.0	12.4	34.1	15.6	57.9
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	5.7	6.0
Max Green Setting (Gmax), s	16.0	24.0	19.0	* 39	16.0	24.0	12.3	46.0
Max Q Clear Time (g_c+I1), s	13.6	21.4	11.9	35.8	8.2	13.8	9.8	20.6
Green Ext Time (p_c), s	0.3	1.2	0.5	3.2	0.2	3.5	0.1	7.2

Intersection Summary	
HCM 7th Control Delay, s/veh	42.7
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

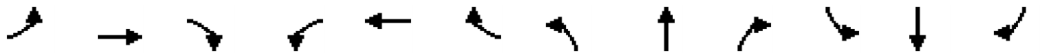
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	276	1822	271	237	911	85	181	687	261	136	628	224
v/c Ratio	0.71	0.98	0.39	0.65	0.49	0.05	0.53	0.72	0.17	0.54	0.73	0.41
Control Delay (s/veh)	46.2	44.9	18.1	58.5	29.3	0.1	55.9	44.5	0.2	60.5	47.9	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.2	44.9	18.1	58.5	29.3	0.1	55.9	44.5	0.2	60.5	47.9	7.5
Queue Length 50th (ft)	114	~574	102	96	256	0	68	246	0	53	233	1
Queue Length 95th (ft)	m112	m#560	m106	136	298	0	103	326	0	83	309	63
Internal Link Dist (ft)		1982			2534			1725			1308	
Turn Bay Length (ft)	225		235	225		250	270		245	235		195
Base Capacity (vph)	457	1858	690	548	1930	1594	436	959	1557	420	855	544
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.98	0.39	0.43	0.47	0.05	0.42	0.72	0.17	0.32	0.73	0.41

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	246	1622	241	211	811	76	161	611	232	121	559	199
Future Volume (veh/h)	246	1622	241	211	811	76	161	611	232	121	559	199
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1841	1900	1796	1870	1870	1737	1856	1826
Adj Flow Rate, veh/h	276	1822	102	237	911	0	181	687	0	136	628	57
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	1	4	0	7	2	2	11	3	5
Cap, veh/h	335	1672	510	725	2276		237	807		189	697	300
Arrive On Green	0.10	0.33	0.33	0.21	0.45	0.00	0.07	0.23	0.00	0.06	0.20	0.20
Sat Flow, veh/h	3456	5106	1558	3483	5025	1610	3319	3554	1585	3209	3526	1519
Grp Volume(v), veh/h	276	1822	102	237	911	0	181	687	0	136	628	57
Grp Sat Flow(s),veh/h/ln	1728	1702	1558	1742	1675	1610	1659	1777	1585	1605	1763	1519
Q Serve(g_s), s	9.4	39.3	5.7	6.9	14.5	0.0	6.4	22.2	0.0	5.0	20.9	2.9
Cycle Q Clear(g_c), s	9.4	39.3	5.7	6.9	14.5	0.0	6.4	22.2	0.0	5.0	20.9	2.9
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	335	1672	510	725	2276		237	807		189	697	300
V/C Ratio(X)	0.82	1.09	0.20	0.33	0.40		0.76	0.85		0.72	0.90	0.19
Avail Cap(c_a), veh/h	461	1672	510	725	2276		443	807		428	705	304
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	40.3	29.0	40.4	21.9	0.0	54.7	44.4	0.0	55.5	47.0	24.1
Incr Delay (d2), s/veh	6.1	50.7	0.9	0.1	0.5	0.0	1.9	9.6	0.0	1.9	17.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	23.5	2.2	2.9	5.6	0.0	2.7	10.5	0.0	2.0	10.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.3	91.1	29.9	40.5	22.5	0.0	56.6	54.0	0.0	57.5	64.0	25.5
LnGrp LOS	E	F	C	D	C		E	D		E	E	C
Approach Vol, veh/h		2200			1148			868			821	
Approach Delay, s/veh		84.2			26.2			54.6			60.2	
Approach LOS		F			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	33.0	31.0	45.0	14.3	29.7	15.6	60.4
Change Period (Y+Rc), s	4.0	5.7	6.0	5.7	5.7	* 6	4.0	6.0
Max Green Setting (Gmax), s	16.0	24.3	19.0	39.3	16.0	* 24	16.0	44.0
Max Q Clear Time (g_c+I1), s	7.0	24.2	8.9	41.3	8.4	22.9	11.4	16.5
Green Ext Time (p_c), s	0.1	0.0	0.3	0.0	0.2	0.8	0.2	9.3

Intersection Summary	
HCM 7th Control Delay, s/veh	62.0
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

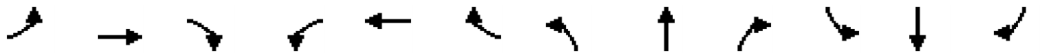
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	16	2357	12	24	1094	99	60	27	51	165	20	74
v/c Ratio	0.15	0.71	0.01	0.23	0.32	0.09	0.46	0.23	0.21	0.71	0.09	0.24
Control Delay (s/veh)	85.1	8.7	0.0	52.0	7.2	4.0	63.9	58.0	2.0	66.0	47.7	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	85.1	8.7	0.0	52.0	7.2	4.0	63.9	58.0	2.0	66.0	47.7	1.8
Queue Length 50th (ft)	13	93	0	20	140	10	46	20	0	123	14	0
Queue Length 95th (ft)	m18	716	m0	m43	163	32	85	48	0	183	37	0
Internal Link Dist (ft)		280			321			469			883	
Turn Bay Length (ft)	220		250	220		250	80		50	100		50
Base Capacity (vph)	240	3323	1064	200	3425	1109	236	348	411	245	302	382
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.71	0.01	0.12	0.32	0.09	0.25	0.08	0.12	0.67	0.07	0.19

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	2027	10	21	941	85	52	23	44	142	17	64
Future Volume (veh/h)	14	2027	10	21	941	85	52	23	44	142	17	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1826	1870	1885	1870	1900	1870	1885	1900	1900
Adj Flow Rate, veh/h	16	2357	0	24	1094	0	60	27	0	165	20	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	2	0	5	2	1	2	0	2	1	0	0
Cap, veh/h	44	2225		403	3357		90	108		192	215	
Arrive On Green	0.02	0.44	0.00	0.23	0.66	0.00	0.05	0.06	0.00	0.11	0.11	0.00
Sat Flow, veh/h	1810	5106	1610	1739	5106	1598	1781	1900	1585	1795	1900	1610
Grp Volume(v), veh/h	16	2357	0	24	1094	0	60	27	0	165	20	0
Grp Sat Flow(s),veh/h/ln	1810	1702	1610	1739	1702	1598	1781	1900	1585	1795	1900	1610
Q Serve(g_s), s	1.0	52.3	0.0	1.3	11.2	0.0	4.0	1.6	0.0	10.8	1.1	0.0
Cycle Q Clear(g_c), s	1.0	52.3	0.0	1.3	11.2	0.0	4.0	1.6	0.0	10.8	1.1	0.0
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	44	2225		403	3357		90	108		192	215	
V/C Ratio(X)	0.37	1.06		0.06	0.33		0.67	0.25		0.86	0.09	
Avail Cap(c_a), veh/h	241	2225		403	3357		238	317		209	302	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.7	33.8	0.0	35.9	9.0	0.0	56.0	54.2	0.0	52.7	47.7	0.0
Incr Delay (d2), s/veh	1.9	37.0	0.0	0.0	0.3	0.0	3.2	0.9	0.0	25.1	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	0.5	27.7	0.0	0.5	3.7	0.0	1.9	0.8	0.0	6.2	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.6	70.9	0.0	36.0	9.2	0.0	59.2	55.1	0.0	77.8	47.9	0.0
LnGrp LOS	E	F		D	A		E	E		E	D	
Approach Vol, veh/h		2373			1118			87			185	
Approach Delay, s/veh		70.8			9.8			57.9			74.6	
Approach LOS		E			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.8	11.7	33.5	58.0	10.1	18.5	6.9	84.6
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	14.0	* 20	14.0	* 52	16.0	19.1	16.0	50.3
Max Q Clear Time (g_c+I1), s	12.8	3.6	3.3	54.3	6.0	3.1	3.0	13.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6

Intersection Summary	
HCM 7th Control Delay, s/veh	52.6
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

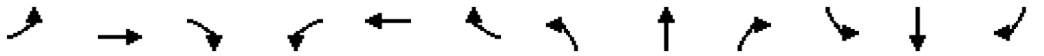
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	176	823	41	465	259	372	34	1172	1062	513	645	93
v/c Ratio	0.33	1.05	0.03	0.59	0.47	0.24	0.15	0.83	0.67	0.79	0.29	0.06
Control Delay (s/veh)	47.6	93.6	0.0	50.2	48.7	0.4	70.0	30.5	10.2	46.7	31.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.6	93.6	0.0	50.2	48.7	0.4	70.0	30.5	10.2	46.7	31.9	0.1
Queue Length 50th (ft)	64	~271	0	118	95	0	14	233	779	208	182	0
Queue Length 95th (ft)	100	#360	0	155	138	0	m20	#414	252	267	216	0
Internal Link Dist (ft)		2093			1923			1415			1823	
Turn Bay Length (ft)	235		425	200		235	225		250	380		560
Base Capacity (vph)	531	787	1593	844	598	1562	453	1408	1574	772	2249	1562
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	1.05	0.03	0.55	0.43	0.24	0.08	0.83	0.67	0.66	0.29	0.06

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	782	39	442	246	353	32	1113	1009	487	613	88
Future Volume (veh/h)	167	782	39	442	246	353	32	1113	1009	487	613	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1900	1870	1870	1870	1856	1870	1885	1870	1841	1870
Adj Flow Rate, veh/h	176	823	0	465	259	0	34	1172	0	513	645	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	0	2	2	2	3	2	1	2	4	2
Cap, veh/h	494	730		675	478		155	1234		599	1901	
Arrive On Green	0.14	0.14	0.00	0.13	0.13	0.00	0.05	0.24	0.00	0.06	0.12	0.00
Sat Flow, veh/h	3428	5066	1610	5023	3554	1585	3428	5106	1598	3456	5025	1585
Grp Volume(v), veh/h	176	823	0	465	259	0	34	1172	0	513	645	0
Grp Sat Flow(s),veh/h/ln	1714	1689	1610	1674	1777	1585	1714	1702	1598	1728	1675	1585
Q Serve(g_s), s	5.6	17.3	0.0	10.6	8.2	0.0	1.1	27.1	0.0	17.7	14.1	0.0
Cycle Q Clear(g_c), s	5.6	17.3	0.0	10.6	8.2	0.0	1.1	27.1	0.0	17.7	14.1	0.0
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	494	730		675	478		155	1234		599	1901	
V/C Ratio(X)	0.36	1.13		0.69	0.54		0.22	0.95		0.86	0.34	
Avail Cap(c_a), veh/h	494	730		850	601		457	1234		778	1901	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.92	0.92	0.00
Uniform Delay (d), s/veh	46.3	51.3	0.0	49.5	48.5	0.0	55.2	44.8	0.0	55.1	38.8	0.0
Incr Delay (d2), s/veh	0.7	74.0	0.0	2.5	1.6	0.0	0.3	15.3	0.0	6.9	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	2.4	12.1	0.0	4.5	3.6	0.0	0.5	12.8	0.0	8.7	6.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.1	125.4	0.0	52.0	50.1	0.0	55.5	60.1	0.0	62.0	39.3	0.0
LnGrp LOS	D	F		D	D		E	E		E	D	
Approach Vol, veh/h		999			724			1206			1158	
Approach Delay, s/veh		111.6			51.4			60.0			49.3	
Approach LOS		F			D			E			D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.8	25.8	35.0		25.0	9.4	51.4				
Change Period (Y+Rc), s		7.7	5.0	6.0		7.7	4.0	* 6				
Max Green Setting (Gmax), s		20.3	27.0	29.0		17.3	16.0	* 41				
Max Q Clear Time (g_c+I1), s		12.6	19.7	29.1		19.3	3.1	16.1				
Green Ext Time (p_c), s		3.2	1.1	0.0		0.0	0.0	6.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	68.0
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	173	87	167	21	22	21	298	1374	189	1084	170
v/c Ratio	0.57	0.56	0.56	0.14	0.14	0.07	0.70	0.39	0.47	0.38	0.18
Control Delay (s/veh)	58.8	65.2	14.9	48.5	48.5	0.5	67.2	16.2	55.3	17.3	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.8	65.2	14.9	48.5	48.5	0.5	67.2	16.2	55.3	17.3	4.3
Queue Length 50th (ft)	71	72	0	16	17	0	124	110	75	143	5
Queue Length 95th (ft)	105	125	61	36	37	0	m156	187	111	259	39
Internal Link Dist (ft)		908			816			1823		832	
Turn Bay Length (ft)	100		115	190			250		250		580
Base Capacity (vph)	611	311	430	295	304	409	751	3535	417	2831	961
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.28	0.39	0.07	0.07	0.05	0.40	0.39	0.45	0.38	0.18

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

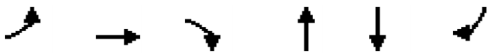
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	18	149	31	7	19	265	1166	57	168	965	151
Future Volume (veh/h)	214	18	149	31	7	19	265	1166	57	168	965	151
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1856	1856	1900	1900	1885	1870	1870	1900	1856	1885
Adj Flow Rate, veh/h	254	0	38	41	0	21	298	1310	64	189	1084	57
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	0	3	3	0	0	1	2	2	0	3	1
Cap, veh/h	360	0	105	200	0	90	364	2021	99	1384	3158	995
Arrive On Green	0.07	0.00	0.07	0.06	0.00	0.06	0.10	0.32	0.32	0.79	1.00	1.00
Sat Flow, veh/h	5302	0	1552	3534	0	1585	3483	6327	308	3510	5066	1596
Grp Volume(v), veh/h	254	0	38	41	0	21	298	999	375	189	1084	57
Grp Sat Flow(s),veh/h/ln	1767	0	1552	1767	0	1585	1742	1609	1809	1755	1689	1596
Q Serve(g_s), s	5.6	0.0	2.8	1.3	0.0	1.5	10.1	21.3	21.4	1.5	0.0	0.0
Cycle Q Clear(g_c), s	5.6	0.0	2.8	1.3	0.0	1.5	10.1	21.3	21.4	1.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	360	0	105	200	0	90	364	1542	578	1384	3158	995
V/C Ratio(X)	0.71	0.00	0.36	0.20	0.00	0.23	0.82	0.65	0.65	0.14	0.34	0.06
Avail Cap(c_a), veh/h	1016	0	297	589	0	264	755	1741	653	1384	3158	995
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.71	0.71	0.71	0.93	0.93	0.93
Uniform Delay (d), s/veh	54.8	0.0	53.4	54.0	0.0	54.1	52.6	35.0	35.1	7.8	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.8	0.2	0.0	0.5	1.3	1.5	4.0	0.0	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	2.5	0.0	1.1	0.6	0.0	0.6	4.5	8.5	10.0	0.6	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.7	0.0	54.2	54.2	0.0	54.6	53.9	36.5	39.1	7.9	0.3	0.1
LnGrp LOS	E		D	D		D	D	D	D	A	A	A
Approach Vol, veh/h		292			62			1672			1330	
Approach Delay, s/veh		55.5			54.3			40.2			1.3	
Approach LOS		E			D			D			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	53.0	44.0		12.1	16.5	80.5		10.8				
Change Period (Y+Rc), s	5.7	5.7		4.0	4.0	5.7		4.0				
Max Green Setting (Gmax), s	14.3	43.3		23.0	26.0	33.3		20.0				
Max Q Clear Time (g_c+I1), s	3.5	23.4		7.6	12.1	2.0		3.5				
Green Ext Time (p_c), s	0.2	15.0		0.5	0.5	16.7		0.1				

Intersection Summary		
HCM 7th Control Delay, s/veh		26.4
HCM 7th LOS		C

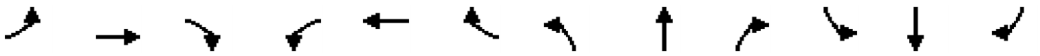
Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



Lane Group	EBL	EBT	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	87	223	218	1612	1239	589
v/c Ratio	0.36	0.79	0.77	0.43	0.32	0.38
Control Delay (s/veh)	47.8	51.4	48.9	3.0	5.9	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.8	51.4	48.9	3.0	5.9	0.8
Queue Length 50th (ft)	65	125	114	70	113	3
Queue Length 95th (ft)	105	201	185	0	122	0
Internal Link Dist (ft)		980		832	895	
Turn Bay Length (ft)	225					180
Base Capacity (vph)	486	485	488	3721	3840	1564
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.46	0.45	0.43	0.32	0.38

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	37	346	0	0	0	0	1012	423	0	1103	524
Future Volume (veh/h)	86	37	346	0	0	0	0	1012	423	0	1103	524
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1870				0	1870	1870	0	1856	1870
Adj Flow Rate, veh/h	79	0	437				0	1137	475	0	1239	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	3	2				0	2	2	0	3	2
Cap, veh/h	285	0	506				0	2626	1095	0	3792	
Arrive On Green	0.16	0.00	0.16				0.00	1.00	1.00	0.00	1.00	0.00
Sat Flow, veh/h	1781	0	3170				0	3677	1463	0	5233	1585
Grp Volume(v), veh/h	79	0	437				0	1103	509	0	1239	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1567	0	1689	1585
Q Serve(g_s), s	4.7	0.0	16.1				0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.7	0.0	16.1				0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.93	0.00		1.00
Lane Grp Cap(c), veh/h	285	0	506				0	2548	1173	0	3792	
V/C Ratio(X)	0.28	0.00	0.86				0.00	0.43	0.43	0.00	0.33	
Avail Cap(c_a), veh/h	515	0	917				0	2548	1173	0	3792	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.92	0.92	0.00	0.92	0.00
Uniform Delay (d), s/veh	44.3	0.0	49.1				0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.7				0.0	0.5	1.1	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
%ile BackOfQ(50%),veh/ln	2.1	0.0	6.5				0.0	0.2	0.4	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.5	0.0	50.9				0.0	0.5	1.1	0.0	0.2	0.0
LnGrp LOS	D		D					A	A		A	
Approach Vol, veh/h		516						1612			1239	
Approach Delay, s/veh		49.9						0.7			0.2	
Approach LOS		D						A			A	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		95.5		24.5		95.5						
Change Period (Y+Rc), s		5.7		5.3		5.7						
Max Green Setting (Gmax), s		74.3		34.7		74.3						
Max Q Clear Time (g_c+I1), s		2.0		18.1		2.0						
Green Ext Time (p_c), s		34.6		1.0		16.8						

Intersection Summary												
HCM 7th Control Delay, s/veh			8.1									
HCM 7th LOS			A									

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	318	319	991	202	109	1417
v/c Ratio	0.64	0.42	0.30	0.13	0.64	0.35
Control Delay (s/veh)	57.7	28.4	11.5	0.2	68.0	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.7	28.4	11.5	0.2	68.0	4.1
Queue Length 50th (ft)	85	88	63	0	83	95
Queue Length 95th (ft)	114	122	269	0	138	130
Internal Link Dist (ft)	1017		895			533
Turn Bay Length (ft)	410	415		300	210	
Base Capacity (vph)	1129	1072	3341	1548	372	4018
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.30	0.30	0.13	0.29	0.35

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	296	297	922	188	101	1318
Future Volume (veh/h)	296	297	922	188	101	1318
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1841	1826	1870	1856	1826	1870
Adj Flow Rate, veh/h	318	319	991	0	109	1417
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	5	2	3	5	2
Cap, veh/h	653	570	3314		134	3878
Arrive On Green	0.13	0.13	1.00	0.00	0.08	0.76
Sat Flow, veh/h	4944	2723	5274	1572	1739	5274
Grp Volume(v), veh/h	318	319	991	0	109	1417
Grp Sat Flow(s),veh/h/ln	1648	1362	1702	1572	1739	1702
Q Serve(g_s), s	7.2	12.6	0.0	0.0	7.4	11.1
Cycle Q Clear(g_c), s	7.2	12.6	0.0	0.0	7.4	11.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	653	570	3314		134	3878
V/C Ratio(X)	0.49	0.56	0.30		0.81	0.37
Avail Cap(c_a), veh/h	1141	839	3314		377	3878
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.91	0.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	42.5	0.0	0.0	54.5	4.8
Incr Delay (d2), s/veh	0.2	0.3	0.2	0.0	4.4	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	4.3	0.1	0.0	3.3	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.5	42.8	0.2	0.0	58.9	5.1
LnGrp LOS	D	D	A		E	A
Approach Vol, veh/h	637		991			1526
Approach Delay, s/veh	45.7		0.2			8.9
Approach LOS	D		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.3	83.6			96.8	23.2
Change Period (Y+Rc), s	4.0	5.7			5.7	7.3
Max Green Setting (Gmax), s	26.0	49.3			79.3	27.7
Max Q Clear Time (g_c+I1), s	9.4	2.0			13.1	14.6
Green Ext Time (p_c), s	0.1	12.2			24.2	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	13.6
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	9	325	36	449	733	20	45	65	343	32	147	58
v/c Ratio	0.04	0.48	0.09	0.74	0.35	0.02	0.35	0.10	0.59	0.14	0.47	0.16
Control Delay (s/veh)	63.8	44.3	0.5	43.4	14.2	0.1	65.9	41.4	9.3	61.9	51.4	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.8	44.3	0.5	43.4	14.2	0.1	65.9	41.4	9.3	61.9	51.4	2.3
Queue Length 50th (ft)	3	105	0	270	126	0	30	20	0	10	95	0
Queue Length 95th (ft)	15	211	0	563	290	0	92	51	90	37	211	7
Internal Link Dist (ft)		2983			2531			400			1404	
Turn Bay Length (ft)	250		250	220		220	140		140	235		235
Base Capacity (vph)	1225	2240	1115	988	2910	1277	302	1103	730	640	625	606
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.15	0.03	0.45	0.25	0.02	0.15	0.06	0.47	0.05	0.24	0.10

Intersection Summary

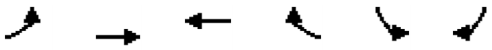
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	296	33	409	667	18	41	59	312	29	134	53
Future Volume (veh/h)	8	296	33	409	667	18	41	59	312	29	134	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1722	1678	1811	1870	1856	1811	1648	1693	1737	1796	1841	1870
Adj Flow Rate, veh/h	9	325	23	449	733	20	45	65	83	32	147	17
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	12	15	6	2	3	6	17	14	11	7	4	2
Cap, veh/h	51	670	323	495	1665	725	89	528	242	150	281	242
Arrive On Green	0.02	0.21	0.21	0.28	0.47	0.47	0.06	0.16	0.16	0.05	0.15	0.15
Sat Flow, veh/h	3182	3188	1535	1781	3526	1535	1570	3216	1472	3319	1841	1585
Grp Volume(v), veh/h	9	325	23	449	733	20	45	65	83	32	147	17
Grp Sat Flow(s),veh/h/ln	1591	1594	1535	1781	1763	1535	1570	1608	1472	1659	1841	1585
Q Serve(g_s), s	0.2	6.8	0.9	18.5	10.5	0.5	2.1	1.3	3.8	0.7	5.6	0.7
Cycle Q Clear(g_c), s	0.2	6.8	0.9	18.5	10.5	0.5	2.1	1.3	3.8	0.7	5.6	0.7
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	51	670	323	495	1665	725	89	528	242	150	281	242
V/C Ratio(X)	0.18	0.48	0.07	0.91	0.44	0.03	0.51	0.12	0.34	0.21	0.52	0.07
Avail Cap(c_a), veh/h	1674	3145	1514	1335	3478	1514	413	1354	620	873	847	730
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	36.9	26.4	24.1	26.5	13.4	10.7	34.8	27.1	28.1	35.0	29.6	27.6
Incr Delay (d2), s/veh	0.6	1.5	0.3	2.7	0.5	0.0	1.7	0.4	3.2	0.3	2.4	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	0.1	2.5	0.3	7.4	3.6	0.2	0.8	0.5	1.5	0.3	2.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.5	27.9	24.3	29.2	13.9	10.8	36.5	27.5	31.4	35.3	32.0	27.8
LnGrp LOS	D	C	C	C	B	B	D	C	C	D	C	C
Approach Vol, veh/h		357			1202			193			196	
Approach Delay, s/veh		27.9			19.5			31.3			32.2	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	18.8	26.1	22.7	9.3	17.9	6.2	42.6
Change Period (Y+Rc), s	5.0	6.3	5.0	6.7	5.0	6.3	5.0	6.7
Max Green Setting (Gmax), s	20.0	32.0	57.0	75.0	20.0	35.0	40.0	75.0
Max Q Clear Time (g_c+I1), s	2.7	5.8	20.5	8.8	4.1	7.6	2.2	12.5
Green Ext Time (p_c), s	0.0	1.6	0.6	5.2	0.0	1.4	0.0	13.8

Intersection Summary	
HCM 7th Control Delay, s/veh	23.5
HCM 7th LOS	C

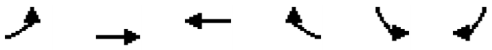
Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	167	519	788	109	164	365
v/c Ratio	0.65	0.25	0.57	0.16	0.55	0.63
Control Delay (s/veh)	46.5	6.5	20.3	4.5	38.7	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.5	6.5	20.3	4.5	38.7	9.2
Queue Length 50th (ft)	68	42	135	0	67	0
Queue Length 95th (ft)	194	105	283	33	169	78
Internal Link Dist (ft)		2531	2908		1602	
Turn Bay Length (ft)	260			240		240
Base Capacity (vph)	431	2999	2654	1191	516	731
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.17	0.30	0.09	0.32	0.50

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	159	493	749	104	156	347
Future Volume (veh/h)	159	493	749	104	156	347
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1604	1722	1841	1811	1826	1870
Adj Flow Rate, veh/h	167	519	788	109	164	365
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	20	12	4	6	5	2
Cap, veh/h	200	1881	1320	579	439	400
Arrive On Green	0.13	0.57	0.38	0.38	0.25	0.25
Sat Flow, veh/h	1527	3358	3589	1535	1739	1585
Grp Volume(v), veh/h	167	519	788	109	164	365
Grp Sat Flow(s),veh/h/ln	1527	1636	1749	1535	1739	1585
Q Serve(g_s), s	8.0	6.0	13.6	3.6	5.9	16.8
Cycle Q Clear(g_c), s	8.0	6.0	13.6	3.6	5.9	16.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	200	1881	1320	579	439	400
V/C Ratio(X)	0.83	0.28	0.60	0.19	0.37	0.91
Avail Cap(c_a), veh/h	406	2389	2554	1121	462	421
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	31.9	8.1	18.8	15.7	23.2	27.3
Incr Delay (d2), s/veh	3.5	0.2	0.9	0.3	0.2	22.5
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	1.7	5.0	1.2	2.3	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	35.4	8.3	19.8	16.0	23.4	49.9
LnGrp LOS	D	A	B	B	C	D
Approach Vol, veh/h		686	897		529	
Approach Delay, s/veh		14.9	19.3		41.7	
Approach LOS		B	B		D	

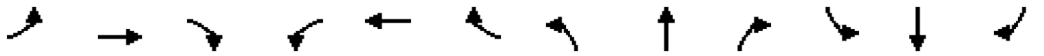
Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		51.3		24.0	14.9	36.4
Change Period (Y+Rc), s		8.0		5.0	5.0	8.0
Max Green Setting (Gmax), s		55.0		20.0	20.0	55.0
Max Q Clear Time (g_c+I1), s		8.0		18.8	10.0	15.6
Green Ext Time (p_c), s		7.2		0.2	0.1	12.8

Intersection Summary	
HCM 7th Control Delay, s/veh	23.5
HCM 7th LOS	C

Notes
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	76	653	38	13	781	58	23	26	8	105	41	136
v/c Ratio	0.34	0.38	0.06	0.08	0.58	0.09	0.16	0.07	0.02	0.40	0.09	0.27
Control Delay (s/veh)	49.0	16.0	1.3	53.1	24.8	5.6	52.9	34.0	0.1	47.3	28.3	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.0	16.0	1.3	53.1	24.8	5.6	52.9	34.0	0.1	47.3	28.3	7.3
Queue Length 50th (ft)	35	87	0	6	154	0	10	11	0	48	13	0
Queue Length 95th (ft)	128	303	5	37	405	24	54	43	0	164	55	45
Internal Link Dist (ft)		2908			4046			853			8570	
Turn Bay Length (ft)	245		245	245		245	245		245	200		200
Base Capacity (vph)	537	2880	1082	482	2933	1334	406	583	491	542	668	663
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.23	0.04	0.03	0.27	0.04	0.06	0.04	0.02	0.19	0.06	0.21

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	575	33	11	687	51	20	23	7	92	36	120
Future Volume (veh/h)	67	575	33	11	687	51	20	23	7	92	36	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1767	1500	1633	1796	1811	1307	1648	1470	1826	1811	1856
Adj Flow Rate, veh/h	76	653	38	12	781	58	23	26	8	105	41	136
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	6	9	27	18	7	6	40	17	29	5	6	3
Cap, veh/h	145	1619	611	33	1432	641	46	153	115	168	276	238
Arrive On Green	0.08	0.48	0.48	0.02	0.42	0.42	0.04	0.09	0.09	0.10	0.15	0.15
Sat Flow, veh/h	1725	3357	1266	1555	3413	1527	1245	1648	1240	1739	1811	1563
Grp Volume(v), veh/h	76	653	38	12	781	58	23	26	8	105	41	136
Grp Sat Flow(s),veh/h/ln	1725	1678	1266	1555	1706	1527	1245	1648	1240	1739	1811	1563
Q Serve(g_s), s	2.5	7.5	1.0	0.5	10.3	1.4	1.1	0.9	0.4	3.5	1.2	4.8
Cycle Q Clear(g_c), s	2.5	7.5	1.0	0.5	10.3	1.4	1.1	0.9	0.4	3.5	1.2	4.8
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	145	1619	611	33	1432	641	46	153	115	168	276	238
V/C Ratio(X)	0.52	0.40	0.06	0.36	0.55	0.09	0.50	0.17	0.07	0.62	0.15	0.57
Avail Cap(c_a), veh/h	578	4221	1592	522	4292	1921	418	553	416	583	607	524
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	26.2	9.9	8.2	28.8	13.0	10.4	28.2	24.9	24.7	25.9	21.9	23.5
Incr Delay (d2), s/veh	1.1	0.3	0.1	2.5	0.6	0.1	3.0	1.1	0.5	1.4	0.3	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	1.0	2.1	0.2	0.2	3.2	0.4	0.3	0.4	0.1	1.4	0.5	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.3	10.2	8.3	31.3	13.7	10.6	31.2	26.0	25.2	27.3	22.2	26.1
LnGrp LOS	C	B	A	C	B	B	C	C	C	C	C	C
Approach Vol, veh/h		767			851			57			282	
Approach Delay, s/veh		11.8			13.7			28.0			26.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	10.1	5.3	34.5	6.2	13.7	9.0	30.7
Change Period (Y+Rc), s	4.0	* 4.6	4.0	5.7	4.0	4.6	4.0	5.7
Max Green Setting (Gmax), s	20.0	* 20	20.0	75.0	20.0	20.0	20.0	75.0
Max Q Clear Time (g_c+I1), s	5.5	2.9	2.5	9.5	3.1	6.8	4.5	12.3
Green Ext Time (p_c), s	0.1	0.1	0.0	9.7	0.0	0.6	0.1	12.5

Intersection Summary	
HCM 7th Control Delay, s/veh	15.2
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

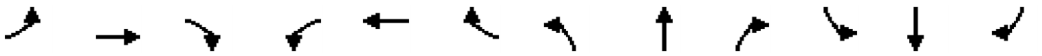
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	264	473	227	351	236	66	1003	289	400	1025	374
v/c Ratio	0.68	0.62	0.63	0.51	0.48	0.51	1.23	0.57	0.88	0.68	0.37
Control Delay (s/veh)	64.5	46.4	65.2	47.0	8.6	75.6	156.4	24.7	66.9	35.2	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.5	46.4	65.2	47.0	8.6	75.6	156.4	24.7	66.9	35.2	4.9
Queue Length 50th (ft)	100	173	86	128	0	49	~513	77	284	329	23
Queue Length 95th (ft)	203	278	179	216	69	130	#945	237	#716	687	116
Internal Link Dist (ft)		4046		6046			2211			1645	
Turn Bay Length (ft)	265		235		240	245		240	235		350
Base Capacity (vph)	842	1191	655	931	579	272	813	504	578	1502	1188
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.40	0.35	0.38	0.41	0.24	1.23	0.57	0.69	0.68	0.31

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	243	391	44	209	323	217	61	923	266	368	943	344
Future Volume (veh/h)	243	391	44	209	323	217	61	923	266	368	943	344
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1678	1811	1693	1856	1781	1752	1737	1811	1856	1870	1826	1811
Adj Flow Rate, veh/h	264	425	48	227	351	60	66	1003	97	400	1025	125
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	15	6	14	3	8	10	11	6	3	2	5	6
Cap, veh/h	334	584	66	302	567	249	84	941	430	435	1620	873
Arrive On Green	0.11	0.19	0.19	0.09	0.17	0.17	0.05	0.27	0.27	0.24	0.47	0.47
Sat Flow, veh/h	3100	3118	350	3428	3385	1485	1654	3441	1572	1781	3469	1516
Grp Volume(v), veh/h	264	234	239	227	351	60	66	1003	97	400	1025	125
Grp Sat Flow(s),veh/h/ln	1550	1721	1748	1714	1692	1485	1654	1721	1572	1781	1735	1516
Q Serve(g_s), s	8.2	12.6	12.7	6.4	9.5	3.5	3.9	27.0	4.7	21.6	22.1	3.8
Cycle Q Clear(g_c), s	8.2	12.6	12.7	6.4	9.5	3.5	3.9	27.0	4.7	21.6	22.1	3.8
Prop In Lane	1.00		0.20	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	334	322	328	302	567	249	84	941	430	435	1620	873
V/C Ratio(X)	0.79	0.72	0.73	0.75	0.62	0.24	0.78	1.07	0.23	0.92	0.63	0.14
Avail Cap(c_a), veh/h	1037	523	531	799	1029	451	335	941	430	704	1620	873
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	42.9	37.7	37.8	43.9	38.1	35.6	46.3	35.8	27.7	36.3	19.9	9.7
Incr Delay (d2), s/veh	1.6	5.7	5.7	1.4	2.1	1.0	5.9	48.4	0.4	8.0	1.0	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	3.1	5.6	5.7	2.7	3.9	1.3	1.7	16.9	1.7	9.8	8.2	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.5	43.4	43.5	45.4	40.3	36.6	52.2	84.2	28.2	44.3	20.9	9.8
LnGrp LOS	D	D	D	D	D	D	D	F	C	D	C	A
Approach Vol, veh/h		737			638			1166			1550	
Approach Delay, s/veh		43.8			41.7			77.7			26.0	
Approach LOS		D			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.1	33.4	12.7	24.5	9.0	52.5	14.6	22.5
Change Period (Y+Rc), s	4.0	6.4	4.0	6.0	4.0	6.4	4.0	6.0
Max Green Setting (Gmax), s	39.0	27.0	23.0	30.0	20.0	35.0	33.0	30.0
Max Q Clear Time (g_c+I1), s	23.6	29.0	8.4	14.7	5.9	24.1	10.2	11.5
Green Ext Time (p_c), s	0.5	0.0	0.3	3.8	0.0	6.9	0.4	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	46.4
HCM 7th LOS	D

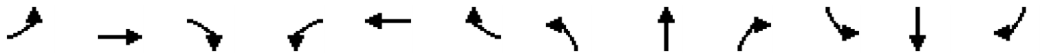
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	44	724	46	530	146	189	58	327	61
v/c Ratio	0.42	0.86	0.43	0.34	0.09	0.79	0.17	0.84	0.11
Control Delay (s/veh)	80.5	47.0	80.7	26.1	0.1	85.1	7.4	73.1	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	80.5	47.0	80.7	26.1	0.1	85.1	7.4	73.1	8.4
Queue Length 50th (ft)	41	579	43	159	0	179	0	301	0
Queue Length 95th (ft)	92	#1006	94	254	0	#317	24	448	34
Internal Link Dist (ft)		6046		7395		1514		6530	
Turn Bay Length (ft)	235		115		280		50		400
Base Capacity (vph)	257	948	260	1778	1564	239	478	538	681
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.76	0.18	0.30	0.09	0.79	0.12	0.61	0.09

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	679	23	45	514	142	36	147	56	198	119	59
Future Volume (veh/h)	43	679	23	45	514	142	36	147	56	198	119	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1856	1841	1841	1826	1870	1811	1885	1826	1885	1826	1856
Adj Flow Rate, veh/h	44	700	24	46	530	0	37	152	13	204	123	61
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	3	4	4	5	2	6	1	5	1	5	3
Cap, veh/h	69	808	28	71	1574		43	177	245	229	138	389
Arrive On Green	0.04	0.45	0.45	0.04	0.45	0.00	0.12	0.12	0.12	0.21	0.21	0.21
Sat Flow, veh/h	1739	1783	61	1753	3469	1585	365	1501	1547	1105	666	1572
Grp Volume(v), veh/h	44	0	724	46	530	0	189	0	13	327	0	61
Grp Sat Flow(s),veh/h/ln	1739	0	1844	1753	1735	1585	1867	0	1547	1771	0	1572
Q Serve(g_s), s	2.8	0.0	40.3	2.9	11.2	0.0	11.3	0.0	0.8	20.4	0.0	3.5
Cycle Q Clear(g_c), s	2.8	0.0	40.3	2.9	11.2	0.0	11.3	0.0	0.8	20.4	0.0	3.5
Prop In Lane	1.00		0.03	1.00		1.00	0.20		1.00	0.62		1.00
Lane Grp Cap(c), veh/h	69	0	835	71	1574		221	0	245	368	0	389
V/C Ratio(X)	0.64	0.00	0.87	0.65	0.34		0.86	0.00	0.05	0.89	0.00	0.16
Avail Cap(c_a), veh/h	305	0	1117	308	1797		269	0	285	622	0	614
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.9	0.0	28.1	53.9	20.1	0.0	49.3	0.0	40.7	43.8	0.0	33.6
Incr Delay (d2), s/veh	3.6	0.0	7.4	3.7	0.2	0.0	17.4	0.0	0.0	4.6	0.0	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	1.3	0.0	18.1	1.3	4.3	0.0	6.2	0.0	0.3	9.3	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.5	0.0	35.5	57.6	20.3	0.0	66.7	0.0	40.7	48.4	0.0	33.6
LnGrp LOS	E		D	E	C		E		D	D		C
Approach Vol, veh/h		768			576			202			388	
Approach Delay, s/veh		36.7			23.3			65.0			46.1	
Approach LOS		D			C			E			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	18.1	8.6	57.6	29.7	8.5	57.7
Change Period (Y+Rc), s	4.6	4.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	16.4	20.0	69.0	40.0	20.0	59.0
Max Q Clear Time (g_c+I1), s	13.3	4.9	42.3	22.4	4.8	13.2
Green Ext Time (p_c), s	0.2	0.0	9.3	1.2	0.0	6.9

Intersection Summary	
HCM 7th Control Delay, s/veh	37.6
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

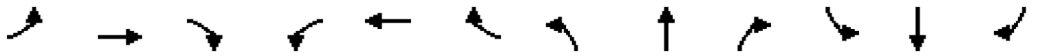
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	157	310	609	104	184	126	376	1080	74	102	1029	130
v/c Ratio	0.71	0.44	1.03	0.62	0.29	0.30	0.76	0.48	0.09	0.43	0.54	0.19
Control Delay (s/veh)	67.2	44.8	66.4	67.0	45.2	4.1	58.5	23.2	0.2	65.6	29.9	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.2	44.8	66.4	67.0	45.2	4.1	58.5	23.2	0.2	65.6	29.9	6.0
Queue Length 50th (ft)	119	111	~279	79	65	0	144	204	0	42	148	13
Queue Length 95th (ft)	182	165	#536	133	106	22	194	255	0	73	178	36
Internal Link Dist (ft)		300			4371			1689			7673	
Turn Bay Length (ft)	195		360	225		125	215		250	250		175
Base Capacity (vph)	327	711	591	238	631	422	567	2252	805	462	1911	693
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.44	1.03	0.44	0.29	0.30	0.66	0.48	0.09	0.22	0.54	0.19

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	285	560	96	169	116	346	994	68	94	947	120
Future Volume (veh/h)	144	285	560	96	169	116	346	994	68	94	947	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1841	1856	1885	1841	1856	1781	1796	1885	1885	1856	1856
Adj Flow Rate, veh/h	157	310	133	104	184	22	376	1080	34	102	1029	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	4	3	1	4	3	8	7	1	1	3	3
Cap, veh/h	185	418	188	129	309	137	441	2871	922	196	2573	
Arrive On Green	0.10	0.12	0.12	0.07	0.09	0.09	0.13	0.59	0.59	0.06	0.51	0.00
Sat Flow, veh/h	1795	3497	1572	1795	3497	1550	3291	4904	1575	3483	5066	1572
Grp Volume(v), veh/h	157	310	133	104	184	22	376	1080	34	102	1029	0
Grp Sat Flow(s),veh/h/ln	1795	1749	1572	1795	1749	1550	1646	1635	1575	1742	1689	1572
Q Serve(g_s), s	10.3	10.3	9.8	6.8	6.1	1.6	13.4	14.1	1.1	3.4	15.1	0.0
Cycle Q Clear(g_c), s	10.3	10.3	9.8	6.8	6.1	1.6	13.4	14.1	1.1	3.4	15.1	0.0
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	185	418	188	129	309	137	441	2871	922	196	2573	
V/C Ratio(X)	0.85	0.74	0.71	0.81	0.59	0.16	0.85	0.38	0.04	0.52	0.40	
Avail Cap(c_a), veh/h	329	583	262	239	428	190	576	2871	922	464	2573	
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	0.84	0.84	0.00
Uniform Delay (d), s/veh	52.9	51.0	50.8	54.9	52.6	50.6	50.8	13.2	10.5	55.0	18.2	0.0
Incr Delay (d2), s/veh	4.1	4.8	8.3	4.4	3.9	1.2	9.5	0.4	0.1	0.7	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	4.7	4.7	4.2	3.2	2.8	0.7	6.0	4.8	0.4	1.5	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.0	55.9	59.1	59.3	56.5	51.7	60.3	13.6	10.6	55.7	18.6	0.0
LnGrp LOS	E	E	E	E	E	D	E	B	B	E	B	
Approach Vol, veh/h		600			310			1490			1131	
Approach Delay, s/veh		56.9			57.1			25.3			22.0	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	76.2	12.6	20.4	20.1	66.9	16.4	16.6
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	16.0	48.0	16.0	20.0	21.0	43.0	22.0	* 15
Max Q Clear Time (g_c+I1), s	5.4	16.1	8.8	12.3	15.4	17.1	12.3	8.1
Green Ext Time (p_c), s	0.1	9.8	0.1	2.1	0.7	10.4	0.1	0.9

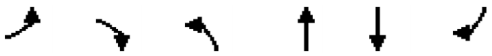
Intersection Summary	
HCM 7th Control Delay, s/veh	32.4
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

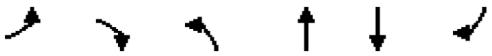
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	371	109	38	778	633	281
v/c Ratio	0.66	0.19	0.17	0.51	0.48	0.37
Control Delay (s/veh)	19.9	4.5	23.3	9.7	13.0	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.9	4.5	23.3	9.7	13.0	3.8
Queue Length 50th (ft)	61	0	7	60	45	0
Queue Length 95th (ft)	123	14	27	80	92	15
Internal Link Dist (ft)	1350			1889	1990	
Turn Bay Length (ft)		200	240			240
Base Capacity (vph)	805	787	228	2367	1608	874
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.14	0.17	0.33	0.39	0.32

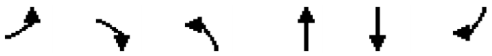
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	256	75	26	537	437	194
Future Volume (veh/h)	256	75	26	537	437	194
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1885	1900	1781	1826	1885
Adj Flow Rate, veh/h	371	109	38	778	633	281
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69
Percent Heavy Veh, %	2	1	0	8	5	1
Cap, veh/h	487	436	79	1637	1104	493
Arrive On Green	0.27	0.27	0.04	0.48	0.32	0.32
Sat Flow, veh/h	1781	1598	1810	3474	3561	1548
Grp Volume(v), veh/h	371	109	38	778	633	281
Grp Sat Flow(s),veh/h/ln	1781	1598	1810	1692	1735	1548
Q Serve(g_s), s	7.1	2.0	0.8	5.7	5.6	5.6
Cycle Q Clear(g_c), s	7.1	2.0	0.8	5.7	5.6	5.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	487	436	79	1637	1104	493
V/C Ratio(X)	0.76	0.25	0.48	0.48	0.57	0.57
Avail Cap(c_a), veh/h	867	777	245	2562	1735	774
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	12.3	10.5	17.3	6.4	10.5	10.5
Incr Delay (d2), s/veh	2.5	0.3	4.5	0.2	0.5	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.0	0.4	1.1	1.5	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.9	10.8	21.7	6.6	11.0	11.5
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	480			816	914	
Approach Delay, s/veh	13.9			7.3	11.2	
Approach LOS	B			A	B	

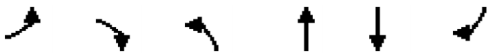
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		22.4		14.6	6.1	16.3
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		28.0		18.0	5.0	18.5
Max Q Clear Time (g_c+I1), s		7.7		9.1	2.8	7.6
Green Ext Time (p_c), s		5.1		1.1	0.0	3.8

Intersection Summary		
HCM 7th Control Delay, s/veh		10.3
HCM 7th LOS		B



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	70	229	211	729	703	26
v/c Ratio	0.24	0.51	0.57	0.34	0.61	0.05
Control Delay (s/veh)	20.2	7.9	25.5	4.5	15.9	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.2	7.9	25.5	4.5	15.9	5.7
Queue Length 50th (ft)	17	0	51	35	81	0
Queue Length 95th (ft)	36	20	89	51	100	8
Internal Link Dist (ft)	1043			3346	1889	
Turn Bay Length (ft)		150	235			235
Base Capacity (vph)	656	727	413	2565	1491	675
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.31	0.51	0.28	0.47	0.04

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	49	160	148	510	492	18
Future Volume (veh/h)	49	160	148	510	492	18
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1796	1841	1900
Adj Flow Rate, veh/h	70	229	211	729	703	26
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Percent Heavy Veh, %	0	1	1	7	4	0
Cap, veh/h	349	309	272	2004	1139	500
Arrive On Green	0.19	0.19	0.15	0.59	0.33	0.33
Sat Flow, veh/h	1810	1598	1795	3503	3589	1535
Grp Volume(v), veh/h	70	229	211	729	703	26
Grp Sat Flow(s),veh/h/ln	1810	1598	1795	1706	1749	1535
Q Serve(g_s), s	1.3	5.5	4.6	4.6	6.9	0.5
Cycle Q Clear(g_c), s	1.3	5.5	4.6	4.6	6.9	0.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	349	309	272	2004	1139	500
V/C Ratio(X)	0.20	0.74	0.78	0.36	0.62	0.05
Avail Cap(c_a), veh/h	729	644	460	2875	1665	731
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	13.9	15.6	16.7	4.4	11.7	9.5
Incr Delay (d2), s/veh	0.3	3.5	4.7	0.1	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.3	1.9	0.7	2.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.1	19.1	21.4	4.6	12.2	9.5
LnGrp LOS	B	B	C	A	B	A
Approach Vol, veh/h	299			940	729	
Approach Delay, s/veh	17.9			8.3	12.1	
Approach LOS	B			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		28.5		12.4	10.7	17.8
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		34.5		16.5	10.5	19.5
Max Q Clear Time (g_c+I1), s		6.6		7.5	6.6	8.9
Green Ext Time (p_c), s		5.1		0.7	0.2	3.4

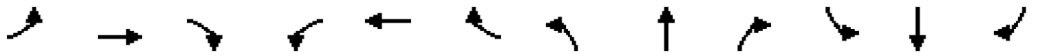
Intersection Summary	
HCM 7th Control Delay, s/veh	11.2
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	20	136	96	86	58	70	39	500	65	28	302	8
v/c Ratio	0.05	0.34	0.22	0.27	0.17	0.19	0.13	0.47	0.12	0.10	0.34	0.02
Control Delay (s/veh)	24.4	26.6	6.7	27.6	26.4	4.6	28.5	19.3	3.5	28.9	20.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.4	26.6	6.7	27.6	26.4	4.6	28.5	19.3	3.5	28.9	20.2	0.1
Queue Length 50th (ft)	6	41	0	26	17	0	12	59	0	8	48	0
Queue Length 95th (ft)	24	100	25	72	53	14	42	137	13	33	86	0
Internal Link Dist (ft)		112			658			1620			940	
Turn Bay Length (ft)				245		250	240		235	240		230
Base Capacity (vph)	751	775	729	702	745	709	751	2577	1187	722	2553	1085
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.18	0.13	0.12	0.08	0.10	0.05	0.19	0.05	0.04	0.12	0.01

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	113	80	71	48	58	32	415	54	23	251	7
Future Volume (veh/h)	17	113	80	71	48	58	32	415	54	23	251	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1885	1796	1811	1870	1900	1826	1841	1841	1811	1693
Adj Flow Rate, veh/h	20	136	96	86	58	70	39	500	65	28	302	8
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	2	1	7	6	2	0	5	4	4	6	14
Cap, veh/h	318	329	280	264	280	244	121	824	371	90	765	319
Arrive On Green	0.18	0.18	0.18	0.15	0.15	0.15	0.07	0.24	0.24	0.05	0.22	0.22
Sat Flow, veh/h	1810	1870	1595	1711	1811	1582	1810	3469	1560	1753	3441	1434
Grp Volume(v), veh/h	20	136	96	86	58	70	39	500	65	28	302	8
Grp Sat Flow(s),veh/h/ln	1810	1870	1595	1711	1811	1582	1810	1735	1560	1753	1721	1434
Q Serve(g_s), s	0.5	3.2	2.6	2.2	1.4	1.9	1.0	6.4	1.6	0.8	3.7	0.2
Cycle Q Clear(g_c), s	0.5	3.2	2.6	2.2	1.4	1.9	1.0	6.4	1.6	0.8	3.7	0.2
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	318	329	280	264	280	244	121	824	371	90	765	319
V/C Ratio(X)	0.06	0.41	0.34	0.33	0.21	0.29	0.32	0.61	0.18	0.31	0.39	0.03
Avail Cap(c_a), veh/h	729	753	642	689	729	637	729	2795	1257	706	2772	1155
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	17.1	18.2	18.0	18.7	18.3	18.6	22.1	16.9	15.1	22.7	16.5	15.1
Incr Delay (d2), s/veh	0.1	0.8	0.7	0.7	0.4	0.6	1.5	0.7	0.2	1.9	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	0.2	1.4	0.9	0.8	0.5	0.7	0.4	2.1	0.5	0.3	1.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.1	19.0	18.7	19.4	18.7	19.2	23.6	17.6	15.3	24.6	16.8	15.1
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		252			214			604			338	
Approach Delay, s/veh		18.7			19.1			17.7			17.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	17.8		12.7	7.3	17.0		12.6				
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9				
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0				
Max Q Clear Time (g_c+I1), s	2.8	8.4		5.2	3.0	5.7		4.2				
Green Ext Time (p_c), s	0.0	3.4		1.0	0.0	1.9		0.6				

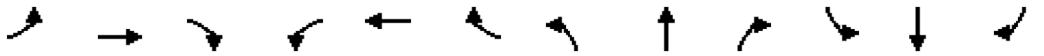
Intersection Summary		
HCM 7th Control Delay, s/veh	18.0	
HCM 7th LOS	B	

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	136	27	299	48	43	11	239	557	24	5	500	29
v/c Ratio	0.47	0.07	0.54	0.28	0.13	0.03	0.69	0.34	0.03	0.03	0.58	0.06
Control Delay (s/veh)	45.5	31.2	8.0	50.3	36.0	0.1	47.1	15.9	0.1	52.5	32.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.5	31.2	8.0	50.3	36.0	0.1	47.1	15.9	0.1	52.5	32.3	0.2
Queue Length 50th (ft)	64	11	0	23	19	0	110	76	0	2	114	0
Queue Length 95th (ft)	154	34	21	71	52	0	254	201	0	16	220	0
Internal Link Dist (ft)		1402			934			1903			1620	
Turn Bay Length (ft)	245		240	225		240	235		235	240		230
Base Capacity (vph)	553	614	713	447	514	540	559	1991	961	447	1705	804
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.04	0.42	0.11	0.08	0.02	0.43	0.28	0.02	0.01	0.29	0.04

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	20	224	36	32	8	179	418	18	4	375	22
Future Volume (veh/h)	102	20	224	36	32	8	179	418	18	4	375	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1697	1710	1710	1710	1710	1710	1710	1630	1710	1710	1643	1590
Adj Flow Rate, veh/h	136	27	299	48	43	11	239	557	24	5	500	29
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	1	0	0	0	0	0	0	6	0	0	5	9
Cap, veh/h	169	432	362	97	355	293	280	1285	599	15	788	338
Arrive On Green	0.10	0.25	0.25	0.06	0.21	0.21	0.17	0.42	0.42	0.01	0.25	0.25
Sat Flow, veh/h	1616	1710	1432	1629	1710	1410	1629	3097	1444	1629	3122	1339
Grp Volume(v), veh/h	136	27	299	48	43	11	239	557	24	5	500	29
Grp Sat Flow(s),veh/h/ln	1616	1710	1432	1629	1710	1410	1629	1548	1444	1629	1561	1339
Q Serve(g_s), s	6.0	0.9	14.4	2.1	1.5	0.5	10.4	9.4	0.7	0.2	10.4	1.2
Cycle Q Clear(g_c), s	6.0	0.9	14.4	2.1	1.5	0.5	10.4	9.4	0.7	0.2	10.4	1.2
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	169	432	362	97	355	293	280	1285	599	15	788	338
V/C Ratio(X)	0.80	0.06	0.83	0.49	0.12	0.04	0.85	0.43	0.04	0.33	0.63	0.09
Avail Cap(c_a), veh/h	552	537	450	445	467	385	556	1692	789	445	1706	732
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	32.0	20.8	25.9	33.4	23.6	23.2	29.4	15.3	12.7	36.0	24.4	20.9
Incr Delay (d2), s/veh	3.4	0.2	16.3	1.4	0.7	0.2	2.9	0.4	0.1	4.7	1.6	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	2.4	0.4	6.4	0.9	0.7	0.2	3.9	2.9	0.2	0.1	3.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.4	21.0	42.1	34.8	24.3	23.4	32.3	15.7	12.8	40.7	25.9	21.1
LnGrp LOS	D	C	D	C	C	C	C	B	B	D	C	C
Approach Vol, veh/h		462			102			820			534	
Approach Delay, s/veh		38.9			29.1			20.5			25.8	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	36.4	8.4	23.8	16.6	24.5	11.7	20.5
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	4.0	* 5.3
Max Green Setting (Gmax), s	20.0	40.0	20.0	23.0	25.0	40.0	25.0	* 20
Max Q Clear Time (g_c+I1), s	2.2	11.4	4.1	16.4	12.4	12.4	8.0	3.5
Green Ext Time (p_c), s	0.0	6.6	0.0	1.6	0.3	5.8	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	26.9
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	49	361	79	9	128	919	20	14	1223	24
v/c Ratio	0.25	0.73	0.41	0.03	0.58	0.42	0.02	0.09	0.74	0.03
Control Delay (s/veh)	40.9	13.9	45.7	0.3	48.1	11.1	0.1	43.2	24.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.9	13.9	45.7	0.3	48.1	11.1	0.1	43.2	24.2	0.1
Queue Length 50th (ft)	25	0	41	0	66	114	0	7	272	0
Queue Length 95th (ft)	52	25	77	0	110	211	0	24	361	0
Internal Link Dist (ft)	1345		900			2172			1903	
Turn Bay Length (ft)		240		100	250		240	240		250
Base Capacity (vph)	537	724	427	454	411	2180	1010	423	1662	729
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.50	0.19	0.02	0.31	0.42	0.02	0.03	0.74	0.03

Intersection Summary

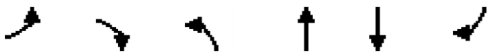
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	8	267	52	7	7	95	680	15	10	905	18
Future Volume (veh/h)	28	8	267	52	7	7	95	680	15	10	905	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1885	1900	1900	1900	1856	1856	1900	1900	1870	1737
Adj Flow Rate, veh/h	38	11	361	70	9	9	128	919	20	14	1223	24
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Percent Heavy Veh, %	0	0	1	0	0	0	3	3	0	0	2	11
Cap, veh/h	346	100	388	128	17	127	159	1624	739	41	1398	577
Arrive On Green	0.24	0.24	0.24	0.08	0.08	0.08	0.09	0.46	0.46	0.02	0.39	0.39
Sat Flow, veh/h	1418	411	1592	1612	207	1592	1767	3526	1605	1810	3554	1466
Grp Volume(v), veh/h	49	0	361	79	0	9	128	919	20	14	1223	24
Grp Sat Flow(s),veh/h/ln	1829	0	1592	1819	0	1592	1767	1763	1605	1810	1777	1466
Q Serve(g_s), s	2.0	0.0	21.7	4.1	0.0	0.5	6.9	18.6	0.7	0.7	31.1	1.0
Cycle Q Clear(g_c), s	2.0	0.0	21.7	4.1	0.0	0.5	6.9	18.6	0.7	0.7	31.1	1.0
Prop In Lane	0.78		1.00	0.89		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	446	0	388	145	0	127	159	1624	739	41	1398	577
V/C Ratio(X)	0.11	0.00	0.93	0.55	0.00	0.07	0.81	0.57	0.03	0.34	0.87	0.04
Avail Cap(c_a), veh/h	468	0	407	372	0	326	362	1624	739	370	1454	600
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	28.7	0.0	36.2	43.3	0.0	41.6	43.7	19.2	14.4	47.1	27.4	18.3
Incr Delay (d2), s/veh	0.0	0.0	26.6	1.2	0.0	0.1	3.7	0.7	0.0	1.8	6.5	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	0.9	0.0	11.2	1.9	0.0	0.2	3.1	7.0	0.2	0.3	13.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.8	0.0	62.7	44.5	0.0	41.7	47.3	19.9	14.4	48.9	33.9	18.3
LnGrp LOS	C		E	D		D	D	B	B	D	C	B
Approach Vol, veh/h		410			88			1067			1261	
Approach Delay, s/veh		58.7			44.2			23.1			33.8	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	51.0		28.7	12.8	44.5		11.8				
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.0				
Max Green Setting (Gmax), s	20.0	40.0		25.0	20.0	40.0		20.0				
Max Q Clear Time (g_c+I1), s	2.7	20.6		23.7	8.9	33.1		6.1				
Green Ext Time (p_c), s	0.0	9.5		0.1	0.1	5.4		0.2				

Intersection Summary			
HCM 7th Control Delay, s/veh		33.7	
HCM 7th LOS		C	

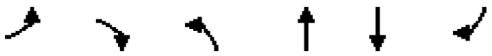
Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	182	205	118	816	983	164
v/c Ratio	0.55	0.45	0.42	0.36	0.59	0.19
Control Delay (s/veh)	33.6	8.0	32.6	5.6	15.4	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.6	8.0	32.6	5.6	15.4	3.9
Queue Length 50th (ft)	73	0	47	60	147	3
Queue Length 95th (ft)	135	48	97	107	251	35
Internal Link Dist (ft)	1304			2460	2779	
Turn Bay Length (ft)	215		245			215
Base Capacity (vph)	1230	1144	535	2894	1964	978
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.18	0.22	0.28	0.50	0.17

Intersection Summary



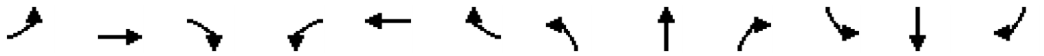
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	160	180	104	718	865	144
Future Volume (veh/h)	160	180	104	718	865	144
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1870	1885	1826	1841	1900
Adj Flow Rate, veh/h	182	205	118	816	983	164
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	2	1	5	4	0
Cap, veh/h	309	271	193	2235	1618	745
Arrive On Green	0.17	0.17	0.11	0.64	0.46	0.46
Sat Flow, veh/h	1810	1585	1795	3561	3589	1610
Grp Volume(v), veh/h	182	205	118	816	983	164
Grp Sat Flow(s),veh/h/ln	1810	1585	1795	1735	1749	1610
Q Serve(g_s), s	5.0	6.7	3.4	5.9	11.4	3.3
Cycle Q Clear(g_c), s	5.0	6.7	3.4	5.9	11.4	3.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	309	271	193	2235	1618	745
V/C Ratio(X)	0.59	0.76	0.61	0.37	0.61	0.22
Avail Cap(c_a), veh/h	1405	1231	598	2235	2199	1012
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	20.7	21.3	23.1	4.5	10.9	8.7
Incr Delay (d2), s/veh	0.7	1.6	3.1	0.2	0.7	0.3
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	5.8	1.4	1.0	3.2	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.3	23.0	26.2	4.7	11.6	9.0
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	387			934	1147	
Approach Delay, s/veh	22.2			7.4	11.2	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		40.8		13.2	9.8	31.0
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s		24.0		42.0	18.0	34.0
Max Q Clear Time (g_c+I1), s		7.9		8.7	5.4	13.4
Green Ext Time (p_c), s		7.5		0.6	0.2	11.7

Intersection Summary	
HCM 7th Control Delay, s/veh	11.5
HCM 7th LOS	B

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	146	24	109	38	11	61	789	47	13	1105	106
v/c Ratio	0.48	0.08	0.30	0.17	0.04	0.27	0.43	0.06	0.06	0.72	0.14
Control Delay (s/veh)	42.7	36.4	9.4	43.7	0.2	43.4	13.5	0.1	44.5	24.0	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.7	36.4	9.4	43.7	0.2	43.4	13.5	0.1	44.5	24.0	3.9
Queue Length 50th (ft)	81	12	0	21	0	34	125	0	7	272	0
Queue Length 95th (ft)	148	36	39	55	0	77	245	0	28	404	26
Internal Link Dist (ft)		1251		1270			3803			2460	
Turn Bay Length (ft)	130		130			250		250	250		255
Base Capacity (vph)	523	550	535	533	541	513	2197	943	523	2058	963
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.04	0.20	0.07	0.02	0.12	0.36	0.05	0.02	0.54	0.11

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	21	95	21	12	10	53	686	41	11	961	92
Future Volume (veh/h)	127	21	95	21	12	10	53	686	41	11	961	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1900	1870	1781	1678	1900	1826	1856
Adj Flow Rate, veh/h	146	24	109	24	14	11	61	789	47	13	1105	106
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	2	0	0	0	2	8	15	0	5	3
Cap, veh/h	212	222	185	82	48	111	141	1597	656	46	1451	656
Arrive On Green	0.12	0.12	0.12	0.07	0.07	0.07	0.08	0.47	0.47	0.03	0.42	0.42
Sat Flow, veh/h	1810	1900	1581	1163	679	1584	1781	3385	1389	1810	3469	1569
Grp Volume(v), veh/h	146	24	109	38	0	11	61	789	47	13	1105	106
Grp Sat Flow(s),veh/h/ln	1810	1900	1581	1842	0	1584	1781	1692	1389	1810	1735	1569
Q Serve(g_s), s	5.5	0.8	4.6	1.4	0.0	0.5	2.3	11.3	1.3	0.5	19.1	3.0
Cycle Q Clear(g_c), s	5.5	0.8	4.6	1.4	0.0	0.5	2.3	11.3	1.3	0.5	19.1	3.0
Prop In Lane	1.00		1.00	0.63		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	222	185	129	0	111	141	1597	656	46	1451	656
V/C Ratio(X)	0.69	0.11	0.59	0.29	0.00	0.10	0.43	0.49	0.07	0.28	0.76	0.16
Avail Cap(c_a), veh/h	514	540	449	524	0	450	506	2068	849	514	2120	959
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	29.8	27.8	29.5	31.1	0.0	30.6	30.9	12.8	10.2	33.7	17.5	12.8
Incr Delay (d2), s/veh	4.0	0.2	3.0	1.3	0.0	0.4	2.1	0.2	0.0	3.3	1.0	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	2.5	0.4	1.8	0.6	0.0	0.2	1.0	3.5	0.3	0.2	6.5	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.8	28.0	32.4	32.3	0.0	31.0	33.0	13.0	10.2	36.9	18.4	12.9
LnGrp LOS	C	C	C	C		C	C	B	B	D	B	B
Approach Vol, veh/h		279			49			897			1224	
Approach Delay, s/veh		32.8			32.0			14.2			18.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	39.2		14.1	9.6	35.4		11.2				
Change Period (Y+Rc), s	4.0	6.0		5.9	4.0	6.0		6.3				
Max Green Setting (Gmax), s	20.0	43.0		20.0	20.0	43.0		20.0				
Max Q Clear Time (g_c+I1), s	2.5	13.3		7.5	4.3	21.1		3.4				
Green Ext Time (p_c), s	0.0	5.7		0.7	0.1	8.1		0.1				

Intersection Summary			
HCM 7th Control Delay, s/veh		18.7	
HCM 7th LOS		B	

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	546	557	86	12	1
Future Vol, veh/h	10	546	557	86	12	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	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	593	605	93	13	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	699	0	-	0	1267	652
Stage 1	-	-	-	-	652	-
Stage 2	-	-	-	-	615	-
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	898	-	-	-	186	468
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	539	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	898	-	-	-	184	468
Mov Cap-2 Maneuver	-	-	-	-	324	-
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	539	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.16	0	16.34
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	898	-	-	-	331
HCM Lane V/C Ratio	0.012	-	-	-	0.043
HCM Ctrl Dly (s/v)	9.1	-	-	-	16.3
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	545	547	11	11	1
Future Vol, veh/h	1	545	547	11	11	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	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	1	592	595	12	12	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	607	0	-	0	1195	601
Stage 1	-	-	-	-	601	-
Stage 2	-	-	-	-	595	-
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	972	-	-	-	206	501
Stage 1	-	-	-	-	548	-
Stage 2	-	-	-	-	551	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	972	-	-	-	206	501
Mov Cap-2 Maneuver	-	-	-	-	344	-
Stage 1	-	-	-	-	547	-
Stage 2	-	-	-	-	551	-

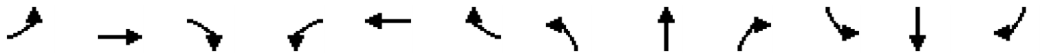
Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.02	0	15.57
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	972	-	-	-	354
HCM Lane V/C Ratio	0.001	-	-	-	0.037
HCM Ctrl Dly (s/v)	8.7	-	-	-	15.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	4	688	426	278	500	107	309	66	289	95	45	6
v/c Ratio	0.03	0.82	0.58	0.70	0.30	0.15	0.77	0.08	0.48	0.43	0.14	0.02
Control Delay (s/veh)	29.3	32.5	6.1	39.8	14.0	0.4	38.4	21.9	6.4	32.6	28.4	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.3	32.5	6.1	39.8	14.0	0.4	38.4	21.9	6.4	32.6	28.4	0.2
Queue Length 50th (ft)	2	136	0	57	43	0	116	11	0	36	8	0
Queue Length 95th (ft)	9	177	42	#87	78	0	#197	24	41	69	21	0
Internal Link Dist (ft)		728			4495			1990			816	
Turn Bay Length (ft)	200		200	200		200	200		200	200		200
Base Capacity (vph)	137	843	730	395	1693	734	415	1302	812	263	1044	593
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.82	0.58	0.70	0.30	0.15	0.74	0.05	0.36	0.36	0.04	0.01

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	564	349	228	410	88	253	54	237	78	37	5
Future Volume (veh/h)	3	564	349	228	410	88	253	54	237	78	37	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1648	1826	1885	1441	1752	1767	1722	1870	1856	1826	1767
Adj Flow Rate, veh/h	4	688	426	278	500	107	309	66	289	95	45	6
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	17	5	1	31	10	9	12	2	3	5	9
Cap, veh/h	10	928	457	385	1579	594	360	743	360	123	286	123
Arrive On Green	0.01	0.30	0.30	0.11	0.40	0.40	0.21	0.23	0.23	0.07	0.08	0.08
Sat Flow, veh/h	1810	3131	1541	3483	3933	1480	1682	3272	1585	1767	3469	1497
Grp Volume(v), veh/h	4	688	426	278	500	107	309	66	289	95	45	6
Grp Sat Flow(s),veh/h/ln	1810	1566	1541	1742	1311	1480	1682	1636	1585	1767	1735	1497
Q Serve(g_s), s	0.1	12.0	16.3	4.7	5.3	2.8	10.7	1.0	10.5	3.2	0.7	0.2
Cycle Q Clear(g_c), s	0.1	12.0	16.3	4.7	5.3	2.8	10.7	1.0	10.5	3.2	0.7	0.2
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	10	928	457	385	1579	594	360	743	360	123	286	123
V/C Ratio(X)	0.41	0.74	0.93	0.72	0.32	0.18	0.86	0.09	0.80	0.77	0.16	0.05
Avail Cap(c_a), veh/h	149	928	457	430	1579	594	457	1434	695	288	1143	493
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	30.1	19.3	20.8	26.1	12.5	11.7	23.0	18.5	22.2	27.8	25.9	25.7
Incr Delay (d2), s/veh	25.5	3.2	26.1	5.2	0.1	0.1	12.4	0.1	4.2	9.9	0.3	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	0.1	4.1	8.2	2.0	1.3	0.8	5.0	0.3	3.8	1.6	0.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.6	22.5	46.9	31.3	12.6	11.9	35.3	18.6	26.4	37.7	26.2	25.8
LnGrp LOS	E	C	D	C	B	B	D	B	C	D	C	C
Approach Vol, veh/h		1118			885			664			146	
Approach Delay, s/veh		31.9			18.4			29.8			33.6	
Approach LOS		C			B			C			C	

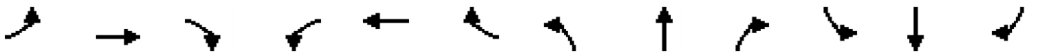
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	18.3	11.2	22.5	17.5	9.5	4.8	28.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.9	26.6	7.5	18.0	16.5	20.0	5.0	20.5
Max Q Clear Time (g_c+I1), s	5.2	12.5	6.7	18.3	12.7	2.7	2.1	7.3
Green Ext Time (p_c), s	0.1	1.1	0.1	0.0	0.3	0.1	0.0	2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	27.2
HCM 7th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	51	951	57	83	872	153	38	106	72	114	110	64
v/c Ratio	0.20	0.62	0.09	0.28	0.51	0.22	0.22	0.52	0.21	0.68	0.24	0.15
Control Delay (s/veh)	23.2	16.9	0.3	23.1	13.7	2.3	27.8	37.0	1.3	51.2	26.7	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.2	16.9	0.3	23.1	13.7	2.3	27.8	37.0	1.3	51.2	26.7	0.8
Queue Length 50th (ft)	15	94	0	25	50	0	12	35	0	38	28	0
Queue Length 95th (ft)	39	132	0	55	117	16	35	#94	0	#113	#99	0
Internal Link Dist (ft)		4495			2724			1145			1436	
Turn Bay Length (ft)	200		200	200		200	200		200	200		200
Base Capacity (vph)	649	1867	735	682	2018	781	173	203	348	168	459	413
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.51	0.08	0.12	0.43	0.20	0.22	0.52	0.21	0.68	0.24	0.15

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	818	49	71	750	132	33	91	62	98	95	55
Future Volume (veh/h)	44	818	49	71	750	132	33	91	62	98	95	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.94	1.00		0.81
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1781	1900	1900	1693	1796	1885	1885	1885	1841	1870	1841
Adj Flow Rate, veh/h	51	951	57	83	872	153	38	106	72	114	110	64
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	5	8	0	0	14	7	1	1	1	4	2	4
Cap, veh/h	73	1481	489	108	1488	489	61	193	153	144	282	191
Arrive On Green	0.04	0.30	0.30	0.06	0.32	0.32	0.03	0.10	0.10	0.08	0.15	0.15
Sat Flow, veh/h	1739	4863	1605	1810	4621	1518	1795	1885	1494	1753	1870	1268
Grp Volume(v), veh/h	51	951	57	83	872	153	38	106	72	114	110	64
Grp Sat Flow(s),veh/h/ln	1739	1621	1605	1810	1540	1518	1795	1885	1494	1753	1870	1268
Q Serve(g_s), s	1.3	7.5	1.1	2.0	7.0	3.4	0.9	2.4	2.0	2.8	2.4	2.0
Cycle Q Clear(g_c), s	1.3	7.5	1.1	2.0	7.0	3.4	0.9	2.4	2.0	2.8	2.4	2.0
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	73	1481	489	108	1488	489	61	193	153	144	282	191
V/C Ratio(X)	0.70	0.64	0.12	0.77	0.59	0.31	0.63	0.55	0.47	0.79	0.39	0.34
Avail Cap(c_a), veh/h	687	1977	652	715	1878	617	182	213	169	178	282	191
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	20.9	13.3	11.1	20.5	12.5	11.3	21.1	18.9	18.8	20.0	17.0	16.8
Incr Delay (d2), s/veh	11.3	0.5	0.1	10.9	0.4	0.4	10.2	2.4	2.3	17.4	0.9	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	0.7	2.0	0.3	1.0	1.7	0.8	0.5	1.0	0.6	1.7	0.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.2	13.8	11.2	31.4	12.9	11.7	31.3	21.4	21.0	37.4	17.9	17.8
LnGrp LOS	C	B	B	C	B	B	C	C	C	D	B	B
Approach Vol, veh/h		1059			1108			216			288	
Approach Delay, s/veh		14.5			14.1			23.0			25.6	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	9.5	7.6	18.5	6.5	11.7	6.9	19.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.5	5.0	17.5	18.0	4.5	5.0	17.5	18.0
Max Q Clear Time (g_c+I1), s	4.8	4.4	4.0	9.5	2.9	4.4	3.3	9.0
Green Ext Time (p_c), s	0.0	0.0	0.1	3.9	0.0	0.0	0.1	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	16.2
HCM 7th LOS	B

Notes

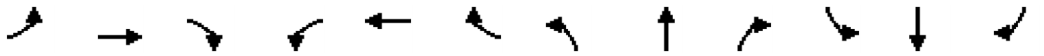
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	190	744	84	766	847	505	73	625	541	342	570	134
v/c Ratio	0.45	0.94	0.28	0.82	0.54	0.59	0.28	0.92	0.75	0.67	0.56	0.25
Control Delay (s/veh)	49.1	65.4	6.1	43.7	30.6	5.5	52.1	62.9	12.4	50.4	36.3	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.1	65.4	6.1	43.7	30.6	5.5	52.1	62.9	12.4	50.4	36.3	7.1
Queue Length 50th (ft)	60	~179	0	234	161	0	23	210	13	108	170	0
Queue Length 95th (ft)	112	#279	22	348	227	63	53	#398	127	180	273	47
Internal Link Dist (ft)		988			7301			2779			2172	
Turn Bay Length (ft)	235		245	230		235	245		250	240		250
Base Capacity (vph)	720	790	304	1798	2367	1026	596	678	721	1166	1150	600
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.94	0.28	0.43	0.36	0.49	0.12	0.92	0.75	0.29	0.50	0.22

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	655	74	674	745	444	64	550	476	301	502	118
Future Volume (veh/h)	167	655	74	674	745	444	64	550	476	301	502	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1604	1856	1856	1900	1678	1841	1870	1900	1856	1841
Adj Flow Rate, veh/h	190	744	54	766	847	305	73	625	314	342	570	82
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	2	20	3	3	0	15	4	2	0	3	4
Cap, veh/h	399	817	217	866	1458	463	290	728	330	431	838	370
Arrive On Green	0.11	0.16	0.16	0.25	0.29	0.29	0.09	0.21	0.21	0.12	0.24	0.24
Sat Flow, veh/h	3510	5106	1359	3428	5066	1610	3100	3497	1583	3510	3526	1558
Grp Volume(v), veh/h	190	744	54	766	847	305	73	625	314	342	570	82
Grp Sat Flow(s),veh/h/ln	1755	1702	1359	1714	1689	1610	1550	1749	1583	1755	1763	1558
Q Serve(g_s), s	4.6	13.1	2.3	19.6	13.1	9.8	2.0	15.7	17.9	8.6	13.4	3.9
Cycle Q Clear(g_c), s	4.6	13.1	2.3	19.6	13.1	9.8	2.0	15.7	17.9	8.6	13.4	3.9
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	399	817	217	866	1458	463	290	728	330	431	838	370
V/C Ratio(X)	0.48	0.91	0.25	0.88	0.58	0.66	0.25	0.86	0.95	0.79	0.68	0.22
Avail Cap(c_a), veh/h	808	817	217	2028	2664	847	679	728	330	1308	1275	563
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	37.9	37.7	17.7	32.8	27.8	11.8	38.4	34.8	35.7	38.9	31.6	28.0
Incr Delay (d2), s/veh	0.3	14.6	1.0	1.2	0.5	2.3	0.2	10.7	37.7	1.3	1.9	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	1.9	6.2	1.0	7.6	4.9	5.2	0.7	7.4	9.8	3.6	5.6	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.2	52.3	18.7	34.1	28.3	14.1	38.6	45.6	73.3	40.2	33.5	28.6
LnGrp LOS	D	D	B	C	C	B	D	D	E	D	C	C
Approach Vol, veh/h		988			1918			1012			994	
Approach Delay, s/veh		47.8			28.4			53.7			35.4	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	25.0	28.1	21.0	14.5	27.7	16.8	32.3
Change Period (Y+Rc), s	6.0	6.0	5.0	6.4	6.0	6.0	6.4	* 6
Max Green Setting (Gmax), s	34.0	19.0	54.0	14.6	20.0	33.0	21.0	* 48
Max Q Clear Time (g_c+I1), s	10.6	19.9	21.6	15.1	4.0	15.4	6.6	15.1
Green Ext Time (p_c), s	0.6	0.0	1.4	0.0	0.1	6.0	0.3	11.2

Intersection Summary	
HCM 7th Control Delay, s/veh	38.9
HCM 7th LOS	D

Notes

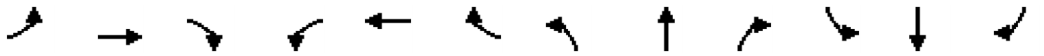
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	46	2073	56	37	2493	293	27	8	33	142	138
v/c Ratio	0.30	0.67	0.06	0.32	0.86	0.31	0.17	0.05	0.12	0.64	0.63
Control Delay (s/veh)	57.3	19.6	0.1	80.7	18.7	1.8	53.0	50.6	0.9	61.9	55.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.3	19.6	0.1	80.7	18.7	1.8	53.0	50.6	0.9	61.9	55.8
Queue Length 50th (ft)	34	408	0	30	619	7	20	6	0	112	96
Queue Length 95th (ft)	68	528	0	m39	#794	m13	46	20	0	155	142
Internal Link Dist (ft)		7301			1456			739			739
Turn Bay Length (ft)	270		200	340		250	120		120	200	
Base Capacity (vph)	240	3116	967	391	2891	947	229	232	329	296	285
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.67	0.06	0.09	0.86	0.31	0.12	0.03	0.10	0.48	0.48

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	1741	47	31	2094	246	23	7	28	196	3	36
Future Volume (veh/h)	39	1741	47	31	2094	246	23	7	28	196	3	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.98	1.00		0.68	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1885	1900	1841	1870	1885	1826	1870	1885	1841	1900
Adj Flow Rate, veh/h	46	2073	56	37	2493	293	27	8	33	276	0	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	0	2	1	0	4	2	1	5	2	1	4	0
Cap, veh/h	118	2834	846	75	2668	823	148	150	89	571	293	0
Arrive On Green	0.07	0.55	0.55	0.08	1.00	1.00	0.08	0.08	0.08	0.16	0.00	0.00
Sat Flow, veh/h	1810	5106	1525	1810	5025	1549	1795	1826	1078	3591	1841	0
Grp Volume(v), veh/h	46	2073	56	37	2493	293	27	8	33	276	0	0
Grp Sat Flow(s),veh/h/ln	1810	1702	1525	1810	1675	1549	1795	1826	1078	1795	1841	0
Q Serve(g_s), s	2.9	36.5	2.0	2.3	0.0	0.0	1.7	0.5	3.5	8.4	0.0	0.0
Cycle Q Clear(g_c), s	2.9	36.5	2.0	2.3	0.0	0.0	1.7	0.5	3.5	8.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	118	2834	846	75	2668	823	148	150	89	571	293	0
V/C Ratio(X)	0.39	0.73	0.07	0.49	0.93	0.36	0.18	0.05	0.37	0.48	0.00	0.00
Avail Cap(c_a), veh/h	241	2834	846	392	2668	823	230	234	138	601	308	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.46	0.46	0.46	0.44	0.44	0.44	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	53.8	20.0	12.3	53.8	0.0	0.0	51.3	50.8	52.1	46.0	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.8	0.1	0.8	3.7	0.5	0.2	0.1	1.0	0.2	0.0	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	1.3	13.3	0.7	1.0	0.9	0.1	0.8	0.2	0.9	3.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.1	20.8	12.4	54.7	3.7	0.5	51.5	50.8	53.1	46.2	0.0	0.0
LnGrp LOS	D	C	B	D	A	A	D	D	D	D		
Approach Vol, veh/h		2175			2823			68			276	
Approach Delay, s/veh		21.3			4.1			52.2			46.2	
Approach LOS		C			A			D			D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.5	9.0	72.6		24.0	11.8	69.7				
Change Period (Y+Rc), s		4.6	4.0	6.0		4.9	4.0	6.0				
Max Green Setting (Gmax), s		15.4	26.0	39.0		20.1	16.0	49.0				
Max Q Clear Time (g_c+I1), s		5.5	4.3	38.5		10.4	4.9	2.0				
Green Ext Time (p_c), s		0.1	0.0	0.5		0.4	0.0	45.5				

Intersection Summary		
HCM 7th Control Delay, s/veh	13.9	
HCM 7th LOS	B	

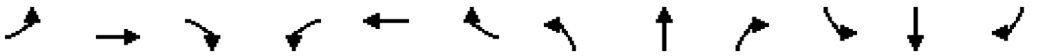
Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	134	1747	204	399	2110	232	409	138	231	178	88	66
v/c Ratio	0.45	0.79	0.26	0.76	0.85	0.30	0.84	0.26	0.53	0.55	0.23	0.23
Control Delay (s/veh)	42.8	42.3	16.9	66.0	26.3	10.2	77.0	49.0	13.3	58.5	49.9	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.8	42.3	16.9	66.0	26.3	10.2	77.0	49.0	13.3	58.5	49.9	1.9
Queue Length 50th (ft)	52	417	36	170	271	42	167	48	6	69	34	0
Queue Length 95th (ft)	m83	#657	146	221	#703	m80	#229	57	8	104	56	0
Internal Link Dist (ft)		1456			1020			9706			1307	
Turn Bay Length (ft)	250		525	235		240	230		240	270		265
Base Capacity (vph)	606	2208	789	1020	2484	766	520	532	436	600	574	363
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.79	0.26	0.39	0.85	0.30	0.79	0.26	0.53	0.30	0.15	0.18

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	1572	184	359	1899	209	368	124	208	160	79	59
Future Volume (veh/h)	121	1572	184	359	1899	209	368	124	208	160	79	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1856	1826	1678	1885	1826	1870	1870	1885	1885
Adj Flow Rate, veh/h	134	1747	204	399	2110	232	409	138	231	178	88	66
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	2	2	3	5	15	1	5	2	2	1	1
Cap, veh/h	287	2377	725	458	2576	732	466	533	238	287	369	156
Arrive On Green	0.16	0.93	0.93	0.27	1.00	1.00	0.13	0.15	0.15	0.08	0.10	0.10
Sat Flow, veh/h	3483	5106	1556	3428	4985	1416	3483	3469	1551	3456	3582	1515
Grp Volume(v), veh/h	134	1747	204	399	2110	232	409	138	231	178	88	66
Grp Sat Flow(s),veh/h/ln	1742	1702	1556	1714	1662	1416	1742	1735	1551	1728	1791	1515
Q Serve(g_s), s	4.2	8.9	1.5	13.3	0.0	0.0	13.8	4.2	17.8	6.0	2.7	4.9
Cycle Q Clear(g_c), s	4.2	8.9	1.5	13.3	0.0	0.0	13.8	4.2	17.8	6.0	2.7	4.9
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	287	2377	725	458	2576	732	466	533	238	287	369	156
V/C Ratio(X)	0.47	0.73	0.28	0.87	0.82	0.32	0.88	0.26	0.97	0.62	0.24	0.42
Avail Cap(c_a), veh/h	610	2377	725	1028	2576	732	522	533	238	605	576	244
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.71	0.60	0.60	0.60	0.90	0.90	0.90	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	2.5	2.3	43.0	0.0	0.0	51.0	44.8	50.5	53.2	49.5	50.5
Incr Delay (d2), s/veh	0.3	1.5	0.7	1.3	1.9	0.7	12.3	0.3	46.9	0.8	0.5	2.9
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	1.7	1.4	0.5	4.8	0.4	0.1	6.7	1.8	9.8	2.6	1.2	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.0	4.0	2.9	44.3	1.9	0.7	63.3	45.1	97.4	54.0	50.0	53.3
LnGrp LOS	D	A	A	D	A	A	E	D	F	D	D	D
Approach Vol, veh/h		2085			2741			778			332	
Approach Delay, s/veh		6.7			7.9			70.2			52.8	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	24.1	20.0	61.9	20.0	18.1	13.9	68.0
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	21.0	16.3	36.0	27.0	18.0	19.3	21.0	42.0
Max Q Clear Time (g_c+I1), s	8.0	19.8	15.3	10.9	15.8	6.9	6.2	2.0
Green Ext Time (p_c), s	0.2	0.0	0.7	14.8	0.2	0.7	0.2	38.1

Intersection Summary	
HCM 7th Control Delay, s/veh	18.2
HCM 7th LOS	B

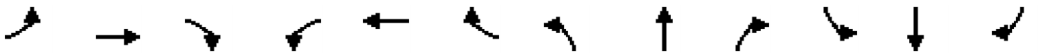
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	39	1933	74	276	2454	32	30	30	138	28	23
v/c Ratio	0.33	0.66	0.08	0.70	0.74	0.03	0.18	0.17	0.49	0.16	0.12
Control Delay (s/veh)	60.1	12.0	1.2	71.8	8.5	0.2	51.6	51.5	14.3	51.7	35.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.1	12.0	1.2	71.8	8.5	0.2	51.6	51.5	14.3	51.7	35.6
Queue Length 50th (ft)	32	130	0	118	83	0	23	23	0	20	9
Queue Length 95th (ft)	m44	200	m2	m0	394	m0	53	53	59	50	36
Internal Link Dist (ft)		1020			810			638			90
Turn Bay Length (ft)	225		250	250		425			250		
Base Capacity (vph)	240	2951	925	465	3303	1084	215	220	321	240	245
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.66	0.08	0.59	0.74	0.03	0.14	0.14	0.43	0.12	0.09

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



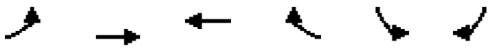
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	1817	70	259	2307	30	46	10	130	26	12	9
Future Volume (veh/h)	37	1817	70	259	2307	30	46	10	130	26	12	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1841	1856	1826	1900	1900	1900	1885	1900	1900	1900
Adj Flow Rate, veh/h	39	1933	74	276	2454	32	57	0	138	28	13	10
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	4	3	5	0	0	0	1	0	0	0
Cap, veh/h	77	2872	865	329	3071	971	370	0	163	148	81	63
Arrive On Green	0.08	1.00	1.00	0.19	1.00	1.00	0.10	0.00	0.10	0.08	0.08	0.08
Sat Flow, veh/h	1810	5106	1538	3428	4985	1576	3619	0	1598	1810	996	766
Grp Volume(v), veh/h	39	1933	74	276	2454	32	57	0	138	28	0	23
Grp Sat Flow(s),veh/h/ln	1810	1702	1538	1714	1662	1576	1810	0	1598	1810	0	1762
Q Serve(g_s), s	2.5	0.0	0.0	9.3	0.0	0.0	1.7	0.0	10.2	1.7	0.0	1.5
Cycle Q Clear(g_c), s	2.5	0.0	0.0	9.3	0.0	0.0	1.7	0.0	10.2	1.7	0.0	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	77	2872	865	329	3071	971	370	0	163	148	0	144
V/C Ratio(X)	0.51	0.67	0.09	0.84	0.80	0.03	0.15	0.00	0.85	0.19	0.00	0.16
Avail Cap(c_a), veh/h	241	2872	865	457	3071	971	455	0	201	241	0	235
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.59	0.59	0.59	0.54	0.54	0.54	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	0.0	0.0	47.6	0.0	0.0	49.1	0.0	52.9	51.4	0.0	51.3
Incr Delay (d2), s/veh	1.1	0.8	0.1	3.9	1.2	0.0	0.1	0.0	19.9	0.2	0.0	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	1.1	0.2	0.0	3.7	0.4	0.0	0.8	0.0	4.9	0.8	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.8	0.8	0.1	51.5	1.2	0.0	49.2	0.0	72.8	51.6	0.0	51.5
LnGrp LOS	D	A	A	D	A	A	D		E	D		D
Approach Vol, veh/h		2046			2762			195			51	
Approach Delay, s/veh		1.8			6.3			65.9			51.5	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	17.2	15.5	73.5	13.8	9.1	79.9
Change Period (Y+Rc), s	4.9	4.0	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	15.1	16.0	54.0	16.0	16.0	54.0
Max Q Clear Time (g_c+I1), s	12.2	11.3	2.0	3.7	4.5	2.0
Green Ext Time (p_c), s	0.1	0.2	42.1	0.1	0.0	48.4

Intersection Summary	
HCM 7th Control Delay, s/veh	7.2
HCM 7th LOS	A

Notes

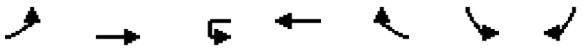
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	30	2170	2848	354	200	29
v/c Ratio	0.23	0.42	0.78	0.29	0.49	0.14
Control Delay (s/veh)	52.5	3.3	3.5	0.2	53.5	16.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.5	3.3	3.5	0.2	53.5	16.6
Queue Length 50th (ft)	24	56	13	0	77	0
Queue Length 95th (ft)	m39	125	m46	m0	106	27
Internal Link Dist (ft)		810	900		572	
Turn Bay Length (ft)	240			230	240	240
Base Capacity (vph)	233	5130	3634	1240	612	289
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.42	0.78	0.29	0.33	0.10

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	27	1953	0	2563	319	180	26
Future Volume (veh/h)	27	1953	0	2563	319	180	26
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
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
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1856	1870		1826	1885	1900	1826
Adj Flow Rate, veh/h	30	2170		2848	354	200	29
Peak Hour Factor	0.90	0.90		0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	2		5	1	0	5
Cap, veh/h	84	5255		3669	1176	351	155
Arrive On Green	0.09	1.00		0.74	0.74	0.10	0.10
Sat Flow, veh/h	1767	6696		5149	1598	3510	1547
Grp Volume(v), veh/h	30	2170		2848	354	200	29
Grp Sat Flow(s),veh/h/ln	1767	1609		1662	1598	1755	1547
Q Serve(g_s), s	1.9	0.0		42.2	9.0	6.5	2.1
Cycle Q Clear(g_c), s	1.9	0.0		42.2	9.0	6.5	2.1
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	84	5255		3669	1176	351	155
V/C Ratio(X)	0.36	0.41		0.78	0.30	0.57	0.19
Avail Cap(c_a), veh/h	236	5255		3669	1176	614	271
HCM Platoon Ratio	2.00	2.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.6	0.0		9.8	5.4	51.5	49.5
Incr Delay (d2), s/veh	0.7	0.2		1.7	0.7	0.5	0.2
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.1		12.2	2.6	2.9	1.8
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	53.3	0.2		11.4	6.0	52.1	49.7
LnGrp LOS	D	A		B	A	D	D
Approach Vol, veh/h		2200		3202		229	
Approach Delay, s/veh		0.9		10.8		51.8	
Approach LOS		A		B		D	

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				104.0		16.0	9.7	94.3
Change Period (Y+Rc), s				6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s				69.0		21.0	16.0	69.0
Max Q Clear Time (g_c+I1), s				2.0		8.5	3.9	44.2
Green Ext Time (p_c), s				52.4		0.3	0.0	24.4

Intersection Summary		
HCM 7th Control Delay, s/veh	8.6	
HCM 7th LOS	A	

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

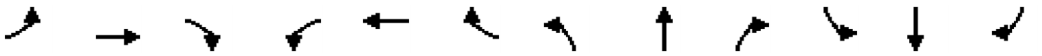
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	71	1851	345	366	2715	133	343	47	394	402	211	97
v/c Ratio	0.25	0.82	0.42	0.80	1.05	0.15	0.83	0.14	0.27	0.72	0.46	0.32
Control Delay (s/veh)	60.2	29.3	10.0	63.7	61.7	3.4	42.2	36.7	1.0	54.8	50.8	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.2	29.3	10.0	63.7	61.7	3.4	42.2	36.7	1.0	54.8	50.8	10.9
Queue Length 50th (ft)	26	497	118	141	~876	0	119	18	0	155	81	0
Queue Length 95th (ft)	47	579	93	#211	#1029	34	m158	m29	m0	210	115	45
Internal Link Dist (ft)		1195			2603			7676			1328	
Turn Bay Length (ft)	235		200	425		525	180		200	230		165
Base Capacity (vph)	462	2264	829	481	2591	869	440	429	1477	582	587	361
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.82	0.42	0.76	1.05	0.15	0.78	0.11	0.27	0.69	0.36	0.27

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	1721	321	340	2525	124	319	44	366	374	196	90
Future Volume (veh/h)	66	1721	321	340	2525	124	319	44	366	374	196	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1885	1870	1841	1856	1811	1826	1781	1693	1811	1900
Adj Flow Rate, veh/h	71	1851	182	366	2715	60	343	47	0	402	211	97
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	2	1	2	4	3	6	5	8	14	6	0
Cap, veh/h	263	2517	777	421	2710	837	397	253		455	344	161
Arrive On Green	0.08	0.49	0.49	0.12	0.54	0.54	0.12	0.07	0.00	0.15	0.10	0.10
Sat Flow, veh/h	3483	5106	1577	3456	5025	1553	3346	3469	1510	3127	3441	1610
Grp Volume(v), veh/h	71	1851	182	366	2715	60	343	47	0	402	211	97
Grp Sat Flow(s),veh/h/ln	1742	1702	1577	1728	1675	1553	1673	1735	1510	1564	1721	1610
Q Serve(g_s), s	2.3	34.6	7.9	12.5	64.7	2.2	12.1	1.5	0.0	15.1	7.1	6.9
Cycle Q Clear(g_c), s	2.3	34.6	7.9	12.5	64.7	2.2	12.1	1.5	0.0	15.1	7.1	6.9
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	263	2517	777	421	2710	837	397	253		455	344	161
V/C Ratio(X)	0.27	0.74	0.23	0.87	1.00	0.07	0.86	0.19		0.88	0.61	0.60
Avail Cap(c_a), veh/h	464	2517	777	461	2710	837	446	434		547	594	278
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	0.70	0.70	0.70	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	24.2	17.4	51.8	27.6	13.2	51.9	52.3	0.0	50.3	51.8	51.7
Incr Delay (d2), s/veh	0.2	2.0	0.7	10.5	14.9	0.1	13.6	0.7	0.0	12.4	6.3	12.5
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	1.0	13.4	2.9	5.9	26.9	0.8	5.7	0.7	0.0	6.6	3.3	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.6	26.2	18.1	62.3	42.6	13.4	65.5	52.9	0.0	62.7	58.1	64.2
LnGrp LOS	D	C	B	E	F	B	E	D		E	E	E
Approach Vol, veh/h		2104			3141			390			710	
Approach Delay, s/veh		26.4			44.3			64.0			61.5	
Approach LOS		C			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	14.8	18.6	65.2	18.2	18.0	13.1	70.7
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	21.0	15.0	16.0	48.0	16.0	* 21	16.0	48.0
Max Q Clear Time (g_c+I1), s	17.1	3.5	14.5	36.6	14.1	9.1	4.3	66.7
Green Ext Time (p_c), s	0.3	0.2	0.1	10.8	0.1	2.6	0.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	41.5
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBR	SBR
Lane Group Flow (vph)	2471	271	14	2359	100	981
v/c Ratio	0.57	0.21	0.12	0.67	0.68	0.63
Control Delay (s/veh)	4.6	2.4	77.5	1.0	86.4	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.6	2.4	77.5	1.0	86.4	1.9
Queue Length 50th (ft)	244	35	16	0	96	0
Queue Length 95th (ft)	354	70	41	0	162	0
Internal Link Dist (ft)	2603			1016		
Turn Bay Length (ft)		130	210			
Base Capacity (vph)	4314	1309	1029	3505	1001	1565
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.21	0.01	0.67	0.10	0.63

Intersection Summary

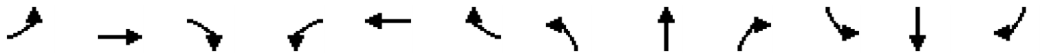
HCM 7th Edition methodology does not support current ring-barrier structure.

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	2442	282	340	1322	240	588	1	612	186	386	505
v/c Ratio	0.98	0.39	0.72	0.66	0.15	1.04	no cap	0.71	0.90	0.95	0.33
Control Delay (s/veh)	50.5	12.7	57.8	20.0	0.2	96.9		23.5	94.5	85.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.5	12.7	57.8	20.0	0.2	96.9	Error	23.5	94.5	85.8	0.6
Queue Length 50th (ft)	534	57	131	354	0	~253	0	140	144	158	0
Queue Length 95th (ft)	#696	139	173	430	0	#367	0	172	#282	#256	0
Internal Link Dist (ft)	1016			1173			3768			847	
Turn Bay Length (ft)		230	175		290	250		250	200		165
Base Capacity (vph)	2490	715	869	2005	1579	566	1	1175	206	408	1519
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.39	0.39	0.66	0.15	1.04	1.00	0.52	0.90	0.95	0.33

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2247	259	313	1216	221	541	1	563	171	355	465
Future Volume (veh/h)	0	2247	259	313	1216	221	541	1	563	171	355	465
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1870	1841	1870	1885	1856	1900	1856	1870	1856	1826
Adj Flow Rate, veh/h	0	2442	282	340	1322	0	588	1	612	186	386	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	3	2	4	2	1	3	0	3	2	3	5
Cap, veh/h	0	2644	656	405	2014		571	0	790	208	411	
Arrive On Green	0.00	0.41	0.41	0.12	0.57	0.00	0.17	0.17	0.17	0.12	0.12	0.00
Sat Flow, veh/h	0	6643	1584	3401	3554	1598	3428	0	2763	1781	3526	1547
Grp Volume(v), veh/h	0	2442	282	340	1322	0	588	0	612	186	386	0
Grp Sat Flow(s),veh/h/ln	0	1596	1584	1700	1777	1598	1714	0	1381	1781	1763	1547
Q Serve(g_s), s	0.0	43.6	15.2	11.7	30.8	0.0	20.0	0.0	20.0	12.4	13.0	0.0
Cycle Q Clear(g_c), s	0.0	43.6	15.2	11.7	30.8	0.0	20.0	0.0	20.0	12.4	13.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2644	656	405	2014		571	0	790	208	411	
V/C Ratio(X)	0.00	0.92	0.43	0.84	0.66		1.03	0.00	0.77	0.90	0.94	
Avail Cap(c_a), veh/h	0	2644	656	879	2014		571	0	790	208	411	
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)	0.00	0.79	0.79	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	33.3	25.0	51.7	17.9	0.0	50.0	0.0	39.3	52.3	52.6	0.0
Incr Delay (d2), s/veh	0.0	5.6	1.6	1.8	1.7	0.0	45.3	0.0	4.4	36.6	29.8	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	0.0	17.5	6.0	5.0	11.9	0.0	12.1	0.0	8.4	7.6	7.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	38.9	26.7	53.5	19.6	0.0	95.3	0.0	43.7	88.8	82.4	0.0
LnGrp LOS		D	C	D	B		F		D	F	F	
Approach Vol, veh/h		2724			1662			1200			572	
Approach Delay, s/veh		37.7			26.6			69.0			84.5	
Approach LOS		D			C			E			F	

Timer - Assigned Phs	2	3	4		6		8					
Phs Duration (G+Y+Rc), s	26.0	18.3	55.7		20.0		74.0					
Change Period (Y+Rc), s	6.0	4.0	6.0		6.0		6.0					
Max Green Setting (Gmax), s	20.0	31.0	33.0		14.0		68.0					
Max Q Clear Time (g_c+I1), s	22.0	13.7	45.6		15.0		32.8					
Green Ext Time (p_c), s	0.0	0.6	0.0		0.0		22.4					

Intersection Summary	
HCM 7th Control Delay, s/veh	45.1
HCM 7th LOS	D

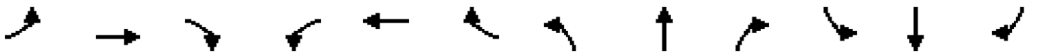
Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	NBR
Lane Group Flow (vph)	16	7
v/c Ratio	0.06	0.01
Control Delay (s/veh)	10.7	0.0
Queue Delay	0.0	0.0
Total Delay (s/veh)	10.7	0.0
Queue Length 50th (ft)	2	0
Queue Length 95th (ft)	6	0
Internal Link Dist (ft)		
Turn Bay Length (ft)	200	200
Base Capacity (vph)	894	923
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.02	0.01

Intersection Summary



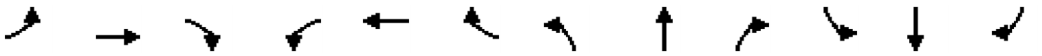
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	7	0	0	0	0	3	0	0	0
Future Volume (veh/h)	0	0	0	7	0	0	0	0	3	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1307	1900	1900	1900	1900	789	1900	1900	1900
Adj Flow Rate, veh/h	0	0	0	16	0	0	0	0	7	0	0	0
Peak Hour Factor	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Percent Heavy Veh, %	0	0	0	40	0	0	0	0	75	0	0	0
Cap, veh/h	13	25	11	27	78	35	25	1262	234	25	1262	563
Arrive On Green	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00
Sat Flow, veh/h	1810	3610	1610	1245	3610	1610	3510	3610	668	3510	3610	1610
Grp Volume(v), veh/h	0	0	0	16	0	0	0	0	7	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1245	1805	1610	1755	1805	668	1755	1805	1610
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
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	13	25	11	27	78	35	25	1262	234	25	1262	563
V/C Ratio(X)	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
Avail Cap(c_a), veh/h	632	4541	2026	1610	7948	3545	1227	5172	957	1227	5172	2307
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)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	19.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	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	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	0.0	26.3	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0
LnGrp LOS				C					A			
Approach Vol, veh/h		0			16			7			0	
Approach Delay, s/veh		0.0			26.3			3.1			0.0	
Approach LOS					C			A				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	9.5	4.8	0.0	0.0	9.5	0.0	4.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	20.5	18.5	18.0	5.0	20.5	5.0	31.5
Max Q Clear Time (g_c+I1), s	0.0	2.1	2.2	0.0	0.0	0.0	0.0	0.0
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 7th Control Delay, s/veh	19.3
HCM 7th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	18	151	32	109	167	482	39	218	85	554	173	22
v/c Ratio	0.05	0.25	0.09	0.29	0.17	0.61	0.28	0.47	0.25	0.90	0.11	0.03
Control Delay (s/veh)	59.1	39.4	0.5	54.0	33.2	7.5	62.4	47.0	1.8	52.1	16.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.1	39.4	0.5	54.0	33.2	7.5	62.4	47.0	1.8	52.1	16.4	0.1
Queue Length 50th (ft)	4	35	0	25	31	0	18	54	0	248	27	0
Queue Length 95th (ft)	24	99	0	93	105	21	86	147	0	696	69	0
Internal Link Dist (ft)		3502			3725			5944			3346	
Turn Bay Length (ft)	240		250	240		250	240		245	240		250
Base Capacity (vph)	507	1365	619	788	1638	975	145	459	334	1368	2798	1338
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.11	0.05	0.14	0.10	0.49	0.27	0.47	0.25	0.40	0.06	0.02

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	119	25	86	132	381	31	172	67	438	137	17
Future Volume (veh/h)	14	119	25	86	132	381	31	172	67	438	137	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.89	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1678	1885	1870	1856	1811	1767	1900	1870	1796	1900
Adj Flow Rate, veh/h	18	151	32	109	167	482	39	218	85	554	173	22
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	15	1	2	3	6	9	0	2	7	0
Cap, veh/h	122	1051	413	295	1227	542	79	294	125	588	1302	594
Arrive On Green	0.04	0.30	0.30	0.08	0.35	0.35	0.05	0.09	0.09	0.33	0.38	0.38
Sat Flow, veh/h	3456	3554	1398	3483	3554	1570	1725	3357	1431	1781	3413	1556
Grp Volume(v), veh/h	18	151	32	109	167	482	39	218	85	554	173	22
Grp Sat Flow(s),veh/h/ln	1728	1777	1398	1742	1777	1570	1725	1678	1431	1781	1706	1556
Q Serve(g_s), s	0.5	3.2	1.7	3.0	3.3	29.4	2.2	6.4	5.8	30.6	3.3	0.9
Cycle Q Clear(g_c), s	0.5	3.2	1.7	3.0	3.3	29.4	2.2	6.4	5.8	30.6	3.3	0.9
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	122	1051	413	295	1227	542	79	294	125	588	1302	594
V/C Ratio(X)	0.15	0.14	0.08	0.37	0.14	0.89	0.49	0.74	0.68	0.94	0.13	0.04
Avail Cap(c_a), veh/h	444	1135	446	689	1381	610	128	309	132	1197	2389	1089
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	47.3	26.2	25.7	43.7	22.8	31.3	47.1	45.0	44.8	32.9	20.4	19.6
Incr Delay (d2), s/veh	0.2	0.2	0.2	0.3	0.1	16.2	1.7	11.6	18.1	3.5	0.2	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	0.2	1.3	0.6	1.3	1.3	12.8	1.0	3.0	2.6	13.0	1.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.5	26.4	25.9	44.0	22.9	47.5	48.8	56.7	62.9	36.4	20.6	19.7
LnGrp LOS	D	C	C	D	C	D	D	E	E	D	C	B
Approach Vol, veh/h		201			758			342			749	
Approach Delay, s/veh		28.2			41.6			57.3			32.3	
Approach LOS		C			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	38.4	14.6	12.6	35.6	8.7	44.3	7.6	40.6
Change Period (Y+Rc), s	5.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	68.0	9.3	20.0	32.3	7.5	70.8	13.0	39.3
Max Q Clear Time (g_c+I1), s	32.6	8.4	5.0	5.2	4.2	5.3	2.5	31.4
Green Ext Time (p_c), s	0.8	0.2	0.1	1.9	0.0	4.2	0.0	3.5

Intersection Summary	
HCM 7th Control Delay, s/veh	39.5
HCM 7th LOS	D

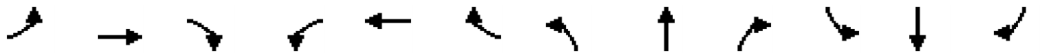
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	62	853	11	85	1042	120	89	315
v/c Ratio	0.33	0.63	0.02	0.44	0.78	0.48	0.30	0.78
Control Delay (s/veh)	57.9	33.8	0.0	59.3	36.5	53.3	12.4	53.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.9	33.8	0.0	59.3	36.5	53.3	12.4	53.6
Queue Length 50th (ft)	40	234	0	56	307	79	0	199
Queue Length 95th (ft)	95	424	0	119	#552	140	35	320
Internal Link Dist (ft)		3725			4857	8570		1281
Turn Bay Length (ft)	200		185	225			135	
Base Capacity (vph)	358	1525	704	338	1471	392	408	597
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.56	0.02	0.25	0.71	0.31	0.22	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	691	9	69	713	131	16	81	72	113	79	62
Future Volume (veh/h)	50	691	9	69	713	131	16	81	72	113	79	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1811	1856	1856	1737	1885	1870	1885	1870	1856
Adj Flow Rate, veh/h	62	853	11	85	880	162	20	100	89	140	98	77
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	1	0	6	3	3	11	1	2	1	2	3
Cap, veh/h	157	1353	603	167	1151	212	34	170	173	162	113	89
Arrive On Green	0.09	0.38	0.38	0.10	0.39	0.39	0.11	0.11	0.11	0.21	0.21	0.21
Sat Flow, veh/h	1810	3582	1595	1725	2968	546	312	1558	1585	780	546	429
Grp Volume(v), veh/h	62	853	11	85	523	519	120	0	89	315	0	0
Grp Sat Flow(s),veh/h/ln	1810	1791	1595	1725	1763	1751	1870	0	1585	1754	0	0
Q Serve(g_s), s	3.0	17.7	0.4	4.3	23.5	23.5	5.6	0.0	4.8	15.8	0.0	0.0
Cycle Q Clear(g_c), s	3.0	17.7	0.4	4.3	23.5	23.5	5.6	0.0	4.8	15.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.31	0.17		1.00	0.44		0.24
Lane Grp Cap(c), veh/h	157	1353	603	167	684	679	204	0	173	364	0	0
V/C Ratio(X)	0.39	0.63	0.02	0.51	0.76	0.76	0.59	0.00	0.51	0.87	0.00	0.00
Avail Cap(c_a), veh/h	397	1572	700	379	832	826	410	0	348	635	0	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	39.3	23.2	17.8	39.1	24.3	24.3	38.6	0.0	38.3	34.9	0.0	0.0
Incr Delay (d2), s/veh	0.6	1.0	0.0	0.9	4.4	4.4	1.0	0.0	0.9	2.5	0.0	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	1.3	7.4	0.1	1.8	10.2	10.1	2.6	0.0	1.9	6.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.9	24.1	17.8	40.0	28.6	28.7	39.6	0.0	39.2	37.3	0.0	0.0
LnGrp LOS	D	C	B	D	C	C	D		D	D		
Approach Vol, veh/h		926			1127			209			315	
Approach Delay, s/veh		25.1			29.5			39.4			37.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	15.2	12.8	40.1	22.9	11.9	41.0
Change Period (Y+Rc), s	5.3	4.0	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	20.0	20.0	40.0	33.0	20.0	43.0
Max Q Clear Time (g_c+I1), s	7.6	6.3	19.7	17.8	5.0	25.5
Green Ext Time (p_c), s	0.4	0.1	9.2	1.1	0.0	9.8

Intersection Summary	
HCM 7th Control Delay, s/veh	29.7
HCM 7th LOS	C

Notes

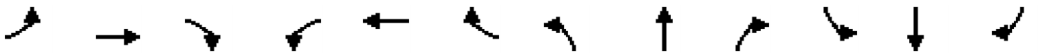
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	89	601	526	507	774	137	617	1010	515	182	915	100
v/c Ratio	0.34	0.60	0.80	0.80	0.56	0.20	1.30	0.74	0.69	0.68	0.83	0.22
Control Delay (s/veh)	68.8	44.1	30.0	63.0	32.1	4.7	192.4	47.4	14.1	76.5	56.5	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.8	44.1	30.0	63.0	32.1	4.7	192.4	47.4	14.1	76.5	56.5	3.2
Queue Length 50th (ft)	32	194	162	186	221	0	~288	266	53	68	~273	0
Queue Length 95th (ft)	81	362	411	336	377	40	#652	421	214	#162	391	15
Internal Link Dist (ft)		4857			8222			3668			3803	
Turn Bay Length (ft)	240		240	250		250	240		240	230		240
Base Capacity (vph)	904	1180	720	1520	1815	847	474	1371	742	325	1097	452
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.51	0.73	0.33	0.43	0.16	1.30	0.74	0.69	0.56	0.83	0.22

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	535	468	451	689	122	549	899	458	162	814	89
Future Volume (veh/h)	79	535	468	451	689	122	549	899	458	162	814	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1885	1900	1826	1856	1796	1781	1781	1841	1826	1826	1841
Adj Flow Rate, veh/h	89	601	327	507	774	59	617	1010	189	182	915	33
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	4	1	0	5	3	7	8	8	4	5	5	4
Cap, veh/h	269	970	430	587	1288	556	563	1404	445	245	948	297
Arrive On Green	0.08	0.27	0.27	0.17	0.37	0.37	0.17	0.29	0.29	0.07	0.19	0.19
Sat Flow, veh/h	3401	3582	1590	3374	3526	1522	3291	4863	1540	3374	4985	1560
Grp Volume(v), veh/h	89	601	327	507	774	59	617	1010	189	182	915	33
Grp Sat Flow(s),veh/h/ln	1700	1791	1590	1687	1763	1522	1646	1621	1540	1687	1662	1560
Q Serve(g_s), s	2.6	15.5	19.9	15.4	18.8	2.7	18.0	19.6	10.5	5.6	19.1	1.8
Cycle Q Clear(g_c), s	2.6	15.5	19.9	15.4	18.8	2.7	18.0	19.6	10.5	5.6	19.1	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	269	970	430	587	1288	556	563	1404	445	245	948	297
V/C Ratio(X)	0.33	0.62	0.76	0.86	0.60	0.11	1.10	0.72	0.43	0.74	0.97	0.11
Avail Cap(c_a), veh/h	1067	1236	549	1796	1978	854	563	1404	445	385	948	297
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	45.8	33.6	35.2	42.2	27.1	22.0	43.6	33.6	30.3	47.8	42.2	35.2
Incr Delay (d2), s/veh	0.3	1.1	6.2	1.5	0.7	0.1	66.5	2.0	1.0	1.7	21.4	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	1.1	6.5	8.0	6.3	7.5	0.9	12.2	7.6	3.8	2.3	9.4	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.0	34.7	41.4	43.8	27.8	22.1	110.1	35.6	31.3	49.5	63.6	35.5
LnGrp LOS	D	C	D	D	C	C	F	D	C	D	E	D
Approach Vol, veh/h		1017			1340			1816			1130	
Approach Delay, s/veh		37.8			33.6			60.5			60.5	
Approach LOS		D			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	36.8	22.3	34.5	22.0	26.4	12.3	44.4
Change Period (Y+Rc), s	4.0	6.4	4.0	* 6	4.0	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	12.0	25.6	56.0	* 36	18.0	* 20	33.0	59.0
Max Q Clear Time (g_c+I1), s	7.6	21.6	17.4	21.9	20.0	21.1	4.6	20.8
Green Ext Time (p_c), s	0.1	2.9	0.9	6.6	0.0	0.0	0.1	8.9

Intersection Summary	
HCM 7th Control Delay, s/veh	49.3
HCM 7th LOS	D

Notes

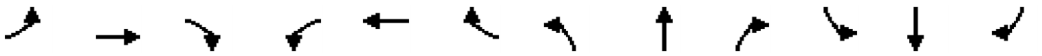
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	119	1167	194	228	1316	254	272	310	196	251	442	139
v/c Ratio	0.53	0.73	0.24	0.69	0.80	0.30	0.88	0.51	0.48	0.60	0.62	0.34
Control Delay (s/veh)	63.3	31.1	4.0	50.3	20.0	2.2	82.8	46.8	12.9	63.6	52.6	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.3	31.1	4.0	50.3	20.0	2.2	82.8	46.8	12.9	63.6	52.6	18.7
Queue Length 50th (ft)	46	360	0	92	206	7	109	118	21	100	180	43
Queue Length 95th (ft)	78	518	45	#158	#650	23	#183	136	73	#163	235	94
Internal Link Dist (ft)		8222			2007			6530			9706	
Turn Bay Length (ft)	240		375	400		260	240		230	215		280
Base Capacity (vph)	223	1603	806	329	1641	837	308	1032	580	420	1032	517
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.73	0.24	0.69	0.80	0.30	0.88	0.30	0.34	0.60	0.43	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	1039	173	203	1171	226	242	276	174	223	393	124
Future Volume (veh/h)	106	1039	173	203	1171	226	242	276	174	223	393	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.93	1.00		0.89
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1885	1885	1885	1826	1841	1841	1870	1900	1870	1870	1856
Adj Flow Rate, veh/h	119	1167	194	228	1316	254	272	310	196	251	442	139
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	4	1	1	1	5	4	4	2	0	2	2	3
Cap, veh/h	195	1316	572	392	1515	680	312	860	363	305	898	352
Arrive On Green	0.06	0.37	0.37	0.23	0.87	0.87	0.09	0.24	0.24	0.09	0.25	0.25
Sat Flow, veh/h	3401	3582	1558	3483	3469	1557	3401	3554	1500	3456	3554	1395
Grp Volume(v), veh/h	119	1167	194	228	1316	254	272	310	196	251	442	139
Grp Sat Flow(s),veh/h/ln	1700	1791	1558	1742	1735	1557	1700	1777	1500	1728	1777	1395
Q Serve(g_s), s	4.1	36.7	7.9	7.0	23.8	2.5	9.5	8.7	13.7	8.6	12.7	9.9
Cycle Q Clear(g_c), s	4.1	36.7	7.9	7.0	23.8	2.5	9.5	8.7	13.7	8.6	12.7	9.9
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	195	1316	572	392	1515	680	312	860	363	305	898	352
V/C Ratio(X)	0.61	0.89	0.34	0.58	0.87	0.37	0.87	0.36	0.54	0.82	0.49	0.39
Avail Cap(c_a), veh/h	198	1361	592	392	1515	680	312	1036	438	317	1036	407
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.72	0.72	0.78	0.78	0.78	0.88	0.88	0.88	0.82	0.82	0.82
Uniform Delay (d), s/veh	55.3	35.6	14.5	44.0	5.8	2.1	53.8	37.8	39.7	53.8	38.3	37.2
Incr Delay (d2), s/veh	2.7	6.8	1.2	1.1	4.7	0.5	19.8	0.4	1.9	12.1	0.6	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	1.8	16.4	3.9	2.8	3.4	1.0	4.8	3.8	5.1	4.2	5.5	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.0	42.4	15.7	45.1	10.5	2.5	73.6	38.2	41.5	65.9	38.9	38.2
LnGrp LOS	E	D	B	D	B	A	E	D	D	E	D	D
Approach Vol, veh/h		1480			1798			778			832	
Approach Delay, s/veh		40.2			13.8			51.4			46.9	
Approach LOS		D			B			D			D	

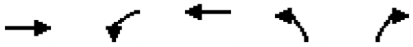
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	34.7	19.2	49.8	15.0	36.0	10.9	58.1
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	11.0	* 35	9.0	* 46	11.0	35.0	7.0	47.6
Max Q Clear Time (g_c+I1), s	10.6	15.7	9.0	38.7	11.5	14.7	6.1	25.8
Green Ext Time (p_c), s	0.0	4.1	0.0	5.4	0.0	5.2	0.0	15.3

Intersection Summary	
HCM 7th Control Delay, s/veh	33.4
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

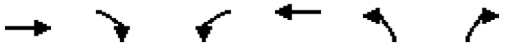
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1661	115	1786	47	114
v/c Ratio	0.65	0.65	0.59	0.38	0.53
Control Delay (s/veh)	16.1	69.6	1.7	62.1	18.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.1	69.6	1.7	62.1	18.9
Queue Length 50th (ft)	290	95	26	36	0
Queue Length 95th (ft)	515	m111	m34	73	53
Internal Link Dist (ft)	2007		2391	1091	
Turn Bay Length (ft)		300			200
Base Capacity (vph)	2543	376	3009	387	430
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.65	0.31	0.59	0.12	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1433	29	101	1572	41	100
Future Volume (veh/h)	1433	29	101	1572	41	100
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1870	1841	1870	1885	1885
Adj Flow Rate, veh/h	1628	33	115	1786	47	114
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	2	4	2	1	1
Cap, veh/h	2576	52	141	2954	158	141
Arrive On Green	1.00	1.00	0.08	0.83	0.09	0.09
Sat Flow, veh/h	3685	73	1753	3647	1795	1598
Grp Volume(v), veh/h	811	850	115	1786	47	114
Grp Sat Flow(s),veh/h/ln	1791	1872	1753	1777	1795	1598
Q Serve(g_s), s	0.0	0.0	7.7	20.5	2.9	8.4
Cycle Q Clear(g_c), s	0.0	0.0	7.7	20.5	2.9	8.4
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1285	1343	141	2954	158	141
V/C Ratio(X)	0.63	0.63	0.82	0.60	0.30	0.81
Avail Cap(c_a), veh/h	1285	1343	380	2954	389	346
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	54.3	3.4	51.2	53.7
Incr Delay (d2), s/veh	1.6	1.6	4.3	0.9	0.4	4.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.6	3.5	4.1	1.3	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	1.6	1.6	58.6	4.4	51.6	57.9
LnGrp LOS	A	A	E	A	D	E
Approach Vol, veh/h	1661			1901	161	
Approach Delay, s/veh	1.6			7.6	56.1	
Approach LOS	A			A	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	14.6	13.6	91.8		105.4
Change Period (Y+Rc), s	4.0	4.0	5.7		5.7
Max Green Setting (Gmax), s	26.0	26.0	38.3		84.3
Max Q Clear Time (g_c+I1), s	10.4	9.7	2.0		22.5
Green Ext Time (p_c), s	0.2	0.1	24.8		39.4

Intersection Summary	
HCM 7th Control Delay, s/veh	7.0
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

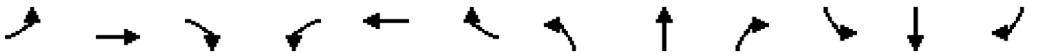
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	165	1425	136	834	1390	198	311	536	648	462	969	168
v/c Ratio	0.58	0.95	0.24	0.90	1.00	0.28	0.74	0.84	1.23	0.90	0.94	0.37
Control Delay (s/veh)	59.3	41.0	5.7	57.9	43.3	2.2	53.9	76.7	159.2	61.6	57.6	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.3	41.0	5.7	57.9	43.3	2.2	53.9	76.7	159.2	61.6	57.6	9.0
Queue Length 50th (ft)	62	312	15	180	~611	16	128	233	~507	185	283	21
Queue Length 95th (ft)	m91	#494	m53	m#252	m#773	m13	175	#311	#744	#276	#400	m65
Internal Link Dist (ft)		820			525			7673			496	
Turn Bay Length (ft)	245		600	250		250	225		235	215		225
Base Capacity (vph)	355	1503	568	960	1386	706	495	635	525	520	1031	452
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.95	0.24	0.87	1.00	0.28	0.63	0.84	1.23	0.89	0.94	0.37

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1297	124	759	1265	180	283	488	590	420	882	153
Future Volume (veh/h)	150	1297	124	759	1265	180	283	488	590	420	882	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1841	1811	1826	1826	1811	1826	1856	1885	1841	1856
Adj Flow Rate, veh/h	165	1425	0	834	1390	0	311	536	0	462	969	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	4	6	5	5	6	5	3	1	4	3
Cap, veh/h	222	1572		917	1501		369	607		514	1067	
Arrive On Green	0.06	0.31	0.00	0.19	0.43	0.00	0.11	0.17	0.00	0.15	0.21	0.00
Sat Flow, veh/h	3483	5147	1560	4864	3469	1547	3346	3469	1572	3483	5025	1572
Grp Volume(v), veh/h	165	1425	0	834	1390	0	311	536	0	462	969	0
Grp Sat Flow(s),veh/h/ln	1742	1716	1560	1621	1735	1547	1673	1735	1572	1742	1675	1572
Q Serve(g_s), s	5.6	31.9	0.0	20.1	45.5	0.0	10.9	18.1	0.0	15.6	22.6	0.0
Cycle Q Clear(g_c), s	5.6	31.9	0.0	20.1	45.5	0.0	10.9	18.1	0.0	15.6	22.6	0.0
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	222	1572		917	1501		369	607		514	1067	
V/C Ratio(X)	0.74	0.91		0.91	0.93		0.84	0.88		0.90	0.91	
Avail Cap(c_a), veh/h	357	1572		973	1501		502	636		522	1067	
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	0.00	1.00	1.00	0.00	0.81	0.81	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.2	40.0	0.0	47.7	32.2	0.0	52.4	48.3	0.0	50.3	46.1	0.0
Incr Delay (d2), s/veh	1.8	9.1	0.0	11.3	11.2	0.0	5.9	11.7	0.0	18.1	11.4	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	2.5	14.2	0.0	8.8	20.1	0.0	4.8	8.6	0.0	8.0	10.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.0	49.1	0.0	59.0	43.4	0.0	58.3	60.0	0.0	68.4	57.5	0.0
LnGrp LOS	E	D		E	D		E	E		E	E	
Approach Vol, veh/h		1590			2224			847			1431	
Approach Delay, s/veh		50.0			49.3			59.4			61.0	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.7	27.0	28.6	42.7	17.2	31.5	13.4	57.9
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	5.7	6.0
Max Green Setting (Gmax), s	18.0	22.0	24.0	* 34	18.0	22.0	12.3	46.0
Max Q Clear Time (g_c+I1), s	17.6	20.1	22.1	33.9	12.9	24.6	7.6	47.5
Green Ext Time (p_c), s	0.1	0.8	0.5	0.3	0.3	0.0	0.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	53.6
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

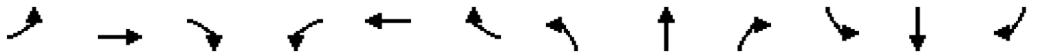
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	279	1957	249	437	1835	107	213	424	322	183	770	351
v/c Ratio	0.69	0.96	0.34	0.80	0.80	0.07	0.98	0.72	0.21	0.62	1.15	0.67
Control Delay (s/veh)	64.4	27.7	4.5	54.7	27.3	0.1	111.4	55.7	0.3	61.0	126.6	17.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.4	27.7	4.5	54.7	27.3	0.1	111.4	55.7	0.3	61.0	126.6	17.0
Queue Length 50th (ft)	100	537	13	184	414	0	86	165	0	71	~368	45
Queue Length 95th (ft)	m92	m492	m14	#240	592	m0	#163	#255	0	105	#485	146
Internal Link Dist (ft)		1982			2534			1725			1308	
Turn Bay Length (ft)	225		235	225		250	270		245	235		195
Base Capacity (vph)	686	2046	730	548	2280	1594	218	589	1557	420	671	523
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.96	0.34	0.80	0.80	0.07	0.98	0.72	0.21	0.44	1.15	0.67

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	248	1742	222	389	1633	95	190	377	287	163	685	312
Future Volume (veh/h)	248	1742	222	389	1633	95	190	377	287	163	685	312
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1841	1900	1796	1870	1870	1737	1856	1826
Adj Flow Rate, veh/h	279	1957	96	437	1835	0	213	424	0	183	770	86
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	1	4	0	7	2	2	11	3	5
Cap, veh/h	342	2052	627	504	2320		221	714		237	676	291
Arrive On Green	0.10	0.40	0.40	0.14	0.46	0.00	0.07	0.20	0.00	0.07	0.19	0.19
Sat Flow, veh/h	3456	5106	1560	3483	5025	1610	3319	3554	1585	3209	3526	1518
Grp Volume(v), veh/h	279	1957	96	437	1835	0	213	424	0	183	770	86
Grp Sat Flow(s),veh/h/ln	1728	1702	1560	1742	1675	1610	1659	1777	1585	1605	1763	1518
Q Serve(g_s), s	9.5	44.6	4.7	14.7	37.2	0.0	7.7	13.0	0.0	6.7	23.0	4.5
Cycle Q Clear(g_c), s	9.5	44.6	4.7	14.7	37.2	0.0	7.7	13.0	0.0	6.7	23.0	4.5
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	342	2052	627	504	2320		221	714		237	676	291
V/C Ratio(X)	0.81	0.95	0.15	0.87	0.79		0.96	0.59		0.77	1.14	0.30
Avail Cap(c_a), veh/h	691	2055	628	551	2320		221	714		428	676	291
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	34.8	22.9	50.2	27.4	0.0	55.9	43.5	0.0	54.6	48.5	24.9
Incr Delay (d2), s/veh	1.8	11.6	0.5	12.0	2.8	0.0	49.5	2.3	0.0	2.0	79.9	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	4.1	19.5	1.8	7.1	14.4	0.0	4.7	5.8	0.0	2.7	17.3	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.8	46.4	23.4	62.2	30.2	0.0	105.4	45.8	0.0	56.6	128.4	27.5
LnGrp LOS	D	D	C	E	C		F	D		E	F	C
Approach Vol, veh/h		2332			2272			637			1039	
Approach Delay, s/veh		46.4			36.4			65.7			107.4	
Approach LOS		D			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	29.8	23.4	53.9	13.7	29.0	15.9	61.4
Change Period (Y+Rc), s	4.0	5.7	6.0	5.7	5.7	* 6	4.0	6.0
Max Green Setting (Gmax), s	16.0	15.3	19.0	48.3	8.0	* 23	24.0	45.0
Max Q Clear Time (g_c+I1), s	8.7	15.0	16.7	46.6	9.7	25.0	11.5	39.2
Green Ext Time (p_c), s	0.2	0.1	0.2	1.6	0.0	0.0	0.4	5.2

Intersection Summary	
HCM 7th Control Delay, s/veh	54.8
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

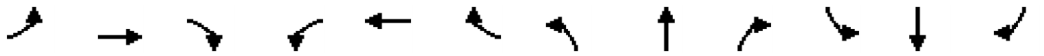
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	15	2420	23	43	2444	93	44	8	51	66	3	23
v/c Ratio	0.14	0.70	0.01	0.24	0.63	0.06	0.29	0.07	0.22	0.48	0.03	0.10
Control Delay (s/veh)	75.1	11.0	0.0	44.9	9.3	0.0	56.9	55.0	2.2	64.4	53.0	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	75.1	11.0	0.0	44.9	9.3	0.0	56.9	55.0	2.2	64.4	53.0	0.8
Queue Length 50th (ft)	11	720	0	25	135	0	33	6	0	50	2	0
Queue Length 95th (ft)	m15	737	m0	m34	m481	m0	67	21	0	91	12	0
Internal Link Dist (ft)		280			321			469			883	
Turn Bay Length (ft)	220		250	220		250	80		25	100		25
Base Capacity (vph)	315	3442	1581	200	3864	1599	243	237	328	238	223	321
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.70	0.01	0.22	0.63	0.06	0.18	0.03	0.16	0.28	0.01	0.07

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	2081	20	37	2102	80	38	7	44	57	3	20
Future Volume (veh/h)	13	2081	20	37	2102	80	38	7	44	57	3	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1826	1870	1885	1870	1900	1870	1885	1900	1900
Adj Flow Rate, veh/h	15	2420	0	43	2444	0	44	8	0	66	3	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	2	0	5	2	1	2	0	2	1	0	0
Cap, veh/h	42	2438		439	3682		80	93		93	106	
Arrive On Green	0.02	0.48	0.00	0.25	0.72	0.00	0.04	0.05	0.00	0.05	0.06	0.00
Sat Flow, veh/h	1810	5106	1610	1739	5106	1598	1781	1900	1585	1795	1900	1610
Grp Volume(v), veh/h	15	2420	0	43	2444	0	44	8	0	66	3	0
Grp Sat Flow(s),veh/h/ln	1810	1702	1610	1739	1702	1598	1781	1900	1585	1795	1900	1610
Q Serve(g_s), s	1.0	56.5	0.0	2.3	30.7	0.0	2.9	0.5	0.0	4.3	0.2	0.0
Cycle Q Clear(g_c), s	1.0	56.5	0.0	2.3	30.7	0.0	2.9	0.5	0.0	4.3	0.2	0.0
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	42	2438		439	3682		80	93		93	106	
V/C Ratio(X)	0.36	0.99		0.10	0.66		0.55	0.09		0.71	0.03	
Avail Cap(c_a), veh/h	317	2438		439	3682		238	238		239	223	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.8	31.1	0.0	34.4	8.9	0.0	56.1	54.5	0.0	56.0	53.6	0.0
Incr Delay (d2), s/veh	2.0	16.6	0.0	0.0	1.0	0.0	2.2	0.3	0.0	3.7	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	0.5	25.0	0.0	0.9	9.3	0.0	1.4	0.2	0.0	2.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.7	47.7	0.0	34.4	9.9	0.0	58.3	54.8	0.0	59.7	53.7	0.0
LnGrp LOS	E	D		C	A		E	D		E	D	
Approach Vol, veh/h		2435			2487			52			69	
Approach Delay, s/veh		47.8			10.3			57.8			59.4	
Approach LOS		D			B			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	10.8	36.0	63.0	9.4	11.6	6.8	92.2
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	16.0	* 15	14.0	* 57	16.0	14.1	21.0	50.3
Max Q Clear Time (g_c+I1), s	6.3	2.5	4.3	58.5	4.9	2.2	3.0	32.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.6

Intersection Summary	
HCM 7th Control Delay, s/veh	29.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

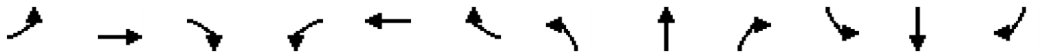
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	288	565	24	963	528	805	48	1271	899	573	1376	184
v/c Ratio	0.59	0.78	0.02	1.04	0.80	0.52	0.12	0.83	1.19	1.00	0.73	0.12
Control Delay (s/veh)	53.5	57.8	0.0	87.6	57.2	1.2	28.2	27.0	119.0	76.9	39.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.5	57.8	0.0	87.6	57.2	1.2	28.2	27.0	119.0	76.9	39.7	0.1
Queue Length 50th (ft)	109	156	0	~285	208	0	0	382	~623	~244	388	0
Queue Length 95th (ft)	155	200	0	#374	#275	0	m22	351	#850	#358	442	m0
Internal Link Dist (ft)		2093			1923			1415			1823	
Turn Bay Length (ft)	235		425	200		235	225		250	380		560
Base Capacity (vph)	490	726	1593	927	657	1562	453	1525	757	572	1882	1562
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.78	0.02	1.04	0.80	0.52	0.11	0.83	1.19	1.00	0.73	0.12

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	274	537	23	915	502	765	46	1207	854	544	1307	175
Future Volume (veh/h)	274	537	23	915	502	765	46	1207	854	544	1307	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1900	1870	1870	1870	1856	1870	1885	1870	1841	1870
Adj Flow Rate, veh/h	288	565	0	963	528	0	48	1271	0	573	1376	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	0	2	2	2	3	2	1	2	4	2
Cap, veh/h	471	695		933	660		405	1477		576	1668	
Arrive On Green	0.14	0.14	0.00	0.19	0.19	0.00	0.12	0.29	0.00	0.06	0.11	0.00
Sat Flow, veh/h	3428	5066	1610	5023	3554	1585	3428	5106	1598	3456	5025	1585
Grp Volume(v), veh/h	288	565	0	963	528	0	48	1271	0	573	1376	0
Grp Sat Flow(s),veh/h/ln	1714	1689	1610	1674	1777	1585	1714	1702	1598	1728	1675	1585
Q Serve(g_s), s	9.5	13.0	0.0	22.3	17.0	0.0	1.5	28.3	0.0	19.9	32.2	0.0
Cycle Q Clear(g_c), s	9.5	13.0	0.0	22.3	17.0	0.0	1.5	28.3	0.0	19.9	32.2	0.0
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	471	695		933	660		405	1477		576	1668	
V/C Ratio(X)	0.61	0.81		1.03	0.80		0.12	0.86		0.99	0.83	
Avail Cap(c_a), veh/h	494	730		933	660		457	1532		576	1729	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.61	0.61	0.00
Uniform Delay (d), s/veh	48.8	50.3	0.0	48.9	46.7	0.0	47.3	40.3	0.0	56.6	50.0	0.0
Incr Delay (d2), s/veh	2.8	7.4	0.0	37.9	7.5	0.0	0.0	5.3	0.0	28.0	3.0	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	4.1	5.8	0.0	12.3	8.0	0.0	0.6	12.1	0.0	11.4	14.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.6	57.6	0.0	86.7	54.2	0.0	47.4	45.7	0.0	84.6	53.0	0.0
LnGrp LOS	D	E		F	D		D	D		F	D	
Approach Vol, veh/h		853			1491			1319			1949	
Approach Delay, s/veh		55.6			75.2			45.7			62.3	
Approach LOS		E			E			D			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		28.0	25.0	40.7		24.2	20.2	45.5				
Change Period (Y+Rc), s		5.7	5.0	6.0		7.7	6.0	* 5.7				
Max Green Setting (Gmax), s		22.3	20.0	36.0		17.3	16.0	* 41				
Max Q Clear Time (g_c+I1), s		24.3	21.9	30.3		15.0	3.5	34.2				
Green Ext Time (p_c), s		0.0	0.0	4.3		1.4	0.0	5.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	60.8
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

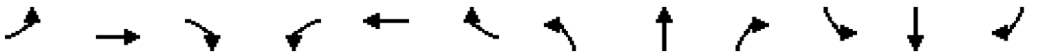
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	311	158	403	64	64	133	428	1961	112	1713	226
v/c Ratio	0.66	0.67	0.71	0.43	0.42	0.48	0.77	0.64	0.27	0.75	0.27
Control Delay (s/veh)	54.7	61.4	11.5	58.8	58.3	11.2	58.6	41.0	41.3	24.0	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.7	61.4	11.5	58.8	58.3	11.2	58.6	41.0	41.3	24.0	3.2
Queue Length 50th (ft)	126	128	0	51	51	0	158	393	40	247	6
Queue Length 95th (ft)	167	196	87	89	89	42	m219	457	58	#645	23
Internal Link Dist (ft)		908			816			1823		832	
Turn Bay Length (ft)	100		115	190			250		250		580
Base Capacity (vph)	611	308	621	277	283	393	751	3080	417	2291	840
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.51	0.65	0.23	0.23	0.34	0.57	0.64	0.27	0.75	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



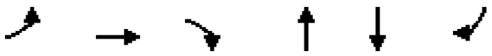
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	408	10	359	100	14	118	381	1731	14	100	1525	201
Future Volume (veh/h)	408	10	359	100	14	118	381	1731	14	100	1525	201
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1856	1856	1900	1900	1885	1870	1870	1900	1856	1885
Adj Flow Rate, veh/h	466	0	91	123	0	133	428	1945	16	112	1713	74
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	0	3	3	0	0	1	2	2	0	3	1
Cap, veh/h	585	0	172	367	0	166	495	2365	19	939	2513	792
Arrive On Green	0.11	0.00	0.11	0.10	0.00	0.10	0.14	0.36	0.36	0.53	0.99	0.99
Sat Flow, veh/h	5302	0	1560	3534	0	1596	3483	6631	55	3510	5066	1596
Grp Volume(v), veh/h	466	0	91	123	0	133	428	1416	545	112	1713	74
Grp Sat Flow(s),veh/h/ln	1767	0	1560	1767	0	1596	1742	1609	1860	1755	1689	1596
Q Serve(g_s), s	10.3	0.0	6.6	3.9	0.0	9.8	14.4	32.0	32.0	1.9	1.0	0.0
Cycle Q Clear(g_c), s	10.3	0.0	6.6	3.9	0.0	9.8	14.4	32.0	32.0	1.9	1.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	585	0	172	367	0	166	495	1721	663	939	2513	792
V/C Ratio(X)	0.80	0.00	0.53	0.34	0.00	0.80	0.86	0.82	0.82	0.12	0.68	0.09
Avail Cap(c_a), veh/h	1016	0	299	589	0	266	755	1741	671	939	2513	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.66	0.66	0.66	0.84	0.84	0.84
Uniform Delay (d), s/veh	52.1	0.0	50.4	49.9	0.0	52.6	50.3	35.1	35.1	20.9	0.2	0.2
Incr Delay (d2), s/veh	1.0	0.0	0.9	0.2	0.0	3.4	3.0	3.1	7.6	0.0	1.3	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	4.6	0.0	2.6	1.7	0.0	4.1	6.5	12.9	15.7	0.8	0.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.0	0.0	51.4	50.1	0.0	56.0	53.3	38.2	42.7	20.9	1.5	0.4
LnGrp LOS	D		D	D		E	D	D	D	C	A	A
Approach Vol, veh/h		557			256			2389			1899	
Approach Delay, s/veh		52.7			53.2			42.0			2.6	
Approach LOS		D			D			D			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	37.8	48.5		17.2	21.1	65.2		16.5				
Change Period (Y+Rc), s	5.7	5.7		4.0	4.0	5.7		4.0				
Max Green Setting (Gmax), s	14.3	43.3		23.0	26.0	33.3		20.0				
Max Q Clear Time (g_c+I1), s	3.9	34.0		12.3	16.4	3.0		11.8				
Green Ext Time (p_c), s	0.1	8.7		1.0	0.6	24.7		0.3				

Intersection Summary			
HCM 7th Control Delay, s/veh		29.1	
HCM 7th LOS		C	

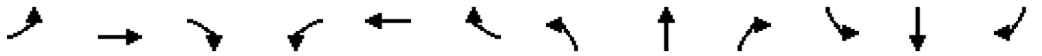
Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.



Lane Group	EBL	EBT	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	154	177	173	2652	1933	344
v/c Ratio	0.61	0.75	0.69	0.71	0.51	0.22
Control Delay (s/veh)	56.5	63.4	54.8	11.5	11.0	0.3
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay (s/veh)	56.5	63.4	54.8	11.6	11.0	0.3
Queue Length 50th (ft)	118	134	115	573	274	0
Queue Length 95th (ft)	176	202	181	693	359	0
Internal Link Dist (ft)		980		832	895	
Turn Bay Length (ft)	225					180
Base Capacity (vph)	486	434	452	3740	3810	1564
Starvation Cap Reductn	0	0	0	132	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.41	0.38	0.74	0.51	0.22

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	6	290	0	0	0	0	1906	454	0	1720	306
Future Volume (veh/h)	152	6	290	0	0	0	0	1906	454	0	1720	306
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1870				0	1870	1870	0	1856	1870
Adj Flow Rate, veh/h	116	0	389				0	2142	510	0	1933	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	3	2				0	2	2	0	3	2
Cap, veh/h	258	0	459				0	3169	712	0	3868	
Arrive On Green	0.14	0.00	0.14				0.00	1.00	1.00	0.00	1.00	0.00
Sat Flow, veh/h	1781	0	3170				0	4318	932	0	5233	1585
Grp Volume(v), veh/h	116	0	389				0	1734	918	0	1933	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1677	0	1689	1585
Q Serve(g_s), s	7.1	0.0	14.4				0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.1	0.0	14.4				0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.56	0.00		1.00
Lane Grp Cap(c), veh/h	258	0	459				0	2600	1281	0	3868	
V/C Ratio(X)	0.45	0.00	0.85				0.00	0.67	0.72	0.00	0.50	
Avail Cap(c_a), veh/h	515	0	917				0	2600	1281	0	3868	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.74	0.74	0.00	0.86	0.00
Uniform Delay (d), s/veh	47.0	0.0	50.0				0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	1.7				0.0	1.0	2.6	0.0	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
%ile BackOfQ(50%),veh/ln	3.2	0.0	5.8				0.0	0.4	0.9	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.4	0.0	51.8				0.0	1.0	2.6	0.0	0.4	0.0
LnGrp LOS	D		D					A	A		A	
Approach Vol, veh/h		505						2652			1933	
Approach Delay, s/veh		50.8						1.6			0.4	
Approach LOS		D						A			A	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		97.3		22.7		97.3						
Change Period (Y+Rc), s		5.7		5.3		5.7						
Max Green Setting (Gmax), s		74.3		34.7		74.3						
Max Q Clear Time (g_c+I1), s		2.0		16.4		2.0						
Green Ext Time (p_c), s		64.4		1.0		37.2						

Intersection Summary												
HCM 7th Control Delay, s/veh			6.0									
HCM 7th LOS			A									

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	410	368	1734	480	202	1752
v/c Ratio	0.69	0.56	0.58	0.44	0.77	0.45
Control Delay (s/veh)	56.6	8.2	20.0	6.2	67.0	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.6	8.2	20.0	6.2	67.0	5.5
Queue Length 50th (ft)	109	0	269	52	152	145
Queue Length 95th (ft)	140	46	426	135	221	201
Internal Link Dist (ft)	1017		895			533
Turn Bay Length (ft)	410	415		300	210	
Base Capacity (vph)	925	810	2966	1102	372	3916
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.45	0.58	0.44	0.54	0.45

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	381	342	1613	446	188	1629
Future Volume (veh/h)	381	342	1613	446	188	1629
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1841	1826	1870	1856	1826	1870
Adj Flow Rate, veh/h	410	368	1734	0	202	1752
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	5	2	3	5	2
Cap, veh/h	775	427	2908		230	3753
Arrive On Green	0.16	0.16	1.00	0.00	0.13	0.73
Sat Flow, veh/h	4944	2723	5274	1572	1739	5274
Grp Volume(v), veh/h	410	368	1734	0	202	1752
Grp Sat Flow(s),veh/h/ln	1648	1362	1702	1572	1739	1702
Q Serve(g_s), s	9.2	15.8	0.0	0.0	13.7	16.6
Cycle Q Clear(g_c), s	9.2	15.8	0.0	0.0	13.7	16.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	775	427	2908		230	3753
V/C Ratio(X)	0.53	0.86	0.60		0.88	0.47
Avail Cap(c_a), veh/h	935	515	2908		377	3753
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.65	0.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	49.3	0.0	0.0	51.1	6.4
Incr Delay (d2), s/veh	0.2	10.7	0.6	0.0	7.4	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	6.0	0.2	0.0	6.3	4.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	46.7	60.0	0.6	0.0	58.5	6.8
LnGrp LOS	D	E	A		E	A
Approach Vol, veh/h	778		1734			1954
Approach Delay, s/veh	53.0		0.6			12.2
Approach LOS	D		A			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	19.9	74.0			93.9	26.1
Change Period (Y+Rc), s	4.0	5.7			5.7	7.3
Max Green Setting (Gmax), s	26.0	54.3			84.3	22.7
Max Q Clear Time (g_c+I1), s	15.7	2.0			18.6	17.8
Green Ext Time (p_c), s	0.2	28.7			34.4	1.0

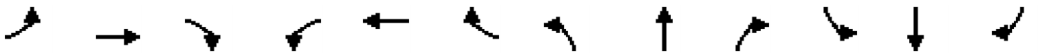
Intersection Summary	
HCM 7th Control Delay, s/veh	14.8
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	42	791	54	347	503	36	64	113	390	25	62	32
v/c Ratio	0.22	0.68	0.09	0.76	0.24	0.04	0.48	0.21	0.68	0.13	0.27	0.11
Control Delay (s/veh)	75.7	41.0	0.3	60.9	14.6	0.1	80.7	53.7	11.8	76.3	65.1	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	75.7	41.0	0.3	60.9	14.6	0.1	80.7	53.7	11.8	76.3	65.1	0.8
Queue Length 50th (ft)	16	275	0	255	100	0	49	43	0	9	47	0
Queue Length 95th (ft)	54	566	0	567	205	0	145	100	109	37	128	0
Internal Link Dist (ft)		2983			1900			400			1225	
Turn Bay Length (ft)	250		220	230		230	140		140	235		235
Base Capacity (vph)	1047	1971	992	844	2689	1185	258	958	712	548	535	532
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.40	0.05	0.41	0.19	0.03	0.25	0.12	0.55	0.05	0.12	0.06

Intersection Summary



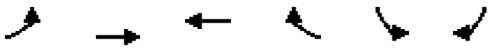
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	720	49	316	458	33	58	103	355	23	56	29
Future Volume (veh/h)	38	720	49	316	458	33	58	103	355	23	56	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1722	1678	1811	1870	1856	1811	1648	1693	1737	1796	1841	1870
Adj Flow Rate, veh/h	42	791	54	347	503	36	64	113	128	25	62	32
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	12	15	6	2	3	6	17	14	11	7	4	2
Cap, veh/h	154	1215	585	383	1930	840	92	437	200	117	207	178
Arrive On Green	0.05	0.38	0.38	0.21	0.55	0.55	0.06	0.14	0.14	0.04	0.11	0.11
Sat Flow, veh/h	3182	3188	1535	1781	3526	1535	1570	3216	1472	3319	1841	1585
Grp Volume(v), veh/h	42	791	54	347	503	36	64	113	128	25	62	32
Grp Sat Flow(s),veh/h/ln	1591	1594	1535	1781	1763	1535	1570	1608	1472	1659	1841	1585
Q Serve(g_s), s	1.3	20.2	2.2	18.7	7.4	1.1	3.9	3.1	8.1	0.7	3.1	1.8
Cycle Q Clear(g_c), s	1.3	20.2	2.2	18.7	7.4	1.1	3.9	3.1	8.1	0.7	3.1	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	154	1215	585	383	1930	840	92	437	200	117	207	178
V/C Ratio(X)	0.27	0.65	0.09	0.91	0.26	0.04	0.70	0.26	0.64	0.21	0.30	0.18
Avail Cap(c_a), veh/h	1290	2422	1166	1029	2679	1166	318	1043	477	673	653	562
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	25.1	19.6	37.8	11.8	10.3	45.6	38.2	40.4	46.3	40.2	39.7
Incr Delay (d2), s/veh	0.3	1.6	0.2	3.4	0.2	0.1	3.5	1.2	12.4	0.3	1.3	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	0.5	7.3	0.8	8.1	2.7	0.3	1.6	1.3	3.5	0.3	1.4	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.6	26.8	19.8	41.2	12.0	10.4	49.1	39.4	52.7	46.6	41.5	40.4
LnGrp LOS	D	C	B	D	B	B	D	D	D	D	D	D
Approach Vol, veh/h		887			886			305			119	
Approach Delay, s/veh		27.2			23.3			47.0			42.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	19.7	26.2	44.3	10.8	17.4	9.8	60.7
Change Period (Y+Rc), s	5.0	6.3	5.0	6.7	5.0	6.3	5.0	6.7
Max Green Setting (Gmax), s	20.0	32.0	57.0	75.0	20.0	35.0	40.0	75.0
Max Q Clear Time (g_c+I1), s	2.7	10.1	20.7	22.2	5.9	5.1	3.3	9.4
Green Ext Time (p_c), s	0.0	2.7	0.5	15.4	0.0	0.6	0.1	8.7

Intersection Summary	
HCM 7th Control Delay, s/veh	29.2
HCM 7th LOS	C

Notes

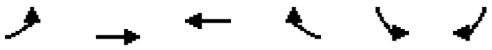
User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	242	933	674	134	144	167
v/c Ratio	0.69	0.44	0.55	0.21	0.52	0.42
Control Delay (s/veh)	42.5	7.5	22.0	4.5	39.0	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.5	7.5	22.0	4.5	39.0	9.2
Queue Length 50th (ft)	96	84	128	0	62	0
Queue Length 95th (ft)	#338	211	235	36	151	54
Internal Link Dist (ft)		551	2908		2583	
Turn Bay Length (ft)	260			240		240
Base Capacity (vph)	413	3023	2617	1182	496	576
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.31	0.26	0.11	0.29	0.29

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	230	886	640	127	137	159
Future Volume (veh/h)	230	886	640	127	137	159
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1604	1722	1841	1811	1826	1870
Adj Flow Rate, veh/h	242	933	674	134	144	167
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	20	12	4	6	5	2
Cap, veh/h	285	2101	1300	570	245	223
Arrive On Green	0.19	0.64	0.37	0.37	0.14	0.14
Sat Flow, veh/h	1527	3358	3589	1535	1739	1585
Grp Volume(v), veh/h	242	933	674	134	144	167
Grp Sat Flow(s),veh/h/ln	1527	1636	1749	1535	1739	1585
Q Serve(g_s), s	9.2	8.5	9.0	3.6	4.6	6.1
Cycle Q Clear(g_c), s	9.2	8.5	9.0	3.6	4.6	6.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	285	2101	1300	570	245	223
V/C Ratio(X)	0.85	0.44	0.52	0.23	0.59	0.75
Avail Cap(c_a), veh/h	511	3008	3215	1411	581	530
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	23.5	5.4	14.6	12.9	24.1	24.7
Incr Delay (d2), s/veh	2.7	0.3	0.7	0.4	0.8	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	1.6	3.0	1.1	1.8	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.2	5.7	15.3	13.4	24.9	26.6
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h		1175	808		311	
Approach Delay, s/veh		9.9	15.0		25.8	
Approach LOS		A	B		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		46.4		13.4	16.2	30.2
Change Period (Y+Rc), s		8.0		5.0	5.0	8.0
Max Green Setting (Gmax), s		55.0		20.0	20.0	55.0
Max Q Clear Time (g_c+I1), s		10.5		8.1	11.2	11.0
Green Ext Time (p_c), s		15.2		0.4	0.2	11.3

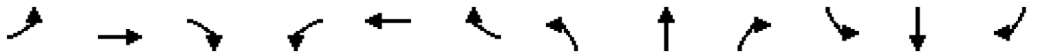
Intersection Summary	
HCM 7th Control Delay, s/veh	13.9
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	98	1014	24	7	775	105	31	27	9	81	33	74
v/c Ratio	0.36	0.48	0.03	0.04	0.45	0.13	0.18	0.06	0.02	0.29	0.08	0.17
Control Delay (s/veh)	48.0	16.2	0.0	54.8	22.9	5.8	52.3	35.1	0.1	47.8	33.0	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.0	16.2	0.0	54.8	22.9	5.8	52.3	35.1	0.1	47.8	33.0	9.0
Queue Length 50th (ft)	44	150	0	3	152	0	14	11	0	37	14	0
Queue Length 95th (ft)	159	503	0	26	404	39	67	46	0	137	51	35
Internal Link Dist (ft)		2908			4046			853			8570	
Turn Bay Length (ft)	245		245	245		245	245		245	200		200
Base Capacity (vph)	627	2866	1078	563	2920	1333	474	669	552	633	729	674
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.35	0.02	0.01	0.27	0.08	0.07	0.04	0.02	0.13	0.05	0.11

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	892	21	6	682	92	27	24	8	71	29	65
Future Volume (veh/h)	86	892	21	6	682	92	27	24	8	71	29	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1767	1500	1633	1796	1811	1307	1648	1470	1826	1811	1856
Adj Flow Rate, veh/h	98	1014	24	7	775	105	31	27	9	81	33	74
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	6	9	27	18	7	6	40	17	29	5	6	3
Cap, veh/h	157	1744	658	20	1507	675	58	156	118	146	240	207
Arrive On Green	0.09	0.52	0.52	0.01	0.44	0.44	0.05	0.09	0.09	0.08	0.13	0.13
Sat Flow, veh/h	1725	3357	1266	1555	3413	1528	1245	1648	1240	1739	1811	1563
Grp Volume(v), veh/h	98	1014	24	7	775	105	31	27	9	81	33	74
Grp Sat Flow(s),veh/h/ln	1725	1678	1266	1555	1706	1528	1245	1648	1240	1739	1811	1563
Q Serve(g_s), s	3.5	13.2	0.6	0.3	10.4	2.6	1.5	1.0	0.4	2.8	1.0	2.7
Cycle Q Clear(g_c), s	3.5	13.2	0.6	0.3	10.4	2.6	1.5	1.0	0.4	2.8	1.0	2.7
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	157	1744	658	20	1507	675	58	156	118	146	240	207
V/C Ratio(X)	0.63	0.58	0.04	0.35	0.51	0.16	0.54	0.17	0.08	0.56	0.14	0.36
Avail Cap(c_a), veh/h	544	3973	1499	491	4040	1808	393	520	391	549	572	493
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	27.8	10.5	7.5	31.0	12.8	10.6	29.5	26.4	26.1	27.9	24.3	25.0
Incr Delay (d2), s/veh	1.5	0.6	0.0	3.9	0.5	0.2	2.8	1.1	0.6	1.2	0.3	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	1.4	3.7	0.1	0.1	3.2	0.7	0.5	0.4	0.1	1.2	0.4	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.3	11.1	7.5	34.9	13.3	10.8	32.4	27.5	26.7	29.1	24.6	26.3
LnGrp LOS	C	B	A	C	B	B	C	C	C	C	C	C
Approach Vol, veh/h		1136			887			67			188	
Approach Delay, s/veh		12.6			13.2			29.7			27.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	10.6	4.8	38.6	6.9	13.0	9.8	33.7
Change Period (Y+Rc), s	4.0	* 4.6	4.0	5.7	4.0	4.6	4.0	5.7
Max Green Setting (Gmax), s	20.0	* 20	20.0	75.0	20.0	20.0	20.0	75.0
Max Q Clear Time (g_c+I1), s	4.8	3.0	2.3	15.2	3.5	4.7	5.5	12.4
Green Ext Time (p_c), s	0.1	0.2	0.0	17.7	0.0	0.4	0.1	13.0

Intersection Summary	
HCM 7th Control Delay, s/veh	14.5
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	402	559	357	450	391	59	1093	274	326	1155	347
v/c Ratio	0.86	0.74	0.81	0.66	0.64	0.52	1.10	0.48	0.91	0.76	0.33
Control Delay (s/veh)	78.2	56.7	76.5	57.4	9.4	84.6	104.6	21.3	84.3	39.6	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	78.2	56.7	76.5	57.4	9.4	84.6	104.6	21.3	84.3	39.6	2.5
Queue Length 50th (ft)	180	250	160	203	0	52	~575	74	283	448	0
Queue Length 95th (ft)	#343	344	#285	283	89	121	#1045	216	#547	#853	51
Internal Link Dist (ft)		4046		6046			2211			1465	
Turn Bay Length (ft)	265		235		240	245		240	235		350
Base Capacity (vph)	571	779	563	698	616	304	997	576	484	1526	1102
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.72	0.63	0.64	0.63	0.19	1.10	0.48	0.67	0.76	0.31

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	450	64	328	414	360	54	1006	252	300	1063	319
Future Volume (veh/h)	370	450	64	328	414	360	54	1006	252	300	1063	319
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1678	1811	1693	1856	1781	1752	1737	1811	1856	1870	1826	1811
Adj Flow Rate, veh/h	402	489	70	357	450	176	59	1093	49	326	1155	76
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	15	6	14	3	8	10	11	6	3	2	5	6
Cap, veh/h	457	580	83	417	562	247	75	1118	511	354	1659	951
Arrive On Green	0.15	0.19	0.19	0.12	0.17	0.17	0.05	0.32	0.32	0.20	0.48	0.48
Sat Flow, veh/h	3100	3023	431	3428	3385	1485	1654	3441	1572	1781	3469	1516
Grp Volume(v), veh/h	402	277	282	357	450	176	59	1093	49	326	1155	76
Grp Sat Flow(s),veh/h/ln	1550	1721	1734	1714	1692	1485	1654	1721	1572	1781	1735	1516
Q Serve(g_s), s	15.9	19.4	19.6	12.8	16.0	14.0	4.4	39.3	2.7	22.4	32.5	2.5
Cycle Q Clear(g_c), s	15.9	19.4	19.6	12.8	16.0	14.0	4.4	39.3	2.7	22.4	32.5	2.5
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	457	330	332	417	562	247	75	1118	511	354	1659	951
V/C Ratio(X)	0.88	0.84	0.85	0.86	0.80	0.71	0.79	0.98	0.10	0.92	0.70	0.08
Avail Cap(c_a), veh/h	645	377	380	631	661	290	344	1118	511	542	1659	951
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	52.2	48.7	48.7	53.8	50.1	49.3	59.1	41.8	29.4	49.1	25.5	9.2
Incr Delay (d2), s/veh	7.8	16.1	16.7	4.8	7.5	9.3	6.9	21.7	0.1	12.0	1.5	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	6.5	9.6	9.8	5.6	7.2	5.7	2.0	19.3	1.0	10.9	13.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.0	64.8	65.5	58.6	57.6	58.6	66.0	63.5	29.5	61.1	27.0	9.3
LnGrp LOS	E	E	E	E	E	E	E	E	C	E	C	A
Approach Vol, veh/h		961			983			1201			1557	
Approach Delay, s/veh		63.0			58.1			62.2			33.3	
Approach LOS		E			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.8	47.0	19.2	30.0	9.6	66.2	22.4	26.8
Change Period (Y+Rc), s	4.0	6.4	4.0	6.0	4.0	6.4	4.0	6.0
Max Green Setting (Gmax), s	38.0	40.6	23.0	27.4	26.0	52.6	26.0	24.4
Max Q Clear Time (g_c+I1), s	24.4	41.3	14.8	21.6	6.4	34.5	17.9	18.0
Green Ext Time (p_c), s	0.4	0.0	0.4	2.3	0.0	10.7	0.5	2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	51.9
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	84	797	37	901	224	179	26	268	77
v/c Ratio	0.60	0.86	0.38	0.56	0.14	0.80	0.08	0.83	0.14
Control Delay (s/veh)	81.2	42.2	77.5	30.1	0.2	86.6	0.5	76.3	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	81.2	42.2	77.5	30.1	0.2	86.6	0.5	76.3	7.2
Queue Length 50th (ft)	74	606	32	293	0	159	0	233	0
Queue Length 95th (ft)	144	#1119	79	479	0	#273	0	360	36
Internal Link Dist (ft)		6046		7395		1514		6530	
Turn Bay Length (ft)	235		115		280		50		400
Base Capacity (vph)	265	931	268	1745	1564	223	473	529	641
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.86	0.14	0.52	0.14	0.80	0.05	0.51	0.12

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	746	27	36	874	217	42	132	25	157	103	75
Future Volume (veh/h)	81	746	27	36	874	217	42	132	25	157	103	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1856	1841	1841	1826	1870	1811	1885	1826	1885	1826	1856
Adj Flow Rate, veh/h	84	769	28	37	901	0	43	136	26	162	106	77
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	3	4	4	5	2	6	1	5	1	5	3
Cap, veh/h	106	877	32	64	1624		51	160	232	187	122	370
Arrive On Green	0.06	0.49	0.49	0.04	0.47	0.00	0.11	0.11	0.11	0.17	0.17	0.17
Sat Flow, veh/h	1739	1779	65	1753	3469	1585	447	1415	1547	1071	701	1572
Grp Volume(v), veh/h	84	0	797	37	901	0	179	0	26	268	0	77
Grp Sat Flow(s),veh/h/ln	1739	0	1844	1753	1735	1585	1863	0	1547	1772	0	1572
Q Serve(g_s), s	5.4	0.0	43.4	2.3	21.0	0.0	10.6	0.0	1.6	16.6	0.0	4.4
Cycle Q Clear(g_c), s	5.4	0.0	43.4	2.3	21.0	0.0	10.6	0.0	1.6	16.6	0.0	4.4
Prop In Lane	1.00		0.04	1.00		1.00	0.24		1.00	0.60		1.00
Lane Grp Cap(c), veh/h	106	0	909	64	1624		211	0	232	309	0	370
V/C Ratio(X)	0.79	0.00	0.88	0.58	0.55		0.85	0.00	0.11	0.87	0.00	0.21
Avail Cap(c_a), veh/h	325	0	1131	327	1819		255	0	268	630	0	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	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.1	0.0	25.5	53.3	21.5	0.0	48.9	0.0	41.4	45.2	0.0	34.6
Incr Delay (d2), s/veh	4.8	0.0	8.1	3.0	0.6	0.0	17.2	0.0	0.1	2.9	0.0	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	2.4	0.0	19.3	1.1	8.1	0.0	5.8	0.0	0.6	7.4	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.9	0.0	33.6	56.4	22.1	0.0	66.2	0.0	41.4	48.1	0.0	34.7
LnGrp LOS	E		C	E	C		E		D	D		C
Approach Vol, veh/h		881			938			205			345	
Approach Delay, s/veh		35.8			23.4			63.0			45.1	
Approach LOS		D			C			E			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	17.3	8.1	61.4	25.6	10.9	58.7
Change Period (Y+Rc), s	4.6	4.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	15.4	21.0	69.0	40.0	21.0	59.0
Max Q Clear Time (g_c+I1), s	12.6	4.3	45.4	18.6	7.4	23.0
Green Ext Time (p_c), s	0.2	0.0	10.0	1.1	0.1	12.7

Intersection Summary	
HCM 7th Control Delay, s/veh	34.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

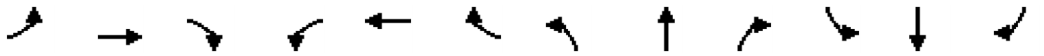
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	175	265	507	141	372	125	664	1211	78	147	1454	187
v/c Ratio	0.73	0.41	0.72	0.68	0.61	0.33	0.86	0.56	0.10	0.53	1.00	0.34
Control Delay (s/veh)	66.4	43.9	9.7	67.0	49.8	7.7	55.4	27.4	3.3	51.7	55.3	21.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	66.4	43.9	9.7	67.0	49.8	7.7	55.4	27.4	3.3	51.7	55.3	21.8
Queue Length 50th (ft)	132	95	0	106	141	0	252	248	0	47	~461	101
Queue Length 95th (ft)	198	128	95	167	181	42	322	367	23	m61	m#695	m119
Internal Link Dist (ft)		300			4371			1689			7673	
Turn Bay Length (ft)	195		360	225		125	215		250	250		175
Base Capacity (vph)	476	653	706	491	620	388	827	2179	763	462	1461	544
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.41	0.72	0.29	0.60	0.32	0.80	0.56	0.10	0.32	1.00	0.34

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	244	466	130	342	115	611	1114	72	135	1338	172
Future Volume (veh/h)	161	244	466	130	342	115	611	1114	72	135	1338	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1841	1856	1885	1841	1856	1781	1796	1885	1885	1856	1856
Adj Flow Rate, veh/h	175	265	94	141	372	22	664	1211	30	147	1454	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	4	3	1	4	3	8	7	1	1	3	3
Cap, veh/h	204	521	234	169	453	201	732	2605	836	205	1862	
Arrive On Green	0.11	0.15	0.15	0.09	0.13	0.13	0.22	0.53	0.53	0.06	0.37	0.00
Sat Flow, veh/h	1795	3497	1572	1795	3497	1551	3291	4904	1575	3483	5066	1572
Grp Volume(v), veh/h	175	265	94	141	372	22	664	1211	30	147	1454	0
Grp Sat Flow(s),veh/h/ln	1795	1749	1572	1795	1749	1551	1646	1635	1575	1742	1689	1572
Q Serve(g_s), s	11.5	8.4	6.5	9.3	12.4	1.5	23.6	18.5	1.1	5.0	30.6	0.0
Cycle Q Clear(g_c), s	11.5	8.4	6.5	9.3	12.4	1.5	23.6	18.5	1.1	5.0	30.6	0.0
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	204	521	234	169	453	201	732	2605	836	205	1862	
V/C Ratio(X)	0.86	0.51	0.40	0.83	0.82	0.11	0.91	0.46	0.04	0.72	0.78	
Avail Cap(c_a), veh/h	479	521	234	494	516	229	823	2605	836	464	1862	
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	0.37	0.37	0.00
Uniform Delay (d), s/veh	52.2	47.0	46.2	53.4	50.9	46.1	45.4	17.5	13.4	55.5	33.7	0.0
Incr Delay (d2), s/veh	4.0	1.4	1.9	4.0	11.2	0.5	12.8	0.6	0.1	0.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	3.7	2.6	4.3	6.1	0.6	10.6	6.6	0.4	2.2	12.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.2	48.4	48.1	57.4	62.0	46.6	58.2	18.1	13.5	56.1	34.9	0.0
LnGrp LOS	E	D	D	E	E	D	E	B	B	E	C	
Approach Vol, veh/h		534			535			1905			1601	
Approach Delay, s/veh		50.9			60.2			32.0			36.9	
Approach LOS		D			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	69.7	15.3	23.9	30.7	50.1	17.6	21.6
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	16.0	35.0	33.0	16.0	30.0	21.0	32.0	* 18
Max Q Clear Time (g_c+I1), s	7.0	20.5	11.3	10.4	25.6	32.6	13.5	14.4
Green Ext Time (p_c), s	0.1	7.6	0.2	1.3	1.1	0.0	0.2	1.1

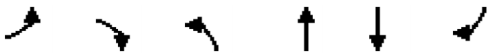
Intersection Summary	
HCM 7th Control Delay, s/veh	39.2
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

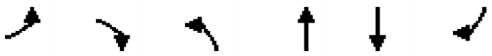
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	178	48	48	614	683	200
v/c Ratio	0.40	0.11	0.17	0.30	0.37	0.22
Control Delay (s/veh)	16.6	6.2	20.1	5.8	9.9	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.6	6.2	20.1	5.8	9.9	3.1
Queue Length 50th (ft)	23	0	7	32	36	0
Queue Length 95th (ft)	63	11	29	51	90	14
Internal Link Dist (ft)	1350			1889	1990	
Turn Bay Length (ft)		200	240			240
Base Capacity (vph)	894	832	278	2578	1950	965
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.06	0.17	0.24	0.35	0.21

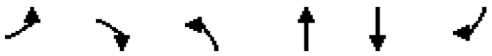
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	123	33	33	424	471	138
Future Volume (veh/h)	123	33	33	424	471	138
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1885	1900	1781	1826	1885
Adj Flow Rate, veh/h	178	48	48	614	683	200
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69
Percent Heavy Veh, %	2	1	0	8	5	1
Cap, veh/h	268	241	99	1889	1241	554
Arrive On Green	0.15	0.15	0.05	0.56	0.36	0.36
Sat Flow, veh/h	1781	1598	1810	3474	3561	1550
Grp Volume(v), veh/h	178	48	48	614	683	200
Grp Sat Flow(s),veh/h/ln	1781	1598	1810	1692	1735	1550
Q Serve(g_s), s	2.9	0.8	0.8	3.0	4.9	2.9
Cycle Q Clear(g_c), s	2.9	0.8	0.8	3.0	4.9	2.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	268	241	99	1889	1241	554
V/C Ratio(X)	0.66	0.20	0.49	0.33	0.55	0.36
Avail Cap(c_a), veh/h	1038	931	322	3069	2022	903
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	12.4	11.5	14.2	3.7	7.9	7.3
Incr Delay (d2), s/veh	2.8	0.4	3.7	0.1	0.4	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.8	0.3	0.2	1.0	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.2	11.9	17.8	3.8	8.3	7.7
LnGrp LOS	B	B	B	A	A	A
Approach Vol, veh/h	226			662	883	
Approach Delay, s/veh	14.5			4.8	8.2	
Approach LOS	B			A	A	

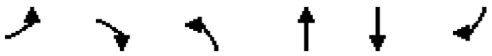
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		21.7		9.2	6.2	15.5
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		28.0		18.0	5.5	18.0
Max Q Clear Time (g_c+I1), s		5.0		4.9	2.8	6.9
Green Ext Time (p_c), s		4.0		0.5	0.0	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	7.7
HCM 7th LOS	A



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	51	109	209	601	697	27
v/c Ratio	0.19	0.33	0.56	0.25	0.51	0.04
Control Delay (s/veh)	19.8	8.1	23.4	3.5	13.7	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.8	8.1	23.4	3.5	13.7	5.4
Queue Length 50th (ft)	12	0	49	26	78	0
Queue Length 95th (ft)	28	18	81	35	92	8
Internal Link Dist (ft)	1043			3346	1889	
Turn Bay Length (ft)		150	235			235
Base Capacity (vph)	719	702	415	2576	1474	668
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.16	0.50	0.23	0.47	0.04

Intersection Summary



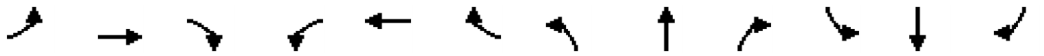
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	36	76	146	421	488	19
Future Volume (veh/h)	36	76	146	421	488	19
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1796	1841	1900
Adj Flow Rate, veh/h	51	109	209	601	697	27
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Percent Heavy Veh, %	0	1	1	7	4	0
Cap, veh/h	205	181	274	2144	1211	532
Arrive On Green	0.11	0.11	0.15	0.63	0.35	0.35
Sat Flow, veh/h	1810	1598	1795	3503	3589	1538
Grp Volume(v), veh/h	51	109	209	601	697	27
Grp Sat Flow(s),veh/h/ln	1810	1598	1795	1706	1749	1538
Q Serve(g_s), s	0.9	2.3	3.9	2.8	5.7	0.4
Cycle Q Clear(g_c), s	0.9	2.3	3.9	2.8	5.7	0.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	205	181	274	2144	1211	532
V/C Ratio(X)	0.25	0.60	0.76	0.28	0.58	0.05
Avail Cap(c_a), veh/h	937	827	542	3238	1810	796
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	14.1	14.7	14.1	2.9	9.3	7.6
Incr Delay (d2), s/veh	0.6	3.2	4.4	0.1	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.1	1.5	0.1	1.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.7	17.9	18.6	3.0	9.7	7.6
LnGrp LOS	B	B	B	A	A	A
Approach Vol, veh/h	160			810	724	
Approach Delay, s/veh	16.9			7.0	9.6	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		26.3		8.4	9.8	16.5
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		33.0		18.0	10.5	18.0
Max Q Clear Time (g_c+I1), s		4.8		4.3	5.9	7.7
Green Ext Time (p_c), s		4.1		0.4	0.2	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	9.1
HCM 7th LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	5	48	54	75	80	60	57	407	88	84	580	11
v/c Ratio	0.01	0.11	0.12	0.18	0.18	0.13	0.14	0.29	0.13	0.21	0.37	0.02
Control Delay (s/veh)	26.8	27.0	1.5	26.9	26.7	3.1	27.4	19.5	5.4	27.1	17.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.8	27.0	1.5	26.9	26.7	3.1	27.4	19.5	5.4	27.1	17.9	0.0
Queue Length 50th (ft)	2	16	0	25	27	0	19	66	0	29	99	0
Queue Length 95th (ft)	10	46	3	63	66	9	52	107	24	67	147	0
Internal Link Dist (ft)		112			658			1620			940	
Turn Bay Length (ft)				245		250	240		235	240		230
Base Capacity (vph)	814	841	781	761	809	761	814	2417	1118	784	2394	1023
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.06	0.07	0.10	0.10	0.08	0.07	0.17	0.08	0.11	0.24	0.01

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	40	45	62	66	50	47	338	73	70	481	9
Future Volume (veh/h)	4	40	45	62	66	50	47	338	73	70	481	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1885	1796	1811	1870	1900	1826	1841	1841	1811	1693
Adj Flow Rate, veh/h	5	48	54	75	80	60	57	407	88	84	580	11
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	2	1	7	6	2	0	5	4	4	6	14
Cap, veh/h	243	252	215	281	297	259	155	828	372	188	894	373
Arrive On Green	0.13	0.13	0.13	0.16	0.16	0.16	0.09	0.24	0.24	0.11	0.26	0.26
Sat Flow, veh/h	1810	1870	1595	1711	1811	1582	1810	3469	1560	1753	3441	1434
Grp Volume(v), veh/h	5	48	54	75	80	60	57	407	88	84	580	11
Grp Sat Flow(s),veh/h/ln	1810	1870	1595	1711	1811	1582	1810	1735	1560	1753	1721	1434
Q Serve(g_s), s	0.1	1.2	1.6	2.0	2.1	1.7	1.6	5.4	2.4	2.4	8.0	0.3
Cycle Q Clear(g_c), s	0.1	1.2	1.6	2.0	2.1	1.7	1.6	5.4	2.4	2.4	8.0	0.3
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	243	252	215	281	297	259	155	828	372	188	894	373
V/C Ratio(X)	0.02	0.19	0.25	0.27	0.27	0.23	0.37	0.49	0.24	0.45	0.65	0.03
Avail Cap(c_a), veh/h	682	704	601	644	682	596	682	2613	1175	660	2592	1080
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	19.9	20.4	20.6	19.4	19.4	19.3	22.9	17.4	16.3	22.2	17.5	14.7
Incr Delay (d2), s/veh	0.0	0.4	0.6	0.5	0.5	0.5	1.5	0.5	0.3	1.7	0.8	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	0.1	0.5	0.6	0.8	0.8	0.6	0.6	1.8	0.7	0.9	2.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.0	20.8	21.2	19.9	19.9	19.7	24.4	17.9	16.6	23.9	18.3	14.7
LnGrp LOS	B	C	C	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		107			215			552			675	
Approach Delay, s/veh		20.9			19.9			18.4			18.9	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	18.7		11.1	8.5	19.8		13.6				
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9				
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0				
Max Q Clear Time (g_c+I1), s	4.4	7.4		3.6	3.6	10.0		4.1				
Green Ext Time (p_c), s	0.1	2.8		0.3	0.1	3.8		0.7				

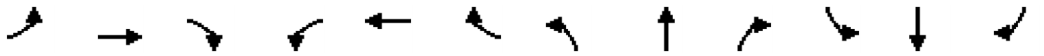
Intersection Summary												
HCM 7th Control Delay, s/veh			19.0									
HCM 7th LOS			B									

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	40	8	177	29	7	8	243	581	48	9	677	63
v/c Ratio	0.21	0.03	0.47	0.16	0.03	0.03	0.67	0.32	0.05	0.05	0.63	0.11
Control Delay (s/veh)	39.7	30.7	10.1	40.0	31.2	0.2	38.3	10.6	0.1	41.0	25.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.7	30.7	10.1	40.0	31.2	0.2	38.3	10.6	0.1	41.0	25.2	0.4
Queue Length 50th (ft)	12	2	0	9	2	0	71	33	0	3	96	0
Queue Length 95th (ft)	54	15	28	44	14	0	213	157	0	20	239	0
Internal Link Dist (ft)		1402			934			1903			1620	
Turn Bay Length (ft)	245		240	225		240	235		235	240		230
Base Capacity (vph)	508	1080	983	641	1215	1041	641	1819	893	512	1071	567
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.01	0.18	0.05	0.01	0.01	0.38	0.32	0.05	0.02	0.63	0.11

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	6	133	22	5	6	182	436	36	7	508	47
Future Volume (veh/h)	30	6	133	22	5	6	182	436	36	7	508	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1697	1710	1710	1710	1710	1710	1710	1630	1710	1710	1643	1590
Adj Flow Rate, veh/h	40	8	177	29	7	8	243	581	48	9	677	63
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	1	0	0	0	0	0	0	6	0	0	5	9
Cap, veh/h	90	315	263	72	295	243	289	1392	649	26	899	386
Arrive On Green	0.06	0.18	0.18	0.04	0.17	0.17	0.18	0.45	0.45	0.02	0.29	0.29
Sat Flow, veh/h	1616	1710	1426	1629	1710	1405	1629	3097	1444	1629	3122	1340
Grp Volume(v), veh/h	40	8	177	29	7	8	243	581	48	9	677	63
Grp Sat Flow(s),veh/h/ln	1616	1710	1426	1629	1710	1405	1629	1548	1444	1629	1561	1340
Q Serve(g_s), s	1.5	0.2	7.3	1.1	0.2	0.3	9.1	8.0	1.2	0.3	12.4	2.2
Cycle Q Clear(g_c), s	1.5	0.2	7.3	1.1	0.2	0.3	9.1	8.0	1.2	0.3	12.4	2.2
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	90	315	263	72	295	243	289	1392	649	26	899	386
V/C Ratio(X)	0.44	0.03	0.67	0.40	0.02	0.03	0.84	0.42	0.07	0.34	0.75	0.16
Avail Cap(c_a), veh/h	512	1084	904	645	1084	891	645	1392	649	516	990	425
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	28.8	21.1	24.0	29.3	21.7	21.7	25.1	11.8	9.9	30.7	20.4	16.8
Incr Delay (d2), s/veh	1.3	0.1	5.5	1.3	0.1	0.1	2.5	0.7	0.2	2.8	5.7	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	0.6	0.1	2.6	0.4	0.1	0.1	3.3	2.3	0.3	0.1	4.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.1	21.2	29.5	30.7	21.7	21.8	27.6	12.5	10.1	33.5	26.2	17.7
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	C	B
Approach Vol, veh/h		225			44			872			749	
Approach Delay, s/veh		29.3			27.7			16.6			25.5	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	16.9	5.0	33.7	6.8	17.6	15.2	23.5
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	4.0	* 5.3
Max Green Setting (Gmax), s	20.0	40.0	20.0	23.0	25.0	40.0	25.0	* 20
Max Q Clear Time (g_c+I1), s	3.5	2.3	2.3	10.0	3.1	9.3	11.1	14.4
Green Ext Time (p_c), s	0.0	0.1	0.0	6.0	0.0	1.3	0.3	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	21.9
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	27	155	65	3	230	1172	73	14	1122	41
v/c Ratio	0.15	0.52	0.35	0.01	0.69	0.52	0.07	0.09	0.75	0.06
Control Delay (s/veh)	42.6	14.1	46.1	0.0	47.0	11.0	2.0	44.0	26.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.6	14.1	46.1	0.0	47.0	11.0	2.0	44.0	26.2	0.4
Queue Length 50th (ft)	15	0	37	0	127	160	0	8	277	0
Queue Length 95th (ft)	35	31	66	0	172	247	9	24	306	0
Internal Link Dist (ft)	1345		900			2172			1903	
Turn Bay Length (ft)		240		100	250		240	240		250
Base Capacity (vph)	429	498	430	458	416	2287	1055	429	1892	818
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.31	0.15	0.01	0.55	0.51	0.07	0.03	0.59	0.05

Intersection Summary

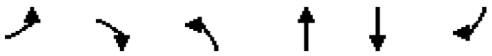
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	0	115	47	1	2	170	867	54	10	830	30
Future Volume (veh/h)	20	0	115	47	1	2	170	867	54	10	830	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1885	1900	1900	1900	1856	1856	1900	1900	1870	1737
Adj Flow Rate, veh/h	27	0	155	64	1	3	230	1172	73	14	1122	41
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Percent Heavy Veh, %	0	0	1	0	0	0	3	3	0	0	2	11
Cap, veh/h	218	0	191	147	2	131	270	1921	875	42	1477	610
Arrive On Green	0.12	0.00	0.12	0.08	0.08	0.08	0.15	0.54	0.54	0.02	0.42	0.42
Sat Flow, veh/h	1810	0	1586	1783	28	1595	1767	3526	1606	1810	3554	1467
Grp Volume(v), veh/h	27	0	155	65	0	3	230	1172	73	14	1122	41
Grp Sat Flow(s),veh/h/ln	1810	0	1586	1811	0	1595	1767	1763	1606	1810	1777	1467
Q Serve(g_s), s	1.1	0.0	7.9	2.8	0.0	0.1	10.5	18.7	1.8	0.6	22.2	1.4
Cycle Q Clear(g_c), s	1.1	0.0	7.9	2.8	0.0	0.1	10.5	18.7	1.8	0.6	22.2	1.4
Prop In Lane	1.00		1.00	0.98		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	0	191	149	0	131	270	1921	875	42	1477	610
V/C Ratio(X)	0.12	0.00	0.81	0.44	0.00	0.02	0.85	0.61	0.08	0.33	0.76	0.07
Avail Cap(c_a), veh/h	439	0	385	439	0	387	429	1924	876	439	1723	711
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	32.4	0.0	35.4	36.0	0.0	34.8	34.0	12.8	9.0	39.6	20.6	14.5
Incr Delay (d2), s/veh	0.1	0.0	3.1	0.7	0.0	0.0	5.3	0.8	0.1	1.7	2.2	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	0.5	0.0	3.2	1.3	0.0	0.1	4.6	6.2	0.5	0.3	8.5	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.5	0.0	38.5	36.8	0.0	34.8	39.4	13.6	9.0	41.3	22.8	14.6
LnGrp LOS	C		D	D		C	D	B	A	D	C	B
Approach Vol, veh/h		182			68			1475			1177	
Approach Delay, s/veh		37.6			36.7			17.4			22.7	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	50.9		14.8	16.6	40.3		10.8				
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.0				
Max Green Setting (Gmax), s	20.0	45.0		20.0	20.0	40.0		20.0				
Max Q Clear Time (g_c+I1), s	2.6	20.7		9.9	12.5	24.2		4.8				
Green Ext Time (p_c), s	0.0	14.3		0.2	0.2	10.0		0.1				

Intersection Summary			
HCM 7th Control Delay, s/veh		21.3	
HCM 7th LOS		C	

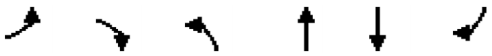
Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	145	158	172	1057	1172	174
v/c Ratio	0.55	0.43	0.57	0.43	0.70	0.20
Control Delay (s/veh)	36.9	9.3	35.1	5.2	18.1	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.9	9.3	35.1	5.2	18.1	4.9
Queue Length 50th (ft)	59	0	69	79	194	9
Queue Length 95th (ft)	116	45	130	133	325	46
Internal Link Dist (ft)	1304			2460	2779	
Turn Bay Length (ft)	215		245			215
Base Capacity (vph)	1079	1010	457	2741	1680	849
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.16	0.38	0.39	0.70	0.20

Intersection Summary



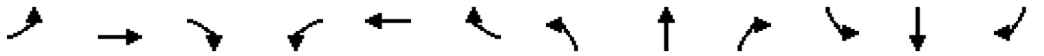
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	128	139	151	930	1031	153
Future Volume (veh/h)	128	139	151	930	1031	153
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1870	1885	1826	1841	1900
Adj Flow Rate, veh/h	145	158	172	1057	1172	174
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	2	1	5	4	0
Cap, veh/h	248	218	223	2392	1735	799
Arrive On Green	0.14	0.14	0.12	0.69	0.50	0.50
Sat Flow, veh/h	1810	1585	1795	3561	3589	1610
Grp Volume(v), veh/h	145	158	172	1057	1172	174
Grp Sat Flow(s),veh/h/ln	1810	1585	1795	1735	1749	1610
Q Serve(g_s), s	4.3	5.5	5.4	7.9	14.7	3.5
Cycle Q Clear(g_c), s	4.3	5.5	5.4	7.9	14.7	3.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	248	218	223	2392	1735	799
V/C Ratio(X)	0.58	0.73	0.77	0.44	0.68	0.22
Avail Cap(c_a), veh/h	1316	1153	560	2392	2059	948
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	23.4	23.9	24.5	4.0	11.0	8.2
Incr Delay (d2), s/veh	0.8	1.7	5.6	0.3	1.1	0.3
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	0.1	2.3	1.2	4.2	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	24.2	25.6	30.1	4.3	12.1	8.5
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	303			1229	1346	
Approach Delay, s/veh	24.9			7.9	11.6	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		45.8		11.9	11.2	34.6
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s		24.0		42.0	18.0	34.0
Max Q Clear Time (g_c+I1), s		9.9		7.5	7.4	16.7
Green Ext Time (p_c), s		8.8		0.5	0.3	12.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.4
HCM 7th LOS	B

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	159	33	91	75	23	91	1085	61	20	1139	216
v/c Ratio	0.56	0.11	0.27	0.35	0.08	0.41	0.62	0.08	0.11	0.74	0.28
Control Delay (s/veh)	49.2	39.5	6.3	49.1	0.6	49.4	20.2	0.3	48.2	28.4	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.2	39.5	6.3	49.1	0.6	49.4	20.2	0.3	48.2	28.4	6.7
Queue Length 50th (ft)	96	19	0	46	0	55	209	0	12	312	14
Queue Length 95th (ft)	169	48	25	96	0	110	404	0	38	474	64
Internal Link Dist (ft)		1251		1270			3803			2460	
Turn Bay Length (ft)	130		130			250		250	250		255
Base Capacity (vph)	438	461	467	448	471	430	1984	863	438	1795	884
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.07	0.19	0.17	0.05	0.21	0.55	0.07	0.05	0.63	0.24

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	29	79	39	26	20	79	944	53	17	991	188
Future Volume (veh/h)	138	29	79	39	26	20	79	944	53	17	991	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1900	1870	1781	1678	1900	1826	1856
Adj Flow Rate, veh/h	159	33	91	45	30	23	91	1085	61	20	1139	216
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	2	0	0	0	2	8	15	0	5	3
Cap, veh/h	218	229	190	100	67	143	157	1589	652	65	1448	655
Arrive On Green	0.12	0.12	0.12	0.09	0.09	0.09	0.09	0.47	0.47	0.04	0.42	0.42
Sat Flow, veh/h	1810	1900	1581	1107	738	1583	1781	3385	1389	1810	3469	1569
Grp Volume(v), veh/h	159	33	91	75	0	23	91	1085	61	20	1139	216
Grp Sat Flow(s),veh/h/ln	1810	1900	1581	1845	0	1583	1781	1692	1389	1810	1735	1569
Q Serve(g_s), s	6.6	1.2	4.2	3.0	0.0	1.0	3.8	19.6	1.9	0.8	22.3	7.3
Cycle Q Clear(g_c), s	6.6	1.2	4.2	3.0	0.0	1.0	3.8	19.6	1.9	0.8	22.3	7.3
Prop In Lane	1.00		1.00	0.60		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	229	190	166	0	143	157	1589	652	65	1448	655
V/C Ratio(X)	0.73	0.14	0.48	0.45	0.00	0.16	0.58	0.68	0.09	0.31	0.79	0.33
Avail Cap(c_a), veh/h	463	486	404	472	0	405	456	1861	764	463	1908	863
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	33.2	30.8	32.1	33.7	0.0	32.8	34.3	16.2	11.5	36.7	19.7	15.4
Incr Delay (d2), s/veh	4.7	0.3	1.9	1.9	0.0	0.5	3.4	0.8	0.1	2.6	1.7	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	3.1	0.6	1.6	1.4	0.0	0.4	1.7	6.5	0.5	0.4	8.1	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.8	31.1	34.0	35.6	0.0	33.4	37.6	17.0	11.6	39.3	21.4	15.7
LnGrp LOS	D	C	C	D		C	D	B	B	D	C	B
Approach Vol, veh/h		283			98			1237			1375	
Approach Delay, s/veh		35.8			35.1			18.3			20.8	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	42.7		15.3	10.9	38.6		13.3				
Change Period (Y+Rc), s	4.0	6.0		5.9	4.0	6.0		6.3				
Max Green Setting (Gmax), s	20.0	43.0		20.0	20.0	43.0		20.0				
Max Q Clear Time (g_c+I1), s	2.8	21.6		8.6	5.8	24.3		5.0				
Green Ext Time (p_c), s	0.0	7.7		0.7	0.1	8.2		0.3				

Intersection Summary			
HCM 7th Control Delay, s/veh		21.6	
HCM 7th LOS		C	

Notes
User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	713	627	15	75	8
Future Vol, veh/h	2	713	627	15	75	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	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	2	775	682	16	82	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	698	0	-	0	1469	690
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	779	-
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	899	-	-	-	140	445
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	452	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	899	-	-	-	140	445
Mov Cap-2 Maneuver	-	-	-	-	280	-
Stage 1	-	-	-	-	497	-
Stage 2	-	-	-	-	452	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.03	0	22.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	899	-	-	-	290
HCM Lane V/C Ratio	0.002	-	-	-	0.311
HCM Ctrl Dly (s/v)	9	-	-	-	22.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	1.3

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	704	624	11	11	1
Future Vol, veh/h	1	704	624	11	11	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	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	1	765	678	12	12	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	690	0	-	0	1452	684
Stage 1	-	-	-	-	684	-
Stage 2	-	-	-	-	767	-
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	904	-	-	-	144	449
Stage 1	-	-	-	-	501	-
Stage 2	-	-	-	-	458	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	904	-	-	-	144	449
Mov Cap-2 Maneuver	-	-	-	-	284	-
Stage 1	-	-	-	-	500	-
Stage 2	-	-	-	-	458	-

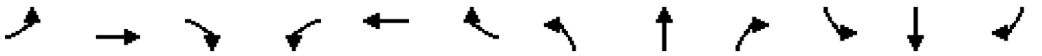
Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.01	0	17.88
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	904	-	-	-	293
HCM Lane V/C Ratio	0.001	-	-	-	0.045
HCM Ctrl Dly (s/v)	9	-	-	-	17.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Appendix H
Opening Year With Project and Improvements Conditions Synchro Reports

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	63	232	42	101	177	408	46	303	141	539	389	70
v/c Ratio	0.14	0.30	0.11	0.22	0.23	0.62	0.26	0.47	0.34	0.70	0.28	0.10
Control Delay (s/veh)	44.8	29.9	0.6	44.0	29.0	7.8	48.9	35.0	9.2	38.4	20.9	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.8	29.9	0.6	44.0	29.0	7.8	48.9	35.0	9.2	38.4	20.9	2.5
Queue Length 50th (ft)	12	45	0	20	34	0	18	62	0	109	68	0
Queue Length 95th (ft)	52	113	0	75	87	28	80	158	35	286	157	6
Internal Link Dist (ft)		3422			3725			6925			3346	
Turn Bay Length (ft)	240		250	240		250	240		245	240		250
Base Capacity (vph)	1399	870	411	1413	880	691	981	649	416	2172	1368	701
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.27	0.10	0.07	0.20	0.59	0.05	0.47	0.34	0.25	0.28	0.10

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	183	33	80	140	322	36	239	111	426	307	55
Future Volume (veh/h)	50	183	33	80	140	322	36	239	111	426	307	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.93	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1678	1885	1870	1856	1811	1767	1900	1870	1796	1900
Adj Flow Rate, veh/h	63	232	42	101	177	408	46	303	141	539	389	70
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	15	1	2	3	6	9	0	2	7	0
Cap, veh/h	331	732	287	415	815	360	106	506	226	679	1030	467
Arrive On Green	0.10	0.21	0.21	0.12	0.23	0.23	0.06	0.15	0.15	0.20	0.30	0.30
Sat Flow, veh/h	3456	3554	1395	3483	3554	1568	1725	3357	1497	3456	3413	1546
Grp Volume(v), veh/h	63	232	42	101	177	408	46	303	141	539	389	70
Grp Sat Flow(s),veh/h/ln	1728	1777	1395	1742	1777	1568	1725	1678	1497	1728	1706	1546
Q Serve(g_s), s	1.0	3.5	1.5	1.6	2.5	14.3	1.6	5.3	5.5	9.3	5.6	2.1
Cycle Q Clear(g_c), s	1.0	3.5	1.5	1.6	2.5	14.3	1.6	5.3	5.5	9.3	5.6	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	331	732	287	415	815	360	106	506	226	679	1030	467
V/C Ratio(X)	0.19	0.32	0.15	0.24	0.22	1.13	0.43	0.60	0.62	0.79	0.38	0.15
Avail Cap(c_a), veh/h	1608	815	320	1620	815	360	1134	608	271	2495	1030	467
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	26.0	21.0	20.3	24.9	19.5	24.0	28.2	24.7	24.8	23.8	17.1	15.9
Incr Delay (d2), s/veh	0.1	0.6	0.6	0.1	0.3	89.0	1.0	2.8	7.0	0.8	1.1	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	0.4	1.3	0.5	0.6	0.9	13.5	0.6	2.0	2.2	3.4	2.1	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.1	21.6	20.8	25.0	19.8	113.0	29.2	27.5	31.9	24.6	18.2	16.6
LnGrp LOS	C	C	C	C	B	F	C	C	C	C	B	B
Approach Vol, veh/h		337			686			490			998	
Approach Delay, s/veh		22.4			76.0			28.9			21.6	
Approach LOS		C			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	15.1	11.4	18.5	7.8	24.5	10.0	20.0
Change Period (Y+Rc), s	5.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	45.0	11.3	29.0	14.3	41.0	16.3	29.0	14.3
Max Q Clear Time (g_c+I1), s	11.3	7.5	3.6	5.5	3.6	7.6	3.0	16.3
Green Ext Time (p_c), s	1.0	1.4	0.1	1.7	0.0	4.0	0.1	0.0

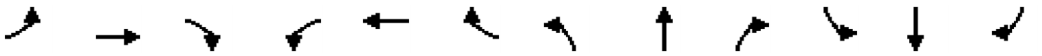
Intersection Summary	
HCM 7th Control Delay, s/veh	38.0
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	18	151	32	109	167	482	39	218	85	554	173	22
v/c Ratio	0.04	0.21	0.08	0.23	0.14	0.58	0.22	0.37	0.22	0.68	0.13	0.03
Control Delay (s/veh)	46.5	29.7	0.4	42.5	22.1	5.9	49.4	33.9	1.3	36.0	18.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.5	29.7	0.4	42.5	22.1	5.9	49.4	33.9	1.3	36.0	18.9	0.1
Queue Length 50th (ft)	3	27	0	19	22	0	14	41	0	102	26	0
Queue Length 95th (ft)	21	78	0	79	83	24	74	117	0	294	70	0
Internal Link Dist (ft)		3502			3725			5944			3346	
Turn Bay Length (ft)	240		250	240		250	240		245	240		250
Base Capacity (vph)	661	1773	762	1028	2122	1121	189	587	388	3038	2999	1427
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.09	0.04	0.11	0.08	0.43	0.21	0.37	0.22	0.18	0.06	0.02

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	119	25	86	132	381	31	172	67	438	137	17
Future Volume (veh/h)	14	119	25	86	132	381	31	172	67	438	137	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.91	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1678	1885	1870	1856	1811	1767	1900	1870	1796	1900
Adj Flow Rate, veh/h	18	151	32	109	167	482	39	218	85	554	173	22
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	15	1	2	3	6	9	0	2	7	0
Cap, veh/h	130	1103	434	382	1359	600	90	355	154	675	895	404
Arrive On Green	0.04	0.31	0.31	0.11	0.38	0.38	0.05	0.11	0.11	0.20	0.26	0.26
Sat Flow, veh/h	3456	3554	1398	3483	3554	1570	1725	3357	1458	3456	3413	1540
Grp Volume(v), veh/h	18	151	32	109	167	482	39	218	85	554	173	22
Grp Sat Flow(s),veh/h/ln	1728	1777	1398	1742	1777	1570	1725	1678	1458	1728	1706	1540
Q Serve(g_s), s	0.4	2.2	1.2	2.1	2.2	20.0	1.6	4.5	4.0	11.2	2.9	0.8
Cycle Q Clear(g_c), s	0.4	2.2	1.2	2.1	2.2	20.0	1.6	4.5	4.0	11.2	2.9	0.8
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	130	1103	434	382	1359	600	90	355	154	675	895	404
V/C Ratio(X)	0.14	0.14	0.07	0.29	0.12	0.80	0.43	0.61	0.55	0.82	0.19	0.05
Avail Cap(c_a), veh/h	615	1570	618	953	1911	844	177	427	186	3215	3306	1491
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	34.0	18.2	17.8	29.9	14.6	20.1	33.6	31.3	31.0	28.2	21.0	20.2
Incr Delay (d2), s/veh	0.2	0.1	0.2	0.2	0.1	6.8	1.2	4.3	7.4	1.0	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	0.1	0.8	0.4	0.8	0.8	7.4	0.7	1.9	1.6	4.4	1.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.2	18.3	18.0	30.1	14.7	27.0	34.8	35.6	38.5	29.2	21.4	20.4
LnGrp LOS	C	B	B	C	B	C	C	D	D	C	C	C
Approach Vol, veh/h		201			758			342			749	
Approach Delay, s/veh		19.7			24.7			36.2			27.1	
Approach LOS		B			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.3	13.4	12.0	28.4	7.8	24.9	6.8	33.6
Change Period (Y+Rc), s	5.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	68.0	9.3	20.0	32.3	7.5	70.8	13.0	39.3
Max Q Clear Time (g_c+I1), s	13.2	6.5	4.1	4.2	3.6	4.9	2.4	22.0
Green Ext Time (p_c), s	1.0	0.7	0.1	2.0	0.0	4.3	0.0	5.7

Intersection Summary	
HCM 7th Control Delay, s/veh	27.0
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Appendix I

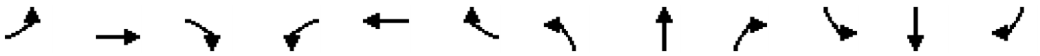
Intersection Lane Configuration and Traffic Control Types Changes in Opening Year

ID	N-S Street	E-W Street	Scenarios	Traffic Control Type	EB			WB			NB			SB		
					EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
1	Westbrook Blvd	Blue Oaks Blvd	Existing	AWSC	1	1 thru-right		1	1	1	1	1 thru-left	2	1	2	1
			2028	Signalized	1	2	1	2	3	1	1	2	2	1	2	1
			2040	Signalized	1	3	1	2	3	1	1	3	2	1	3	1
2	Hayden Pkwy	Blue Oaks Blvd	Existing	Signalized	1	3	1	1	3	1	1	1	1	1	1	1
			2028	Signalized	1	3	1	1	3	1	1	1	1	1	1	1
			2040	Signalized	1	3	1	1	3	1	1	1	1	1	1	1
3	Fiddyment Rd	Blue Oaks Blvd	Existing	Signalized	2	3	1	2	3	1	2	2	1	2	2	1
			2028	Signalized	2	3	1	2	3	1	2	2	1	2	2	1
			2040	Signalized	2	3	1	2	3	1	2	2	1	2	2	1
4	Diamond Creek Blvd/Prairie Woods Wy	Blue Oaks Blvd	Existing	Signalized	1	3	1	1	3	1	1	1	1	1	1 left-thru-right	
			2028	Signalized	1	3	1	1	3	1	1	1	1	1	1 left-thru-right	
			2040	Signalized	1	3	1	1	3	1	1	1	1	1	1 left-thru-right	
5	Woodcreek Oaks Blvd	Blue Oaks Blvd	Existing	Signalized	2	3	1	2	3	1	2	2	1	2	2	1
			2028	Signalized	2	3	1	2	3	1	2	2	1	2	2	1
			2040	Signalized	2	4	1	2	3	1	2	2	1	2	2	1
6	Walgreens Dwy/Roseville Pkwy	Blue Oaks Blvd	Existing	Signalized	1	3	1	2	3	1	1	1 thru-left	1	1	1 thru-right	
			2028	Signalized	1	3	1	2	3	1	1	1 thru-left	1	1	1 thru-right	
			2040	Signalized	1	4	1	2	4	1	2	1 thru-left	1	1	1 thru-right	
7	New Meadow Dr	Blue Oaks Blvd	Existing	Signalized	1	4	-	1	3	1	-	-	-	2	-	1
			2028	Signalized	1	4	-	1	3	1	-	-	-	2	-	1
			2040	Signalized	1	4	1	1	4	1	1	1	1	1	1 thru-right	1
8	Foothills Blvd	Blue Oaks Blvd	Existing	Signalized	2	3	1	2	3	1	2	2	1	2	2	1
			2028	Signalized	2	3	1	2	3	1	2	2	1	2	2	1
			2040	Signalized	2	4	1	2	4	1	2	2	1	2	3	1
9	Fidelity Wy	Blue Oaks Blvd	Existing	Signalized	-	3	1	1	2	-	-	-	1	-	-	1
			2028	Signalized	-	3	1	1	2	-	-	-	1	-	-	1
			2040	Signalized	-	3	1	1	4	-	-	-	1	-	-	1
10	Washington Blvd	Blue Oaks Blvd	Existing	Signalized	-	4	1	2	2	1	2	-	2	1	2	1
			2028	Signalized	-	4	1	2	2	1	2	-	2	1	2	1
			2040	Signalized	-	4	1	2	3	1	2	-	2	1	2	1
11	Santucci Blvd	Pleasant Grove Blvd	Existing	AWSC	-	-	-	1	-	1	-	-	1	-	-	-
			2028	Signalized	1	2	1	1	2	1	2	2	1	2	2	1
			2040	Signalized	1	2	1	1	2	1	2	2	1	2	2	1
12	Westbrook Blvd	Pleasant Grove Blvd	Existing	Signalized	2	2	1	2	2	1	1	2	1	1	2	1
			2028	Signalized	2	2	1	2	2	1	1	2	1	1	2	1
			2040	Signalized	2	2	1	2	2	1	1	3	1	2	3	1
13	Market St	Pleasant Grove Blvd	Existing	Signalized	1	2	1	1	1	1 thru-right		1 thru-left	1		1 left-thru-right	
			2028	Signalized	1	2	1	1	1	1 thru-right		1 thru-left	1		1 left-thru-right	
			2040	Signalized	1	2	1	1	1	1 thru-right		1 thru-left	1		1 left-thru-right	
14	Fiddyment Rd	Pleasant Grove Blvd	Existing	Signalized	2	2	1	2	2	1	2	3	1	2	3	1
			2028	Signalized	2	2	1	3	1	1 thru-right	2	3	1	2	3	1
			2040	Signalized	2	2	1	3	1	1 thru-right	2	3	1	2	3	1
15	Woodcreek Oaks Blvd	Pleasant Grove Blvd	Existing	Signalized	2	2	1	2	2	1	2	2	1	2	2	1
			2028	Signalized	2	2	1	2	2	1	2	2	1	2	2	1
			2040	Signalized	2	3	1	2	3	1	2	2	1	1	2	1

16	Country Club Dr	Pleasant Grove Blvd	Existing	Signalized	1	1 thru-right		1	2	-	1	-	1	-	-	-
			2028	Signalized	1	1 thru-right		1	2	-	1	-	1	-	-	-
			2040	Signalized	2	1 thru-right		1	3	-	1	-	1	-	-	-
17	Foothills Blvd	Pleasant Grove Blvd	Existing	Signalized	2	3	1	2	3	1	2	2	1	2	3	1
			2028	Signalized	2	3	1	2	3	1	2	2	1	2	3	1
			2040	Signalized	2	3	1	3	3	1	2	3	1	2	4	1
18	Washington Blvd	Pleasant Grove Blvd	Existing	Signalized	2	3	1	2	3	1	2	2	1	2	2	1
			2028	Signalized	2	3	1	2	3	1	2	2	1	2	2	1
			2040	Signalized	2	3	1	2	3	1	2	2	1	2	2	1
19	Hallissy Dr/Gold Coast Dr	Pleasant Grove Blvd	Existing	Signalized	1	3	1	1	3	1	1	1	1	1	1	1
			2028	Signalized	1	3	1	1	3	1	1	1	1	1	1	1
			2040	Signalized	1	3	1	1	3	1	1	1	1	1	1	1
20	Pleasant Grove Blvd	Roseville Pkwy	Existing	Signalized	3	2	1	2	3	1	2	3	1	2	3	1
			2028	Signalized	3	2	1	2	3	1	2	3	1	2	3	1
			2040	Signalized	3	3	1	2	3	1	2	3	1	2	3	1
21	Pleasant Grove Blvd	Highland Pointe Dr	Existing	Signalized	2	1 thru-left	1	1	1 thru-left	1	2	3	1 thru-right	2	3	1
			2028	Signalized	2	1 thru-left	1	1	1 thru-left	1	2	3	1 thru-right	2	3	1
			2040	Signalized	2	1	1	2	1	1	2	3	1 thru-right	2	3	1
22	Pleasant Grove Blvd	SR 65 SB Ramps	Existing	Signalized	1	1 left-thru-right	1	-	-	-	-	2	1 thru-right	-	3	1
			2028	Signalized	1	1 left-thru-right	1	-	-	-	-	2	1 thru-right	-	3	1
			2040	Signalized	1	1 left-thru-right	2	-	-	-	-	3	1	-	3	1
23	Pleasant Grove Blvd	SR 65 NB Ramps	Existing	Signalized	-	-	-	3	-	2	-	3	1	1	3	-
			2028	Signalized	-	-	-	3	-	2	-	3	1	1	3	-
			2040	Signalized	-	-	-	3	-	2	-	3	1	1	3	-
	Blvd		Existing	Signalized	1	2	1	1	1 thru-right		1	2	1	2	1	1
			2028	Signalized	-	-	-	3	-	2	-	3	1	1	3	-
24	Santucci Blvd/Watt Ave	Baseline Rd	Existing	Signalized	1	2	1	1	1 thru-right		1	2	1	2	1	1
			2028	Signalized	1	2	1	1	1 thru-right		1	2	1	2	1	1
			2040	Signalized	2	3	1	2	3	1	2	3	1	2	3	1
25	Westbrook Blvd	Baseline Rd	Existing	Signalized	1	2			2	1	-	-	-	1	-	1
			2028	Signalized	1	2			2	1	-	-	-	1	-	1
			2040	Signalized	2	3	1	2	3	1	2	3	1	2	3	1
26	Market St/Stargazer Dr	Baseline Rd	Existing	Signalized	1	2	1	1	2	1	1	1	1	1	1	1
			2028	Signalized	1	2	1	1	2	1	1	1	1	1	1	1
			2040	Signalized	1	3	1	1	3	1	1	1	1	1	1	1
27	Fiddyment Rd	Baseline Rd	Existing	Signalized	2	1	1 thru-right	2	2	1	1	2	1	1	2	1
			2028	Signalized	2	1	1 thru-right	2	2	1	1	2	1	1	2	1
			2040	Signalized	2	3	1	2	3	1	2	3	1	2	3	1
28	Woodcreek Oaks Blvd/Cook Riolo Rd	Baseline Rd	Existing	Signalized	1	1 thru-right		1	2	1		1 thru-left	1		1 thru-left	1
			2028	Signalized	1	1 thru-right		1	2	1		1 thru-left	1		1 thru-left	1
			2040	Signalized	1	2	1	1	2	1		1 thru-left	1		1 thru-left	1
29	Foothills Blvd	Baseline Rd/Main St	Existing	Signalized	1	2	1	1	2	1	2	3	1	2	3	1
			2028	Signalized	1	2	1	1	2	1	2	3	1	2	3	1
			2040	Signalized	2	2	1	1	2	1	2	3	1	1	3	1
30	Westbrook Blvd	Brookstone Dr (North)	Existing	AWSC	1	-	1	-	-	-	1	2	-	-	2	1
			2028	Signalized	1	-	1	-	-	-	1	2	-	-	2	1
			2040	Signalized	1	-	1	-	-	-	1	3	-	-	3	1
31	Westbrook Blvd	Brookstone Dr (South)	Existing	AWSC	1	-	1	-	-	-	1	2	-	-	2	1
			2028	Signalized	1	-	1	-	-	-	1	2	-	-	2	1

		(South)	2040	Signalized	1	-	1	-	-	-	1	3	-	-	3	1
32	Fiddyment Rd	Parkland Wy/Angus Rd	Existing	Signalized	1	2	1	1	2	1	1	1	1	1	1	1
			2028	Signalized	1	2	1	1	2	1	1	1	1	1	1	1
			2040	Signalized	1	2	1	1	2	1	1	1	1	1	1	1
33	Fiddyment Rd	N Hayden Pkwy	Existing	Signalized	1	1	1	1	1	1	1	2	1	1	2	1
			2028	Signalized	1	1	1	1	1	1	1	2	1	1	2	1
			2040	Signalized	1	1	1	1	1	1	1	2	1	1	2	1
34	Fiddyment Rd	Crawford Pkwy/Old Coach Dr	Existing	Signalized		1 thru-left	1		1 thru-left	1	1	2	1	1	2	1
			2028	Signalized		1 thru-left	1		1 thru-left	1	1	2	1	1	2	1
			2040	Signalized		1 thru-left	1		1 thru-left	1	1	2	1	1	2	1
35	Fiddyment Rd	Hayden Pkwy	Existing	Signalized	1	-	1	-	-	-	1	2	-	-	2	1
			2028	Signalized	1	-	1	-	-	-	1	2	-	-	2	1
			2040	Signalized	1	-	1	-	-	-	1	2	-	-	2	1
36	Fiddyment Rd	Village Green Dr/Del Webb Blvd	Existing	Signalized	1	1	1		1 thru-left	1	1	2	1	1	2	1
			2028	Signalized	1	1	1		1 thru-left	1	1	2	1	1	2	1
			2040	Signalized	1	1	1	1	1	1	1	2	1	1	2	1

Appendix J
Cumulative Year No Project Conditions Synchro Reports



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	595	209	264	384	136	202	677	587	443	897	69
Future Volume (veh/h)	59	595	209	264	384	136	202	677	587	443	897	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	626	220	278	404	143	213	713	618	466	944	73
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	923	285	360	1226	379	255	1120	612	513	1860	577
Arrive On Green	0.04	0.18	0.18	0.10	0.24	0.24	0.14	0.22	0.22	0.29	0.36	0.36
Sat Flow, veh/h	1781	5106	1575	3456	5106	1577	1781	5106	2790	1781	5106	1585
Grp Volume(v), veh/h	62	626	220	278	404	143	213	713	618	466	944	73
Grp Sat Flow(s),veh/h/ln	1781	1702	1575	1728	1702	1577	1781	1702	1395	1781	1702	1585
Q Serve(g_s), s	3.0	9.9	11.5	6.8	5.7	6.6	10.1	11.0	19.0	21.9	12.5	2.7
Cycle Q Clear(g_c), s	3.0	9.9	11.5	6.8	5.7	6.6	10.1	11.0	19.0	21.9	12.5	2.7
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	80	923	285	360	1226	379	255	1120	612	513	1860	577
V/C Ratio(X)	0.78	0.68	0.77	0.77	0.33	0.38	0.84	0.64	1.01	0.91	0.51	0.13
Avail Cap(c_a), veh/h	187	1061	327	459	1226	379	428	1120	612	689	1869	580
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	40.9	33.1	33.8	37.8	27.1	27.5	36.1	30.7	33.8	29.8	21.5	18.3
Incr Delay (d2), s/veh	14.7	1.5	9.6	6.1	0.2	0.6	7.1	1.2	38.8	13.1	0.2	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	1.6	4.0	4.9	3.0	2.2	2.4	4.7	4.4	9.3	10.4	4.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.6	34.6	43.3	43.9	27.3	28.1	43.3	31.9	72.6	42.9	21.7	18.4
LnGrp LOS	E	C	D	D	C	C	D	C	F	D	C	B
Approach Vol, veh/h		908			825			1544			1483	
Approach Delay, s/veh		38.1			33.0			49.8			28.2	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.4	23.5	13.5	20.2	16.9	36.0	8.4	25.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	33.5	19.0	11.5	18.0	20.8	31.7	9.1	20.4
Max Q Clear Time (g_c+I1), s	23.9	21.0	8.8	13.5	12.1	14.5	5.0	8.6
Green Ext Time (p_c), s	1.1	0.0	0.2	1.9	0.4	5.9	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	37.9
HCM 7th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1427	34	84	586	43	42	108	138	292	105	118
Future Volume (veh/h)	60	1427	34	84	586	43	42	108	138	292	105	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	1502	36	88	617	45	44	114	145	307	111	124
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	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	1977	612	113	2067	640	66	280	226	351	578	441
Arrive On Green	0.05	0.39	0.39	0.06	0.40	0.40	0.04	0.15	0.15	0.20	0.31	0.31
Sat Flow, veh/h	1781	5106	1581	1781	5106	1581	1781	1870	1509	1781	1870	1427
Grp Volume(v), veh/h	63	1502	36	88	617	45	44	114	145	307	111	124
Grp Sat Flow(s),veh/h/ln	1781	1702	1581	1781	1702	1581	1781	1870	1509	1781	1870	1427
Q Serve(g_s), s	3.1	22.6	1.3	4.3	7.3	1.5	2.2	4.9	8.0	14.8	3.9	5.8
Cycle Q Clear(g_c), s	3.1	22.6	1.3	4.3	7.3	1.5	2.2	4.9	8.0	14.8	3.9	5.8
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	81	1977	612	113	2067	640	66	280	226	351	578	441
V/C Ratio(X)	0.77	0.76	0.06	0.78	0.30	0.07	0.66	0.41	0.64	0.88	0.19	0.28
Avail Cap(c_a), veh/h	209	2447	758	171	2338	724	175	411	332	532	787	600
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	41.9	23.6	17.0	40.9	17.9	16.2	42.1	34.1	35.5	34.5	22.5	23.2
Incr Delay (d2), s/veh	14.3	1.1	0.0	12.1	0.1	0.0	10.7	1.0	3.0	10.2	0.2	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	1.6	8.4	0.4	2.2	2.6	0.5	1.1	2.2	2.9	7.2	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.2	24.7	17.1	53.0	17.9	16.2	52.8	35.1	38.5	44.8	22.7	23.5
LnGrp LOS	E	C	B	D	B	B	D	D	D	D	C	C
Approach Vol, veh/h		1601			750			303			542	
Approach Delay, s/veh		25.8			22.0			39.3			35.4	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	17.8	10.1	38.8	7.8	31.9	8.6	40.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	26.5	19.5	8.5	42.5	8.7	37.3	10.4	40.6
Max Q Clear Time (g_c+I1), s	16.3	10.0	6.3	24.6	4.2	7.8	5.1	9.3
Green Ext Time (p_c), s	0.6	0.7	0.0	9.7	0.0	1.1	0.0	4.1

Intersection Summary	
HCM 7th Control Delay, s/veh	27.8
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	1460	120	354	596	157	56	1104	503	294	912	162
Future Volume (veh/h)	269	1460	120	354	596	157	56	1104	503	294	912	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	283	1537	23	373	627	56	59	1162	202	309	960	71
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	813	1556	483	369	866	269	360	1227	547	300	1165	519
Arrive On Green	0.24	0.30	0.30	0.11	0.17	0.17	0.10	0.35	0.35	0.09	0.33	0.33
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1584	3456	3554	1584
Grp Volume(v), veh/h	283	1537	23	373	627	56	59	1162	202	309	960	71
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1584	1728	1777	1584
Q Serve(g_s), s	10.2	44.8	1.1	16.0	17.4	3.6	2.3	47.6	14.3	13.0	37.2	4.7
Cycle Q Clear(g_c), s	10.2	44.8	1.1	16.0	17.4	3.6	2.3	47.6	14.3	13.0	37.2	4.7
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	813	1556	483	369	866	269	360	1227	547	300	1165	519
V/C Ratio(X)	0.35	0.99	0.05	1.01	0.72	0.21	0.16	0.95	0.37	1.03	0.82	0.14
Avail Cap(c_a), veh/h	813	1556	483	369	1501	466	360	1235	550	300	1353	603
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	47.7	51.8	19.6	66.8	58.8	34.1	61.1	47.7	36.8	68.3	46.3	35.4
Incr Delay (d2), s/veh	0.1	20.0	0.1	49.3	1.7	0.6	0.1	15.0	0.8	59.7	4.5	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	4.4	21.4	0.6	9.4	7.5	1.8	1.0	23.0	5.5	8.1	16.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.8	71.7	19.7	116.1	60.5	34.7	61.2	62.7	37.6	128.1	50.8	35.6
LnGrp LOS	D	E	B	F	E	C	E	E	D	F	D	D
Approach Vol, veh/h		1843			1056			1423			1340	
Approach Delay, s/veh		67.4			78.8			59.1			67.8	
Approach LOS		E			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	57.7	21.0	52.0	21.6	55.1	41.6	31.4
Change Period (Y+Rc), s	6.0	6.0	5.0	6.4	6.0	6.0	6.4	* 6
Max Green Setting (Gmax), s	13.0	52.0	16.0	45.6	8.0	57.0	18.0	* 44
Max Q Clear Time (g_c+I1), s	15.0	49.6	18.0	46.8	4.3	39.2	12.2	19.4
Green Ext Time (p_c), s	0.0	2.0	0.0	0.0	0.0	9.8	0.3	6.0

Intersection Summary	
HCM 7th Control Delay, s/veh	67.5
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	2767	68	82	1232	156	34	28	114	480	39	53
Future Volume (veh/h)	77	2767	68	82	1232	156	34	28	114	480	39	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.98	1.00		0.68	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	81	2913	36	86	1297	82	36	29	9	581	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	2893	857	109	2809	853	149	157	90	448	235	0
Arrive On Green	0.08	0.57	0.57	0.06	0.55	0.55	0.08	0.08	0.08	0.13	0.00	0.00
Sat Flow, veh/h	1781	5106	1513	1781	5106	1550	1781	1870	1078	3563	1870	0
Grp Volume(v), veh/h	81	2913	36	86	1297	82	36	29	9	581	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1513	1781	1702	1550	1781	1870	1078	1781	1870	0
Q Serve(g_s), s	5.3	68.0	1.3	5.7	18.4	3.0	2.3	1.7	0.9	15.1	0.0	0.0
Cycle Q Clear(g_c), s	5.3	68.0	1.3	5.7	18.4	3.0	2.3	1.7	0.9	15.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	138	2893	857	109	2809	853	149	157	90	448	235	0
V/C Ratio(X)	0.58	1.01	0.04	0.79	0.46	0.10	0.24	0.18	0.10	1.30	0.00	0.00
Avail Cap(c_a), veh/h	238	2893	857	386	2809	853	303	318	183	448	235	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)	0.22	0.22	0.22	0.83	0.83	0.83	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	53.5	26.0	11.5	55.6	16.3	12.8	51.4	51.1	50.8	52.5	0.0	0.0
Incr Delay (d2), s/veh	0.3	9.6	0.0	3.9	0.5	0.2	0.3	0.2	0.2	148.9	0.0	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	2.3	26.8	0.4	2.6	6.7	1.0	1.0	0.8	0.2	15.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.8	35.6	11.6	59.5	16.7	13.0	51.7	51.4	51.0	201.4	0.0	0.0
LnGrp LOS	D	F	B	E	B	B	D	D	D	F		
Approach Vol, veh/h		3030			1465			74			581	
Approach Delay, s/veh		35.8			19.0			51.5			201.4	
Approach LOS		D			B			D			F	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	14.7	11.3	74.0		20.0	13.3	72.0
Change Period (Y+Rc), s	4.6	4.0	6.0		4.9	4.0	6.0
Max Green Setting (Gmax), s	20.4	26.0	39.0		15.1	16.0	49.0
Max Q Clear Time (g_c+I1), s	4.3	7.7	70.0		17.1	7.3	20.4
Green Ext Time (p_c), s	0.1	0.1	0.0		0.0	0.0	19.9

Intersection Summary	
HCM 7th Control Delay, s/veh	49.9
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	2814	424	250	1185	494	203	588	460	316	265	82
Future Volume (veh/h)	123	2814	424	250	1185	494	203	588	460	316	265	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	129	2962	214	263	1247	368	214	619	384	333	279	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	229	2917	705	276	2384	737	260	836	368	346	924	401
Arrive On Green	0.07	0.45	0.45	0.16	0.93	0.93	0.08	0.24	0.24	0.10	0.26	0.26
Sat Flow, veh/h	3456	6434	1556	3456	5106	1578	3456	3554	1563	3456	3554	1541
Grp Volume(v), veh/h	129	2962	214	263	1247	368	214	619	384	333	279	22
Grp Sat Flow(s),veh/h/ln	1728	1609	1556	1728	1702	1578	1728	1777	1563	1728	1777	1541
Q Serve(g_s), s	5.4	68.0	13.1	11.3	4.7	4.3	9.2	24.2	35.3	14.4	9.5	1.6
Cycle Q Clear(g_c), s	5.4	68.0	13.1	11.3	4.7	4.3	9.2	24.2	35.3	14.4	9.5	1.6
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	229	2917	705	276	2384	737	260	836	368	346	924	401
V/C Ratio(X)	0.56	1.02	0.30	0.95	0.52	0.50	0.82	0.74	1.04	0.96	0.30	0.05
Avail Cap(c_a), veh/h	249	2917	705	276	2384	737	357	836	368	346	924	401
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.9	41.0	26.0	62.7	2.8	2.8	68.4	53.1	57.3	67.2	44.6	41.7
Incr Delay (d2), s/veh	0.1	9.6	0.1	38.1	0.7	2.2	7.7	3.7	58.9	38.4	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	2.4	27.6	4.8	5.9	1.2	1.3	4.3	11.0	19.6	8.1	4.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.0	50.6	26.1	100.8	3.5	5.0	76.0	56.8	116.2	105.7	44.9	41.8
LnGrp LOS	E	F	C	F	A	A	E	E	F	F	D	D
Approach Vol, veh/h		3305			1878			1217			634	
Approach Delay, s/veh		49.7			17.4			79.0			76.7	
Approach LOS		D			B			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	41.0	16.0	74.0	15.3	44.7	14.0	76.0
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	15.0	35.3	12.0	68.0	15.5	34.8	10.8	69.2
Max Q Clear Time (g_c+I1), s	13.4	37.3	13.3	70.0	11.2	11.5	7.4	6.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	2.6	0.1	42.1

Intersection Summary	
HCM 7th Control Delay, s/veh	48.6
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	3578	10	22	1905	69	18	13	120	15	6	6
Future Volume (veh/h)	2	3578	10	22	1905	69	18	13	120	15	6	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	3766	11	23	2005	73	19	14	126	16	6	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	7	4483	1089	99	4644	1120	333	175	148	98	47	47
Arrive On Green	0.01	1.00	1.00	0.04	0.96	0.96	0.09	0.09	0.09	0.06	0.06	0.06
Sat Flow, veh/h	1781	6434	1563	3456	6434	1551	3563	1870	1585	1781	858	858
Grp Volume(v), veh/h	2	3766	11	23	2005	73	19	14	126	16	0	12
Grp Sat Flow(s),veh/h/ln	1781	1609	1563	1728	1609	1551	1781	1870	1585	1781	0	1716
Q Serve(g_s), s	0.2	0.0	0.0	1.0	3.2	0.3	0.7	1.0	11.7	1.3	0.0	1.0
Cycle Q Clear(g_c), s	0.2	0.0	0.0	1.0	3.2	0.3	0.7	1.0	11.7	1.3	0.0	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	7	4483	1089	99	4644	1120	333	175	148	98	0	95
V/C Ratio(X)	0.30	0.84	0.01	0.23	0.43	0.07	0.06	0.08	0.85	0.16	0.00	0.13
Avail Cap(c_a), veh/h	89	4483	1089	173	4644	1120	1330	698	592	220	0	212
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.88	0.88	0.88	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	74.2	0.0	0.0	70.5	0.9	0.8	62.0	62.1	67.0	67.6	0.0	67.4
Incr Delay (d2), s/veh	0.8	0.2	0.0	0.4	0.3	0.1	0.0	0.1	5.2	0.3	0.0	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	0.1	0.1	0.0	0.4	0.7	0.1	0.3	0.5	4.9	0.6	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	75.1	0.2	0.0	70.9	1.2	0.9	62.0	62.2	72.1	67.9	0.0	67.7
LnGrp LOS	E	A	A	E	A	A	E	E	E	E		E
Approach Vol, veh/h		3779			2101			159			28	
Approach Delay, s/veh		0.2			1.9			70.1			67.8	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	18.9	8.3	110.5	12.3	4.6	114.3
Change Period (Y+Rc), s	4.9	4.0	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	56.0	7.5	49.1	18.5	7.5	49.1
Max Q Clear Time (g_c+I1), s	13.7	3.0	2.0	3.3	2.2	5.2
Green Ext Time (p_c), s	0.3	0.0	47.0	0.0	0.0	37.5

Intersection Summary	
HCM 7th Control Delay, s/veh	3.0
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	3693	5	5	1954	75	5	5	5	248	5	37
Future Volume (veh/h)	15	3693	5	5	1954	75	5	5	5	248	5	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	3887	5	5	2057	79	5	5	5	261	0	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	52	4650	1121	69	4290	1057	32	33	28	290	0	516
Arrive On Green	0.06	1.00	1.00	0.67	0.67	0.67	0.02	0.02	0.02	0.16	0.00	0.16
Sat Flow, veh/h	1781	6434	1551	32	6434	1585	1781	1870	1571	1781	0	3164
Grp Volume(v), veh/h	16	3887	5	5	2057	79	5	5	5	261	0	42
Grp Sat Flow(s),veh/h/ln	1781	1609	1551	32	1609	1585	1781	1870	1571	1781	0	1582
Q Serve(g_s), s	1.3	0.0	0.0	9.4	23.5	2.6	0.4	0.4	0.5	21.6	0.0	1.7
Cycle Q Clear(g_c), s	1.3	0.0	0.0	9.4	23.5	2.6	0.4	0.4	0.5	21.6	0.0	1.7
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	52	4650	1121	69	4290	1057	32	33	28	290	0	516
V/C Ratio(X)	0.31	0.84	0.00	0.07	0.48	0.07	0.16	0.15	0.18	0.90	0.00	0.08
Avail Cap(c_a), veh/h	113	4650	1121	69	4290	1057	214	224	188	545	0	968
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.43	0.43	0.43	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	69.2	0.0	0.0	9.9	12.2	8.8	72.6	72.6	72.6	61.6	0.0	53.3
Incr Delay (d2), s/veh	0.5	0.8	0.0	2.0	0.4	0.1	2.3	2.1	3.0	4.1	0.0	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	0.6	0.3	0.0	0.1	7.9	0.9	0.2	0.2	0.2	10.1	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.7	0.8	0.0	11.9	12.6	8.9	74.9	74.6	75.6	65.6	0.0	53.3
LnGrp LOS	E	A	A	B	B	A	E	E	E	E		D
Approach Vol, veh/h		3908			2141			15			303	
Approach Delay, s/veh		1.1			12.5			75.1			63.9	
Approach LOS		A			B			E			E	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	7.2	114.4	28.4	8.4	106.0
Change Period (Y+Rc), s	4.5	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	18.0	48.6	45.9	9.5	58.1
Max Q Clear Time (g_c+I1), s	2.5	2.0	23.6	3.3	25.5
Green Ext Time (p_c), s	0.0	46.5	0.4	0.0	28.2

Intersection Summary	
HCM 7th Control Delay, s/veh	8.1
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	2943	612	516	1713	868	360	584	350	702	578	63
Future Volume (veh/h)	229	2943	612	516	1713	868	360	584	350	702	578	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	241	3098	503	543	1803	566	379	615	0	739	608	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	284	2305	560	369	2462	599	323	655		751	1575	489
Arrive On Green	0.08	0.36	0.36	0.11	0.38	0.38	0.09	0.18	0.00	0.22	0.31	0.31
Sat Flow, veh/h	3456	6434	1564	3456	6434	1565	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	241	3098	503	543	1803	566	379	615	0	739	608	13
Grp Sat Flow(s),veh/h/ln	1728	1609	1564	1728	1609	1565	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	10.3	53.7	45.6	16.0	36.0	52.5	14.0	25.6	0.0	31.9	14.0	0.9
Cycle Q Clear(g_c), s	10.3	53.7	45.6	16.0	36.0	52.5	14.0	25.6	0.0	31.9	14.0	0.9
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	284	2305	560	369	2462	599	323	655		751	1575	489
V/C Ratio(X)	0.85	1.34	0.90	1.47	0.73	0.94	1.18	0.94		0.98	0.39	0.03
Avail Cap(c_a), veh/h	290	2305	560	369	2462	599	323	656		751	1600	497
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	0.65	0.65	0.65	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.9	48.1	45.5	67.0	39.7	44.8	68.0	60.3	0.0	58.4	40.7	36.2
Incr Delay (d2), s/veh	19.0	157.8	19.7	222.4	1.3	19.0	106.5	21.8	0.0	28.7	0.6	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	5.2	46.1	20.2	18.3	14.1	22.8	10.8	13.3	0.0	16.7	5.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	86.9	205.9	65.2	289.4	41.0	63.7	174.5	82.1	0.0	87.1	41.3	36.3
LnGrp LOS	F	F	E	F	D	E	F	F		F	D	D
Approach Vol, veh/h		3842			2912			994			1360	
Approach Delay, s/veh		180.0			91.7			117.3			66.1	
Approach LOS		F			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.6	33.7	20.0	59.7	18.0	52.3	16.3	63.4
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	32.6	27.7	16.0	53.7	14.0	* 47	12.6	57.1
Max Q Clear Time (g_c+I1), s	33.9	27.6	18.0	55.7	16.0	16.0	12.3	54.5
Green Ext Time (p_c), s	0.0	0.1	0.0	0.0	0.0	10.2	0.0	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	127.9
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	3164	329	663	1057	388	189	0	622	112	766	442
Future Volume (veh/h)	0	3164	329	663	1057	388	189	0	622	112	766	442
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	3331	346	698	1113	0	199	0	655	118	806	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	0	2	2	2	2
Cap, veh/h	0	3302	813	369	3301		0	0	0	487	972	
Arrive On Green	0.00	0.51	0.51	0.11	0.65	0.00	0.00	0.00	0.00	0.27	0.27	0.00
Sat Flow, veh/h	0	6696	1584	3456	5106	1585		0		1781	3554	1585
Grp Volume(v), veh/h	0	3331	346	698	1113	0		0.0		118	806	0
Grp Sat Flow(s),veh/h/ln	0	1609	1584	1728	1702	1585				1781	1777	1585
Q Serve(g_s), s	0.0	77.0	20.4	16.0	14.8	0.0				7.7	32.0	0.0
Cycle Q Clear(g_c), s	0.0	77.0	20.4	16.0	14.8	0.0				7.7	32.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3302	813	369	3301					487	972	
V/C Ratio(X)	0.00	1.01	0.43	1.89	0.34					0.24	0.83	
Avail Cap(c_a), veh/h	0	3302	813	369	3301					546	1090	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.37	0.37	1.00	1.00	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	36.5	22.7	67.0	12.0	0.0				42.4	51.2	0.0
Incr Delay (d2), s/veh	0.0	11.8	0.6	412.2	0.3	0.0				0.5	5.8	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	0.0	32.2	7.8	28.0	5.4	0.0				3.5	15.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	48.3	23.3	479.2	12.3	0.0				42.9	57.0	0.0
LnGrp LOS		F	C	F	B					D	E	
Approach Vol, veh/h		3677			1811						924	
Approach Delay, s/veh		45.9			192.2						55.2	
Approach LOS		D			F						E	

Timer - Assigned Phs		3	4		6	8						
Phs Duration (G+Y+Rc), s		20.0	83.0		47.0	103.0						
Change Period (Y+Rc), s		4.0	6.0		6.0	6.0						
Max Green Setting (Gmax), s		16.0	48.0		46.0	68.0						
Max Q Clear Time (g_c+I1), s		18.0	79.0		34.0	16.8						
Green Ext Time (p_c), s		0.0	0.0		7.0	21.0						

Intersection Summary	
HCM 7th Control Delay, s/veh	88.6
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	460	580	109	254	62	330	711	62	72	323	5
Future Volume (veh/h)	5	460	580	109	254	62	330	711	62	72	323	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	484	306	115	267	27	347	748	20	76	340	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	952	424	170	1267	564	419	1020	455	204	799	356
Arrive On Green	0.01	0.27	0.27	0.10	0.36	0.36	0.12	0.29	0.29	0.06	0.22	0.22
Sat Flow, veh/h	1781	3554	1582	1781	3554	1582	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	5	484	306	115	267	27	347	748	20	76	340	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1582	1781	1777	1582	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.2	7.1	10.9	3.9	3.2	0.7	6.1	11.8	0.6	1.3	5.1	0.2
Cycle Q Clear(g_c), s	0.2	7.1	10.9	3.9	3.2	0.7	6.1	11.8	0.6	1.3	5.1	0.2
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	12	952	424	170	1267	564	419	1020	455	204	799	356
V/C Ratio(X)	0.42	0.51	0.72	0.68	0.21	0.05	0.83	0.73	0.04	0.37	0.43	0.01
Avail Cap(c_a), veh/h	216	1694	754	216	1694	754	419	1579	704	419	1579	704
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	30.6	19.2	20.6	27.1	13.9	13.0	26.6	19.9	15.9	28.0	20.6	18.7
Incr Delay (d2), s/veh	22.1	0.4	2.3	5.7	0.1	0.0	13.0	1.0	0.0	1.1	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	0.1	2.6	3.8	1.8	1.1	0.2	3.0	4.3	0.2	0.5	1.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.7	19.6	22.9	32.8	13.9	13.1	39.5	21.0	16.0	29.1	20.9	18.7
LnGrp LOS	D	B	C	C	B	B	D	C	B	C	C	B
Approach Vol, veh/h		795			409			1115			421	
Approach Delay, s/veh		21.1			19.2			26.7			22.4	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	22.3	10.4	21.1	12.0	18.4	4.9	26.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	27.5	7.5	29.5	7.5	27.5	7.5	29.5
Max Q Clear Time (g_c+I1), s	3.3	13.8	5.9	12.9	8.1	7.1	2.2	5.2
Green Ext Time (p_c), s	0.1	4.0	0.0	3.7	0.0	1.9	0.0	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	23.3
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	502	18	97	306	495	39	1081	54	793	934	79
Future Volume (veh/h)	103	502	18	97	306	495	39	1081	54	793	934	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	528	19	102	322	521	41	1138	57	835	983	83
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	1204	528	207	1203	536	69	1396	414	655	2202	662
Arrive On Green	0.06	0.34	0.34	0.06	0.34	0.34	0.04	0.27	0.27	0.19	0.43	0.43
Sat Flow, veh/h	3456	3554	1559	3456	3554	1582	1781	5106	1515	3456	5106	1535
Grp Volume(v), veh/h	108	528	19	102	322	521	41	1138	57	835	983	83
Grp Sat Flow(s),veh/h/ln	1728	1777	1559	1728	1777	1582	1781	1702	1515	1728	1702	1535
Q Serve(g_s), s	4.5	17.0	1.2	4.2	9.7	47.9	3.3	30.8	4.2	28.0	20.0	4.8
Cycle Q Clear(g_c), s	4.5	17.0	1.2	4.2	9.7	47.9	3.3	30.8	4.2	28.0	20.0	4.8
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	208	1204	528	207	1203	536	69	1396	414	655	2202	662
V/C Ratio(X)	0.52	0.44	0.04	0.49	0.27	0.97	0.60	0.82	0.14	1.27	0.45	0.13
Avail Cap(c_a), veh/h	222	1204	528	222	1204	536	110	1456	432	655	2202	662
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	67.3	37.9	32.7	67.2	35.5	48.1	69.8	50.2	40.5	59.8	29.6	25.2
Incr Delay (d2), s/veh	0.7	0.6	0.1	0.7	0.3	32.2	3.1	4.3	0.4	134.9	0.7	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	2.0	7.4	0.5	1.9	4.2	23.1	1.6	13.4	1.6	24.4	8.2	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.0	38.5	32.7	67.9	35.8	80.3	72.9	54.5	40.9	194.7	30.2	25.6
LnGrp LOS	E	D	C	E	D	F	E	D	D	F	C	C
Approach Vol, veh/h		655			945			1236			1901	
Approach Delay, s/veh		43.2			63.8			54.5			102.3	
Approach LOS		D			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	46.0	12.9	55.7	9.7	69.3	12.9	55.7
Change Period (Y+Rc), s	5.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	28.0	42.1	9.5	50.0	9.1	62.0	9.5	50.0
Max Q Clear Time (g_c+I1), s	30.0	32.8	6.2	19.0	5.3	22.0	6.5	49.9
Green Ext Time (p_c), s	0.0	7.1	0.0	7.4	0.0	25.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	74.0
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	1036	13	120	626	181	56	122	204	54	277	101
Future Volume (veh/h)	113	1036	13	120	626	181	56	122	204	54	277	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	119	1091	5	126	659	159	59	128	34	57	292	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	1177	520	165	940	227	72	157	197	62	318	106
Arrive On Green	0.09	0.33	0.33	0.09	0.33	0.33	0.12	0.12	0.12	0.27	0.27	0.27
Sat Flow, veh/h	1781	3554	1568	1781	2833	683	581	1260	1585	229	1171	389
Grp Volume(v), veh/h	119	1091	5	126	413	405	187	0	34	446	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1568	1781	1777	1739	1841	0	1585	1789	0	0
Q Serve(g_s), s	6.8	31.2	0.2	7.3	21.3	21.3	10.4	0.0	2.0	25.5	0.0	0.0
Cycle Q Clear(g_c), s	6.8	31.2	0.2	7.3	21.3	21.3	10.4	0.0	2.0	25.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.39	0.32		1.00	0.13		0.22
Lane Grp Cap(c), veh/h	164	1177	520	165	590	577	229	0	197	485	0	0
V/C Ratio(X)	0.73	0.93	0.01	0.76	0.70	0.70	0.82	0.00	0.17	0.92	0.00	0.00
Avail Cap(c_a), veh/h	381	1192	526	245	590	577	563	0	485	578	0	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	46.5	34.0	23.6	46.6	30.6	30.6	44.9	0.0	41.2	37.2	0.0	0.0
Incr Delay (d2), s/veh	2.3	12.5	0.0	3.6	4.3	4.4	2.7	0.0	0.2	16.7	0.0	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	3.1	15.2	0.1	3.4	9.7	9.5	4.9	0.0	0.8	13.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.8	46.5	23.6	50.2	34.9	35.1	47.7	0.0	41.4	54.0	0.0	0.0
LnGrp LOS	D	D	C	D	C	D	D		D	D		
Approach Vol, veh/h		1215			944			221			446	
Approach Delay, s/veh		46.6			37.0			46.7			54.0	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	18.4	13.7	40.6	32.5	13.7	40.6
Change Period (Y+Rc), s	5.3	4.0	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	32.2	14.5	35.3	34.0	22.5	27.3
Max Q Clear Time (g_c+I1), s	12.4	9.3	33.2	27.5	8.8	23.3
Green Ext Time (p_c), s	0.7	0.1	1.7	1.1	0.1	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	44.6
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	760	644	608	470	76	408	1418	966	152	1141	77
Future Volume (veh/h)	159	760	644	608	470	76	408	1418	966	152	1141	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	167	800	277	640	495	69	429	1493	721	160	1201	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	214	1299	572	453	1544	689	191	1588	487	179	1571	488
Arrive On Green	0.06	0.37	0.37	0.13	0.43	0.43	0.06	0.31	0.31	0.05	0.31	0.31
Sat Flow, veh/h	3456	3554	1565	3456	3554	1585	3456	5106	1565	3456	5106	1585
Grp Volume(v), veh/h	167	800	277	640	495	69	429	1493	721	160	1201	33
Grp Sat Flow(s),veh/h/ln	1728	1777	1565	1728	1777	1585	1728	1702	1565	1728	1702	1585
Q Serve(g_s), s	6.9	26.7	19.8	19.0	13.3	3.7	8.0	41.3	45.1	6.7	30.9	2.1
Cycle Q Clear(g_c), s	6.9	26.7	19.8	19.0	13.3	3.7	8.0	41.3	45.1	6.7	30.9	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	214	1299	572	453	1544	689	191	1588	487	179	1571	488
V/C Ratio(X)	0.78	0.62	0.48	1.41	0.32	0.10	2.25	0.94	1.48	0.90	0.76	0.07
Avail Cap(c_a), veh/h	296	1306	575	453	1544	689	191	1588	487	179	1585	492
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)	0.21	0.21	0.21	1.00	1.00	1.00	0.09	0.09	0.09	0.55	0.55	0.55
Uniform Delay (d), s/veh	67.0	37.7	35.5	63.0	26.9	24.2	68.5	48.6	50.0	68.4	45.4	35.5
Incr Delay (d2), s/veh	1.2	0.5	0.6	198.7	0.5	0.3	564.1	1.4	217.6	25.0	1.5	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	3.0	11.4	7.5	20.7	5.6	1.4	18.4	17.2	46.5	3.5	12.9	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.3	38.1	36.1	261.7	27.5	24.5	632.6	50.0	267.6	93.3	46.9	35.6
LnGrp LOS	E	D	D	F	C	C	F	D	F	F	D	D
Approach Vol, veh/h		1244			1204			2643			1394	
Approach Delay, s/veh		41.7			151.8			203.9			52.0	
Approach LOS		D			F			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	51.5	23.0	59.0	12.0	51.0	13.0	69.0
Change Period (Y+Rc), s	4.0	6.4	4.0	* 6	4.0	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	7.5	45.1	19.0	* 53	8.0	* 45	12.4	59.6
Max Q Clear Time (g_c+I1), s	8.7	47.1	21.0	28.7	10.0	32.9	8.9	15.3
Green Ext Time (p_c), s	0.0	0.0	0.0	10.7	0.0	8.5	0.1	5.4

Intersection Summary	
HCM 7th Control Delay, s/veh	130.5
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	1572	202	200	911	220	131	909	522	385	448	243
Future Volume (veh/h)	141	1572	202	200	911	220	131	909	522	385	448	243
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	148	1655	0	211	959	0	138	957	0	405	472	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	193	1627		2017	4380		183	990		380	1601	
Arrive On Green	0.06	0.32	0.00	0.58	0.86	0.00	0.05	0.28	0.00	0.21	0.45	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	148	1655	0	211	959	0	138	957	0	405	472	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	6.3	47.8	0.0	4.1	4.9	0.0	5.9	39.9	0.0	32.0	12.6	0.0
Cycle Q Clear(g_c), s	6.3	47.8	0.0	4.1	4.9	0.0	5.9	39.9	0.0	32.0	12.6	0.0
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	193	1627		2017	4380		183	990		380	1601	
V/C Ratio(X)	0.77	1.02		0.10	0.22		0.75	0.97		1.07	0.29	
Avail Cap(c_a), veh/h	253	1627		2017	4380		253	990		380	1601	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	69.8	51.1	0.0	13.8	1.9	0.0	70.1	53.4	0.0	59.0	26.1	0.0
Incr Delay (d2), s/veh	6.8	26.7	0.0	0.0	0.0	0.0	4.7	21.0	0.0	64.7	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	2.9	23.8	0.0	1.6	0.9	0.0	2.7	20.4	0.0	21.0	5.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	76.6	77.8	0.0	13.9	1.9	0.0	74.8	74.4	0.0	123.7	26.3	0.0
LnGrp LOS	E	F		B	A		E	E		F	C	
Approach Vol, veh/h		1803			1170			1095			877	
Approach Delay, s/veh		77.7			4.1			74.4			71.3	
Approach LOS		E			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	47.5	94.7	53.5	11.9	73.3	12.4	135.8
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	12.0	* 42	9.0	* 48	11.0	62.8	11.0	45.8
Max Q Clear Time (g_c+I1), s	34.0	41.9	6.1	49.8	7.9	14.6	8.3	6.9
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.1	5.6	0.1	12.5

Intersection Summary	
HCM 7th Control Delay, s/veh	58.4
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2323	141	116	1163	103	232
Future Volume (veh/h)	2323	141	116	1163	103	232
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2445	148	122	1224	108	244
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3252	195	144	3919	299	266
Arrive On Green	0.66	0.66	0.08	0.77	0.17	0.17
Sat Flow, veh/h	5095	295	1781	5274	1781	1585
Grp Volume(v), veh/h	1680	913	122	1224	108	244
Grp Sat Flow(s),veh/h/ln	1702	1817	1781	1702	1781	1585
Q Serve(g_s), s	49.7	51.4	10.1	11.0	8.1	22.7
Cycle Q Clear(g_c), s	49.7	51.4	10.1	11.0	8.1	22.7
Prop In Lane		0.16	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2247	1200	144	3919	299	266
V/C Ratio(X)	0.75	0.76	0.85	0.31	0.36	0.92
Avail Cap(c_a), veh/h	2247	1200	178	3919	428	380
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	17.1	17.4	68.0	5.3	55.3	61.4
Incr Delay (d2), s/veh	2.3	4.6	22.3	0.2	0.3	17.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.3	20.9	5.4	3.4	3.7	10.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	19.4	22.0	90.4	5.5	55.6	78.8
LnGrp LOS	B	C	F	A	E	E
Approach Vol, veh/h	2593			1346	352	
Approach Delay, s/veh	20.3			13.2	71.7	
Approach LOS	C			B	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	29.2	16.1	104.7		120.8
Change Period (Y+Rc), s	4.0	4.0	5.7		5.7
Max Green Setting (Gmax), s	36.0	15.0	85.3		104.3
Max Q Clear Time (g_c+I1), s	24.7	12.1	53.4		13.0
Green Ext Time (p_c), s	0.5	0.0	29.6		21.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	502	1768	175	561	934	164	180	993	740	185	441	132
Future Volume (veh/h)	502	1768	175	561	934	164	180	993	740	185	441	132
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	528	1861	0	591	983	0	189	1045	0	195	464	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	576	2125		636	1931		235	1066		207	1879	
Arrive On Green	0.17	0.42	0.00	0.13	0.38	0.00	0.07	0.30	0.00	0.06	0.29	0.00
Sat Flow, veh/h	3456	5106	1585	5023	5106	1585	3456	3554	1585	3456	6434	1585
Grp Volume(v), veh/h	528	1861	0	591	983	0	189	1045	0	195	464	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1674	1702	1585	1728	1777	1585	1728	1609	1585
Q Serve(g_s), s	22.5	50.2	0.0	17.5	22.2	0.0	8.1	43.7	0.0	8.4	8.3	0.0
Cycle Q Clear(g_c), s	22.5	50.2	0.0	17.5	22.2	0.0	8.1	43.7	0.0	8.4	8.3	0.0
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	576	2125		636	1931		235	1066		207	1879	
V/C Ratio(X)	0.92	0.88		0.93	0.51		0.80	0.98		0.94	0.25	
Avail Cap(c_a), veh/h	652	2125		636	1931		323	1066		207	1879	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	61.5	40.2	0.0	64.8	35.9	0.0	68.9	52.1	0.0	70.2	40.5	0.0
Incr Delay (d2), s/veh	15.8	5.4	0.0	19.8	1.0	0.0	7.0	22.8	0.0	45.9	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	11.0	21.3	0.0	8.5	9.2	0.0	3.8	22.5	0.0	5.0	3.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	77.2	45.7	0.0	84.7	36.9	0.0	75.9	74.9	0.0	116.1	40.6	0.0
LnGrp LOS	E	D		F	D		E	E		F	D	
Approach Vol, veh/h		2389			1574			1234			659	
Approach Delay, s/veh		52.6			54.8			75.0			62.9	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	51.0	25.0	68.5	14.2	49.8	30.7	62.8
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	5.7	6.0
Max Green Setting (Gmax), s	9.0	45.0	19.0	* 55	14.0	40.0	28.3	46.0
Max Q Clear Time (g_c+I1), s	10.4	45.7	19.5	52.2	10.1	10.3	24.5	24.2
Green Ext Time (p_c), s	0.0	0.0	0.0	2.9	0.1	4.5	0.5	9.1

Intersection Summary	
HCM 7th Control Delay, s/veh	59.1
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	2211	295	159	1019	67	317	846	294	68	654	304
Future Volume (veh/h)	228	2211	295	159	1019	67	317	846	294	68	654	304
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	240	2327	311	167	1073	0	334	891	0	72	688	320
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	2379	727	803	3201		346	1073		153	828	363
Arrive On Green	0.08	0.47	0.47	0.23	0.63	0.00	0.10	0.30	0.00	0.04	0.23	0.23
Sat Flow, veh/h	3456	5106	1561	3456	5106	1585	3456	3554	1585	3456	3554	1561
Grp Volume(v), veh/h	240	2327	311	167	1073	0	334	891	0	72	688	320
Grp Sat Flow(s),veh/h/ln	1728	1702	1561	1728	1702	1585	1728	1777	1585	1728	1777	1561
Q Serve(g_s), s	10.3	67.1	19.9	5.8	14.9	0.0	14.4	35.0	0.0	3.1	27.6	31.1
Cycle Q Clear(g_c), s	10.3	67.1	19.9	5.8	14.9	0.0	14.4	35.0	0.0	3.1	27.6	31.1
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	286	2379	727	803	3201		346	1073		153	828	363
V/C Ratio(X)	0.84	0.98	0.43	0.21	0.34		0.97	0.83		0.47	0.83	0.88
Avail Cap(c_a), veh/h	369	2379	727	803	3201		346	1073		161	839	368
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.8	39.3	26.7	46.4	13.2	0.0	67.2	48.8	0.0	70.0	54.7	61.1
Incr Delay (d2), s/veh	10.3	14.0	1.8	0.0	0.3	0.0	39.2	6.4	0.0	0.8	9.5	24.9
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	4.9	29.7	7.6	2.5	5.5	0.0	8.1	16.1	0.0	1.4	13.2	14.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	78.1	53.3	28.6	46.5	13.5	0.0	106.4	55.2	0.0	70.8	64.2	86.0
LnGrp LOS	E	D	C	D	B		F	E		E	E	F
Approach Vol, veh/h		2878			1240			1225			1080	
Approach Delay, s/veh		52.7			17.9			69.2			71.1	
Approach LOS		D			B			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	51.0	42.0	75.6	20.7	41.0	16.4	101.1
Change Period (Y+Rc), s	4.0	5.7	6.0	5.7	5.7	* 6	4.0	6.0
Max Green Setting (Gmax), s	7.0	43.7	8.0	69.9	15.0	* 35	16.0	63.6
Max Q Clear Time (g_c+I1), s	5.1	37.0	7.8	69.1	16.4	33.1	12.3	16.9
Green Ext Time (p_c), s	0.0	4.5	0.0	0.8	0.0	1.9	0.2	13.4

Intersection Summary	
HCM 7th Control Delay, s/veh	52.2
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	2437	24	40	1138	125	55	76	38	163	28	28
Future Volume (veh/h)	14	2437	24	40	1138	125	55	76	38	163	28	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	2565	0	42	1198	0	58	80	0	172	29	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	2546		372	3559		76	107		178	215	
Arrive On Green	0.02	0.50	0.00	0.21	0.70	0.00	0.04	0.06	0.00	0.10	0.11	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	15	2565	0	42	1198	0	58	80	0	172	29	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.2	74.8	0.0	2.9	13.9	0.0	4.8	6.3	0.0	14.4	2.1	0.0
Cycle Q Clear(g_c), s	1.2	74.8	0.0	2.9	13.9	0.0	4.8	6.3	0.0	14.4	2.1	0.0
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	39	2546		372	3559		76	107		178	215	
V/C Ratio(X)	0.39	1.01		0.11	0.34		0.77	0.75		0.97	0.13	
Avail Cap(c_a), veh/h	89	2546		372	3559		125	436		178	481	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	72.4	37.6	0.0	48.1	9.0	0.0	71.1	69.6	0.0	67.2	59.7	0.0
Incr Delay (d2), s/veh	2.4	19.6	0.0	0.0	0.3	0.0	5.9	7.4	0.0	56.9	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	0.6	33.9	0.0	1.3	4.8	0.0	2.3	3.3	0.0	9.4	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.7	57.2	0.0	48.2	9.3	0.0	77.0	77.0	0.0	124.1	60.0	0.0
LnGrp LOS	E	F		D	A		E	E		F	E	
Approach Vol, veh/h		2580			1240			138			201	
Approach Delay, s/veh		57.3			10.6			77.0			114.8	
Approach LOS		E			B			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	13.5	37.0	80.5	10.4	22.1	7.3	110.2
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	5.0	* 35	7.5	* 75	10.5	38.6	7.5	74.8
Max Q Clear Time (g_c+I1), s	3.4	8.3	4.9	76.8	6.8	4.1	3.2	15.9
Green Ext Time (p_c), s	0.0	0.3	0.0	0.0	0.0	0.1	0.0	19.2

Intersection Summary	
HCM 7th Control Delay, s/veh	46.8
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	216	1408	24	590	1049	497	26	1365	1060	889	854	256
Future Volume (veh/h)	216	1408	24	590	1049	497	26	1365	1060	889	854	256
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	227	1482	0	621	1104	0	27	1437	0	936	899	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	1444		520	1605		126	1268		739	2208	
Arrive On Green	0.08	0.28	0.00	0.10	0.31	0.00	0.04	0.25	0.00	0.21	0.43	0.00
Sat Flow, veh/h	3456	5106	1585	5023	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	227	1482	0	621	1104	0	27	1437	0	936	899	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1674	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	9.4	41.0	0.0	15.0	27.4	0.0	1.1	36.0	0.0	31.0	17.6	0.0
Cycle Q Clear(g_c), s	9.4	41.0	0.0	15.0	27.4	0.0	1.1	36.0	0.0	31.0	17.6	0.0
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	272	1444		520	1605		126	1268		739	2208	
V/C Ratio(X)	0.83	1.03		1.20	0.69		0.21	1.13		1.27	0.41	
Avail Cap(c_a), veh/h	286	1444		520	1605		191	1268		739	2208	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.71	0.71	0.00
Uniform Delay (d), s/veh	65.9	52.0	0.0	65.0	43.5	0.0	67.8	54.5	0.0	57.0	28.3	0.0
Incr Delay (d2), s/veh	16.8	30.7	0.0	105.4	2.4	0.0	0.3	70.4	0.0	127.8	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	4.7	21.1	0.0	11.4	11.7	0.0	0.5	23.3	0.0	26.3	7.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	82.7	82.7	0.0	170.4	45.9	0.0	68.1	124.9	0.0	184.8	28.5	0.0
LnGrp LOS	F	F		F	D		E	F		F	C	
Approach Vol, veh/h		1709			1725			1464			1835	
Approach Delay, s/veh		82.7			90.7			123.8			108.2	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.0	42.0	20.0	47.0	9.3	68.7	15.4	51.6
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	4.0	* 6	4.0	* 6
Max Green Setting (Gmax), s	31.0	36.0	15.0	41.0	8.0	* 60	12.0	* 45
Max Q Clear Time (g_c+I1), s	33.0	38.0	17.0	43.0	3.1	19.6	11.4	29.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	11.7	0.0	9.2

Intersection Summary	
HCM 7th Control Delay, s/veh	100.7
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	257	4	144	44	2	49	215	1896	22	347	1836	202
Future Volume (veh/h)	257	4	144	44	2	49	215	1896	22	347	1836	202
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	271	4	31	46	2	52	226	1996	23	365	1933	107
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	336	182	153	213	115	96	289	2364	27	1110	3113	965
Arrive On Green	0.10	0.10	0.10	0.06	0.06	0.06	0.08	0.36	0.36	0.32	0.61	0.61
Sat Flow, veh/h	3456	1870	1570	3456	1870	1562	3456	6605	76	3456	5106	1583
Grp Volume(v), veh/h	271	4	31	46	2	52	226	1458	561	365	1933	107
Grp Sat Flow(s),veh/h/ln	1728	1870	1570	1728	1870	1562	1728	1609	1855	1728	1702	1583
Q Serve(g_s), s	9.2	0.2	2.2	1.5	0.1	3.9	7.7	33.4	33.4	9.6	28.5	3.4
Cycle Q Clear(g_c), s	9.2	0.2	2.2	1.5	0.1	3.9	7.7	33.4	33.4	9.6	28.5	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	336	182	153	213	115	96	289	1727	664	1110	3113	965
V/C Ratio(X)	0.81	0.02	0.20	0.22	0.02	0.54	0.78	0.84	0.84	0.33	0.62	0.11
Avail Cap(c_a), veh/h	662	358	301	576	312	260	749	1741	669	1110	3113	965
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	0.29	0.29	0.29	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	49.0	49.9	53.5	52.9	54.6	53.9	35.5	35.5	30.9	14.7	9.8
Incr Delay (d2), s/veh	1.7	0.0	0.2	0.2	0.0	1.7	0.5	1.6	4.0	0.1	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	4.1	0.1	0.9	0.7	0.1	1.6	3.4	13.2	15.6	3.9	10.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.8	49.0	50.1	53.7	52.9	56.4	54.4	37.1	39.5	31.0	15.7	10.0
LnGrp LOS	D	D	D	D	D	E	D	D	D	C	B	B
Approach Vol, veh/h		306			100			2245			2405	
Approach Delay, s/veh		54.2			55.1			39.4			17.7	
Approach LOS		D			E			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	48.6		15.7	14.1	78.9		11.4				
Change Period (Y+Rc), s	5.7	5.7		4.0	4.0	5.7		4.0				
Max Green Setting (Gmax), s	14.3	43.3		23.0	26.0	33.3		20.0				
Max Q Clear Time (g_c+I1), s	11.6	35.4		11.2	9.7	30.5		5.9				
Green Ext Time (p_c), s	0.2	7.6		0.5	0.4	2.7		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	30.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	0	577	0	0	0	0	1385	409	0	1908	386
Future Volume (veh/h)	152	0	577	0	0	0	0	1385	409	0	1908	386
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	107	0	664				0	1458	431	0	2008	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	297	0	793				0	3787	1149	0	3787	
Arrive On Green	0.17	0.00	0.17				0.00	0.74	0.74	0.00	1.00	0.00
Sat Flow, veh/h	1781	0	4755				0	5274	1549	0	5274	1585
Grp Volume(v), veh/h	107	0	664				0	1458	431	0	2008	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1549	0	1702	1585
Q Serve(g_s), s	6.4	0.0	16.2				0.0	12.4	11.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.4	0.0	16.2				0.0	12.4	11.9	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	297	0	793				0	3787	1149	0	3787	
V/C Ratio(X)	0.36	0.00	0.84				0.00	0.39	0.38	0.00	0.53	
Avail Cap(c_a), veh/h	545	0	1454				0	3787	1149	0	3787	
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	0.00	1.00				0.00	1.00	1.00	0.00	0.78	0.00
Uniform Delay (d), s/veh	44.3	0.0	48.4				0.0	5.6	5.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.9				0.0	0.3	0.9	0.0	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
%ile BackOfQ(50%),veh/ln	2.9	0.0	6.5				0.0	4.0	3.7	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.6	0.0	49.3				0.0	5.9	6.5	0.0	0.4	0.0
LnGrp LOS	D		D					A	A		A	
Approach Vol, veh/h		771						1889			2008	
Approach Delay, s/veh		48.7						6.0			0.4	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	94.7	25.3	94.7
Change Period (Y+Rc), s	5.7	5.3	5.7
Max Green Setting (Gmax), s	72.3	36.7	72.3
Max Q Clear Time (g_c+I1), s	14.4	18.2	2.0
Green Ext Time (p_c), s	34.2	1.8	39.2

Intersection Summary	
HCM 7th Control Delay, s/veh	10.7
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	823	1085	1166	371	245	1471
Future Volume (veh/h)	823	1085	1166	371	245	1471
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	866	1142	1227	0	258	1548
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1201	1117	2338		287	3332
Arrive On Green	0.24	0.24	0.61	0.00	0.16	0.65
Sat Flow, veh/h	5023	2790	5274	1585	1781	5274
Grp Volume(v), veh/h	866	1142	1227	0	258	1548
Grp Sat Flow(s),veh/h/ln	1674	1395	1702	1585	1781	1702
Q Serve(g_s), s	19.0	28.7	16.6	0.0	17.0	18.1
Cycle Q Clear(g_c), s	19.0	28.7	16.6	0.0	17.0	18.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1201	1117	2338		287	3332
V/C Ratio(X)	0.72	1.02	0.52		0.90	0.46
Avail Cap(c_a), veh/h	1201	1117	2338		520	3332
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.92	0.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	36.0	16.0	0.0	49.4	10.4
Incr Delay (d2), s/veh	1.9	32.8	0.8	0.0	4.1	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	21.0	5.7	0.0	7.7	6.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	43.8	68.7	16.7	0.0	53.5	10.9
LnGrp LOS	D	F	B		D	B
Approach Vol, veh/h	2008		1227			1806
Approach Delay, s/veh	58.0		16.7			16.9
Approach LOS	E		B			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	23.3	60.7			84.0	36.0
Change Period (Y+Rc), s	4.0	5.7			5.7	7.3
Max Green Setting (Gmax), s	35.6	39.3			78.3	28.7
Max Q Clear Time (g_c+I1), s	19.0	18.6			20.1	30.7
Green Ext Time (p_c), s	0.3	11.3			26.7	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	33.2
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	424	1494	62	596	1519	35	69	803	320	99	899	562
Future Volume (veh/h)	424	1494	62	596	1519	35	69	803	320	99	899	562
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	446	1573	22	627	1599	14	73	845	103	104	946	347
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	512	1702	528	684	1956	607	187	1099	341	199	1117	347
Arrive On Green	0.15	0.33	0.33	0.20	0.38	0.38	0.05	0.22	0.22	0.06	0.22	0.22
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	446	1573	22	627	1599	14	73	845	103	104	946	347
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	14.8	34.9	1.1	20.9	33.0	0.6	2.4	18.3	6.4	3.4	20.9	25.7
Cycle Q Clear(g_c), s	14.8	34.9	1.1	20.9	33.0	0.6	2.4	18.3	6.4	3.4	20.9	25.7
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	512	1702	528	684	1956	607	187	1099	341	199	1117	347
V/C Ratio(X)	0.87	0.92	0.04	0.92	0.82	0.02	0.39	0.77	0.30	0.52	0.85	1.00
Avail Cap(c_a), veh/h	736	1709	530	736	1956	607	206	1117	347	206	1117	347
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	48.9	37.7	26.5	46.2	32.5	22.6	53.7	43.3	38.7	53.8	44.0	45.9
Incr Delay (d2), s/veh	5.9	9.5	0.1	15.1	3.4	0.0	0.5	4.8	1.9	0.9	6.5	48.4
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	6.6	15.3	0.4	10.1	13.5	0.2	1.0	7.9	2.6	1.5	9.4	14.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.8	47.2	26.6	61.2	35.9	22.6	54.2	48.1	40.6	54.6	50.5	94.3
LnGrp LOS	D	D	C	E	D	C	D	D	D	D	D	F
Approach Vol, veh/h		2041			2240			1021			1397	
Approach Delay, s/veh		48.6			42.9			47.8			61.7	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	31.6	28.2	45.8	11.4	32.0	22.4	51.7
Change Period (Y+Rc), s	5.0	6.3	5.0	6.7	5.0	6.3	5.0	6.7
Max Green Setting (Gmax), s	7.0	25.7	25.0	39.3	7.0	25.7	25.0	39.3
Max Q Clear Time (g_c+I1), s	5.4	20.3	22.9	36.9	4.4	27.7	16.8	35.0
Green Ext Time (p_c), s	0.0	4.1	0.4	2.3	0.0	0.0	0.6	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	49.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	461	1248	11	289	1483	179	37	536	548	275	695	632
Future Volume (veh/h)	461	1248	11	289	1483	179	37	536	548	275	695	632
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	485	1314	5	304	1561	89	39	564	414	289	732	466
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	437	1654	514	364	1523	473	98	1506	468	250	1753	544
Arrive On Green	0.13	0.32	0.32	0.11	0.30	0.30	0.03	0.29	0.29	0.07	0.34	0.34
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	485	1314	5	304	1561	89	39	564	414	289	732	466
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	14.0	25.9	0.2	9.5	33.0	4.6	1.2	9.7	27.6	8.0	12.2	30.3
Cycle Q Clear(g_c), s	14.0	25.9	0.2	9.5	33.0	4.6	1.2	9.7	27.6	8.0	12.2	30.3
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	437	1654	514	364	1523	473	98	1506	468	250	1753	544
V/C Ratio(X)	1.11	0.79	0.01	0.84	1.02	0.19	0.40	0.37	0.89	1.16	0.42	0.86
Avail Cap(c_a), veh/h	437	1654	514	390	1523	473	141	1685	523	250	1846	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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	34.0	25.4	48.5	38.8	28.9	52.8	30.9	37.2	51.3	27.8	33.8
Incr Delay (d2), s/veh	76.1	3.2	0.0	13.8	29.6	0.4	2.6	0.2	15.4	105.8	0.1	11.0
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	10.4	10.6	0.1	4.7	17.2	1.7	0.6	4.0	12.1	7.1	4.9	12.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	124.4	37.2	25.4	62.3	68.4	29.3	55.4	31.1	52.7	157.2	27.9	44.8
LnGrp LOS	F	D	C	E	F	C	E	C	D	F	C	D
Approach Vol, veh/h		1804			1954			1017			1487	
Approach Delay, s/veh		60.6			65.7			40.8			58.3	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	37.6	16.2	43.8	7.6	43.0	19.0	41.0
Change Period (Y+Rc), s	5.0	* 5	4.5	8.0	4.5	5.0	5.0	8.0
Max Green Setting (Gmax), s	8.0	* 37	12.5	35.0	4.5	40.0	14.0	33.0
Max Q Clear Time (g_c+I1), s	10.0	29.6	11.5	27.9	3.2	32.3	16.0	35.0
Green Ext Time (p_c), s	0.0	3.1	0.1	5.7	0.0	2.9	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	58.4
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	1923	163	7	1916	98	212	63	12	161	120	105
Future Volume (veh/h)	12	1923	163	7	1916	98	212	63	12	161	120	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	2024	172	7	2017	103	223	66	13	169	126	111
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	27	2749	850	16	2716	840	260	270	228	202	210	176
Arrive On Green	0.02	0.54	0.54	0.01	0.53	0.53	0.15	0.14	0.14	0.11	0.11	0.11
Sat Flow, veh/h	1781	5106	1579	1781	5106	1579	1781	1870	1575	1781	1870	1572
Grp Volume(v), veh/h	13	2024	172	7	2017	103	223	66	13	169	126	111
Grp Sat Flow(s),veh/h/ln	1781	1702	1579	1781	1702	1579	1781	1870	1575	1781	1870	1572
Q Serve(g_s), s	0.7	28.5	5.3	0.4	28.7	3.1	11.5	2.9	0.7	8.7	6.0	6.3
Cycle Q Clear(g_c), s	0.7	28.5	5.3	0.4	28.7	3.1	11.5	2.9	0.7	8.7	6.0	6.3
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	27	2749	850	16	2716	840	260	270	228	202	210	176
V/C Ratio(X)	0.48	0.74	0.20	0.44	0.74	0.12	0.86	0.24	0.06	0.84	0.60	0.63
Avail Cap(c_a), veh/h	95	2842	879	95	2842	879	512	936	788	246	645	542
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	45.9	16.6	11.2	46.3	17.0	11.0	39.2	35.6	34.7	40.8	39.7	39.9
Incr Delay (d2), s/veh	4.7	1.2	0.2	7.0	1.3	0.1	3.2	1.0	0.2	15.9	3.4	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	0.3	9.8	1.7	0.2	9.9	1.0	5.2	1.4	0.3	4.7	2.9	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.6	17.8	11.5	53.4	18.3	11.1	42.4	36.6	34.9	56.7	43.1	44.4
LnGrp LOS	D	B	B	D	B	B	D	D	C	E	D	D
Approach Vol, veh/h		2209			2127			302			406	
Approach Delay, s/veh		17.5			18.0			40.8			49.1	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	18.2	4.8	56.3	17.7	15.1	5.4	55.7
Change Period (Y+Rc), s	4.0	* 4.6	4.0	5.7	4.0	4.6	4.0	5.7
Max Green Setting (Gmax), s	13.0	* 47	5.0	52.3	27.0	32.4	5.0	52.3
Max Q Clear Time (g_c+I1), s	10.7	4.9	2.4	30.5	13.5	8.3	2.7	30.7
Green Ext Time (p_c), s	0.1	0.8	0.0	19.7	0.3	1.3	0.0	19.3

Intersection Summary	
HCM 7th Control Delay, s/veh	21.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	546	1377	105	276	1037	311	237	1275	251	459	892	1006
Future Volume (veh/h)	546	1377	105	276	1037	311	237	1275	251	459	892	1006
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	575	1449	111	291	1092	156	249	1342	78	483	939	818
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	647	1699	527	356	1269	394	312	1174	364	555	1533	767
Arrive On Green	0.19	0.33	0.33	0.10	0.25	0.25	0.09	0.23	0.23	0.16	0.30	0.30
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1565
Grp Volume(v), veh/h	575	1449	111	291	1092	156	249	1342	78	483	939	818
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1565
Q Serve(g_s), s	19.1	31.0	5.9	9.7	24.0	9.6	8.3	27.0	4.7	16.0	18.5	35.3
Cycle Q Clear(g_c), s	19.1	31.0	5.9	9.7	24.0	9.6	8.3	27.0	4.7	16.0	18.5	35.3
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	647	1699	527	356	1269	394	312	1174	364	555	1533	767
V/C Ratio(X)	0.89	0.85	0.21	0.82	0.86	0.40	0.80	1.14	0.21	0.87	0.61	1.07
Avail Cap(c_a), veh/h	971	1699	527	677	1305	405	589	1174	364	1148	1533	767
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	46.5	36.5	28.1	51.6	42.2	36.8	52.4	45.2	36.6	48.1	35.2	30.2
Incr Delay (d2), s/veh	5.1	4.7	0.4	1.8	6.4	1.3	1.8	74.8	0.5	1.7	0.9	51.9
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	8.4	13.0	2.2	4.2	10.5	3.8	3.6	19.1	1.8	6.8	7.5	30.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.6	41.2	28.5	53.4	48.6	38.0	54.2	120.1	37.1	49.8	36.1	82.1
LnGrp LOS	D	D	C	D	D	D	D	F	D	D	D	F
Approach Vol, veh/h		2135			1539			1669			2240	
Approach Delay, s/veh		43.3			48.4			106.3			55.9	
Approach LOS		D			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.9	33.4	16.1	45.1	14.6	41.7	26.0	35.2
Change Period (Y+Rc), s	4.0	6.4	4.0	6.0	4.0	6.4	4.0	6.0
Max Green Setting (Gmax), s	39.0	27.0	23.0	30.0	20.0	35.0	33.0	30.0
Max Q Clear Time (g_c+I1), s	18.3	29.0	11.7	33.0	10.3	37.3	21.1	26.0
Green Ext Time (p_c), s	0.8	0.0	0.4	0.0	0.3	0.0	0.9	3.2

Intersection Summary	
HCM 7th Control Delay, s/veh	61.9
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	1347	124	50	818	167	232	451	82	264	88	302
Future Volume (veh/h)	222	1347	124	50	818	167	232	451	82	264	88	302
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	234	1418	131	53	861	0	244	475	40	278	93	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	1132	504	68	822		197	384	561	257	86	
Arrive On Green	0.13	0.32	0.32	0.04	0.23	0.00	0.32	0.32	0.32	0.19	0.19	0.00
Sat Flow, veh/h	1781	3554	1583	1781	3554	1585	624	1215	1585	1351	452	1585
Grp Volume(v), veh/h	234	1418	131	53	861	0	719	0	40	371	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1583	1781	1777	1585	1839	0	1585	1803	0	1585
Q Serve(g_s), s	18.8	47.8	9.2	4.4	34.7	0.0	47.4	0.0	2.5	28.5	0.0	0.0
Cycle Q Clear(g_c), s	18.8	47.8	9.2	4.4	34.7	0.0	47.4	0.0	2.5	28.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.34		1.00	0.75		1.00
Lane Grp Cap(c), veh/h	223	1132	504	68	822		581	0	561	343	0	
V/C Ratio(X)	1.05	1.25	0.26	0.78	1.05		1.24	0.00	0.07	1.08	0.00	
Avail Cap(c_a), veh/h	223	1132	504	77	822		581	0	561	343	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	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	65.6	51.1	38.0	71.5	57.6	0.0	51.3	0.0	32.1	60.8	0.0	0.0
Incr Delay (d2), s/veh	73.4	121.1	0.5	30.5	44.5	0.0	121.0	0.0	0.0	72.6	0.0	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	12.9	39.7	3.6	2.6	20.3	0.0	40.9	0.0	1.0	19.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	139.0	172.2	38.5	102.0	102.1	0.0	172.3	0.0	32.1	133.4	0.0	0.0
LnGrp LOS	F	F	D	F	F		F		C	F		
Approach Vol, veh/h		1783			914			759			371	
Approach Delay, s/veh		158.0			102.1			164.9			133.4	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	52.0	9.7	53.8	34.5	22.8	40.7
Change Period (Y+Rc), s	4.6	4.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	47.4	6.5	47.0	28.5	18.8	34.7
Max Q Clear Time (g_c+I1), s	49.4	6.4	49.8	30.5	20.8	36.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	143.7
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	452	946	55	294	84	439	1427	60	66	1090	128
Future Volume (veh/h)	179	452	946	55	294	84	439	1427	60	66	1090	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	476	810	58	309	37	462	1502	20	69	1147	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	1599	713	80	1515	667	444	1613	493	161	1194	
Arrive On Green	0.07	0.45	0.45	0.04	0.43	0.43	0.13	0.32	0.32	0.05	0.23	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1565	3456	5106	1560	3456	5106	1585
Grp Volume(v), veh/h	188	476	810	58	309	37	462	1502	20	69	1147	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1565	1728	1702	1560	1728	1702	1585
Q Serve(g_s), s	7.5	11.9	63.0	4.5	7.7	1.9	18.0	39.9	1.2	2.7	31.1	0.0
Cycle Q Clear(g_c), s	7.5	11.9	63.0	4.5	7.7	1.9	18.0	39.9	1.2	2.7	31.1	0.0
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	237	1599	713	80	1515	667	444	1613	493	161	1194	
V/C Ratio(X)	0.79	0.30	1.14	0.73	0.20	0.06	1.04	0.93	0.04	0.43	0.96	
Avail Cap(c_a), veh/h	321	1599	713	89	1515	667	444	1613	493	173	1194	
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	0.00
Uniform Delay (d), s/veh	64.2	24.4	38.5	66.0	25.2	23.6	61.0	46.4	33.2	64.9	53.0	0.0
Incr Delay (d2), s/veh	6.5	0.2	77.6	18.7	0.1	0.1	53.4	11.1	0.2	0.7	18.2	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	3.5	4.9	39.1	2.5	3.3	0.7	11.0	18.0	0.5	1.2	14.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	70.7	24.6	116.1	84.8	25.4	23.7	114.4	57.6	33.3	65.6	71.2	0.0
LnGrp LOS	E	C	F	F	C	C	F	E	C	E	E	
Approach Vol, veh/h		1474			404			1984			1216	
Approach Delay, s/veh		80.8			33.8			70.6			70.9	
Approach LOS		F			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	50.2	10.3	69.0	22.0	38.7	13.6	65.7
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	7.0	43.0	7.0	63.0	18.0	32.0	13.0	* 58
Max Q Clear Time (g_c+I1), s	4.7	41.9	6.5	65.0	20.0	33.1	9.5	9.7
Green Ext Time (p_c), s	0.0	0.9	0.0	0.0	0.0	0.0	0.1	4.5

Intersection Summary	
HCM 7th Control Delay, s/veh	70.7
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	210	125	58	1322	1283	110
Future Volume (veh/h)	210	125	58	1322	1283	110
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	132	61	1392	1351	116
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	330	294	111	2968	2055	620
Arrive On Green	0.19	0.19	0.06	0.58	0.40	0.40
Sat Flow, veh/h	1781	1585	1781	5274	5274	1539
Grp Volume(v), veh/h	221	132	61	1392	1351	116
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1539
Q Serve(g_s), s	4.5	2.9	1.3	6.1	8.3	1.9
Cycle Q Clear(g_c), s	4.5	2.9	1.3	6.1	8.3	1.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	330	294	111	2968	2055	620
V/C Ratio(X)	0.67	0.45	0.55	0.47	0.66	0.19
Avail Cap(c_a), veh/h	831	740	231	2968	2383	718
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	14.6	14.0	17.6	4.6	9.4	7.4
Incr Delay (d2), s/veh	2.4	1.1	4.2	0.1	0.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	2.7	0.6	0.8	2.0	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	17.0	15.0	21.8	4.8	9.9	7.6
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	353			1453	1467	
Approach Delay, s/veh	16.2			5.5	9.7	
Approach LOS	B			A	A	

Timer - Assigned Phs	2	4	5	6
Phs Duration (G+Y+Rc), s	26.9	11.6	6.9	20.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	8.1	6.5	3.3	10.3
Green Ext Time (p_c), s	6.1	0.9	0.0	5.1

Intersection Summary	
HCM 7th Control Delay, s/veh	8.5
HCM 7th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	47	50	17	1332	1397	10
Future Volume (veh/h)	47	50	17	1332	1397	10
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	53	18	1402	1471	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	160	142	41	3335	2562	765
Arrive On Green	0.09	0.09	0.02	0.65	0.50	0.50
Sat Flow, veh/h	1781	1585	1781	5274	5274	1526
Grp Volume(v), veh/h	49	53	18	1402	1471	11
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1526
Q Serve(g_s), s	0.9	1.1	0.3	4.6	7.1	0.1
Cycle Q Clear(g_c), s	0.9	1.1	0.3	4.6	7.1	0.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	160	142	41	3335	2562	765
V/C Ratio(X)	0.31	0.37	0.44	0.42	0.57	0.01
Avail Cap(c_a), veh/h	916	815	254	4812	3427	1024
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	14.9	15.0	16.9	2.9	6.1	4.4
Incr Delay (d2), s/veh	1.1	1.6	7.3	0.1	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.2	0.0	1.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.0	16.6	24.2	3.0	6.3	4.4
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	102			1420	1482	
Approach Delay, s/veh	16.3			3.3	6.3	
Approach LOS	B			A	A	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	27.4		7.6	5.3	22.1
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	33.0		18.0	5.0	23.5
Max Q Clear Time (g_c+I1), s	6.6		3.1	2.3	9.1
Green Ext Time (p_c), s	11.2		0.2	0.0	8.4

Intersection Summary	
HCM 7th Control Delay, s/veh	5.2
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	89	5	77	39	100	5	1576	44	37	585	26
Future Volume (veh/h)	76	89	5	77	39	100	5	1576	44	37	585	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	94	5	81	41	105	5	1659	46	39	616	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	206	174	180	189	160	19	1757	784	103	1926	859
Arrive On Green	0.11	0.11	0.11	0.10	0.10	0.10	0.01	0.49	0.49	0.06	0.54	0.54
Sat Flow, veh/h	1781	1870	1581	1781	1870	1580	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	80	94	5	81	41	105	5	1659	46	39	616	27
Grp Sat Flow(s),veh/h/ln	1781	1870	1581	1781	1870	1580	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.3	3.8	0.2	3.4	1.6	5.1	0.2	35.4	1.2	1.7	7.7	0.6
Cycle Q Clear(g_c), s	3.3	3.8	0.2	3.4	1.6	5.1	0.2	35.4	1.2	1.7	7.7	0.6
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	197	206	174	180	189	160	19	1757	784	103	1926	859
V/C Ratio(X)	0.41	0.46	0.03	0.45	0.22	0.66	0.27	0.94	0.06	0.38	0.32	0.03
Avail Cap(c_a), veh/h	445	467	395	445	467	395	445	1776	792	445	1926	859
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	33.2	33.3	31.8	33.9	33.1	34.6	39.3	19.2	10.5	36.3	10.2	8.5
Incr Delay (d2), s/veh	1.4	1.6	0.1	1.8	0.6	4.5	7.4	10.8	0.0	2.3	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	1.5	1.8	0.1	1.5	0.7	2.1	0.1	14.6	0.4	0.8	2.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.5	34.9	31.8	35.6	33.6	39.2	46.7	30.0	10.6	38.6	10.3	8.6
LnGrp LOS	C	C	C	D	C	D	D	C	B	D	B	A
Approach Vol, veh/h		179			227			1710			682	
Approach Delay, s/veh		34.6			36.9			29.5			11.8	
Approach LOS		C			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.6	45.6		12.8	4.8	49.4		13.0
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	3.7	37.4		5.8	2.2	9.7		7.1
Green Ext Time (p_c), s	0.0	2.2		0.6	0.0	4.2		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	26.1
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	6	280	77	4	16	213	1482	81	25	838	28
Future Volume (veh/h)	86	6	280	77	4	16	213	1482	81	25	838	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	91	6	169	81	4	17	224	1560	85	26	882	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	306	255	103	287	236	253	1652	735	58	1263	561
Arrive On Green	0.08	0.18	0.18	0.06	0.17	0.17	0.16	0.52	0.52	0.04	0.39	0.39
Sat Flow, veh/h	1603	1683	1403	1603	1683	1383	1603	3198	1422	1603	3198	1421
Grp Volume(v), veh/h	91	6	169	81	4	17	224	1560	85	26	882	29
Grp Sat Flow(s),veh/h/ln	1603	1683	1403	1603	1683	1383	1603	1599	1422	1603	1599	1421
Q Serve(g_s), s	5.3	0.3	10.8	4.8	0.2	1.0	13.1	44.3	3.0	1.5	22.1	1.2
Cycle Q Clear(g_c), s	5.3	0.3	10.8	4.8	0.2	1.0	13.1	44.3	3.0	1.5	22.1	1.2
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	122	306	255	103	287	236	253	1652	735	58	1263	561
V/C Ratio(X)	0.75	0.02	0.66	0.78	0.01	0.07	0.88	0.94	0.12	0.44	0.70	0.05
Avail Cap(c_a), veh/h	133	800	667	200	893	734	300	1663	740	133	1331	591
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	43.5	32.3	36.6	44.3	33.2	33.5	39.6	21.9	11.9	45.4	24.3	18.0
Incr Delay (d2), s/veh	16.0	0.1	9.7	4.8	0.1	0.6	20.7	11.6	0.1	2.0	1.9	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	2.6	0.1	4.4	2.0	0.1	0.4	6.4	16.9	1.0	0.6	8.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.5	32.4	46.3	49.2	33.3	34.1	60.3	33.6	12.1	47.3	26.2	18.0
LnGrp LOS	E	C	D	D	C	C	E	C	B	D	C	B
Approach Vol, veh/h		266			102			1869			937	
Approach Delay, s/veh		50.5			46.0			35.8			26.6	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	55.7	10.2	22.8	19.2	44.0	11.3	21.7
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	4.0	* 5.3
Max Green Setting (Gmax), s	3.5	50.0	12.0	45.7	18.0	40.0	8.0	* 51
Max Q Clear Time (g_c+I1), s	3.5	46.3	6.8	12.8	15.1	24.1	7.3	3.0
Green Ext Time (p_c), s	0.0	3.4	0.0	1.8	0.1	8.0	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	34.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	2	260	42	6	11	92	1488	21	11	1175	23
Future Volume (veh/h)	102	2	260	42	6	11	92	1488	21	11	1175	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	107	2	274	44	6	12	97	1566	22	12	1237	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	6	308	120	16	120	128	1762	783	36	1579	702
Arrive On Green	0.20	0.20	0.20	0.08	0.08	0.08	0.07	0.50	0.50	0.02	0.44	0.44
Sat Flow, veh/h	1750	33	1578	1577	215	1569	1781	3554	1580	1781	3554	1580
Grp Volume(v), veh/h	109	0	274	50	0	12	97	1566	22	12	1237	24
Grp Sat Flow(s),veh/h/ln	1783	0	1578	1792	0	1569	1781	1777	1580	1781	1777	1580
Q Serve(g_s), s	4.7	0.0	15.0	2.4	0.0	0.6	4.7	35.3	0.6	0.6	26.4	0.8
Cycle Q Clear(g_c), s	4.7	0.0	15.0	2.4	0.0	0.6	4.7	35.3	0.6	0.6	26.4	0.8
Prop In Lane	0.98		1.00	0.88		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	348	0	308	137	0	120	128	1762	783	36	1579	702
V/C Ratio(X)	0.31	0.00	0.89	0.37	0.00	0.10	0.76	0.89	0.03	0.33	0.78	0.03
Avail Cap(c_a), veh/h	401	0	355	403	0	353	401	1800	801	401	1600	711
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	30.7	0.0	34.8	39.0	0.0	38.2	40.5	20.2	11.5	42.9	21.0	13.9
Incr Delay (d2), s/veh	0.2	0.0	19.7	0.6	0.0	0.1	3.5	6.2	0.0	2.0	2.9	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	2.0	0.0	7.4	1.1	0.0	0.2	2.1	13.9	0.2	0.3	10.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.8	0.0	54.5	39.6	0.0	38.3	44.0	26.3	11.5	44.9	24.0	14.0
LnGrp LOS	C		D	D		D	D	C	B	D	C	B
Approach Vol, veh/h		383			62			1685			1273	
Approach Delay, s/veh		47.8			39.3			27.2			24.0	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	50.0		22.2	10.4	45.5		10.8
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.0
Max Green Setting (Gmax), s	20.0	45.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	2.6	37.3		17.0	6.7	28.4		4.4
Green Ext Time (p_c), s	0.0	6.7		0.3	0.1	8.5		0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	28.5
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	248	189	105	1414	1283	153
Future Volume (veh/h)	248	189	105	1414	1283	153
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	199	111	1488	1351	161
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	327	291	169	2338	1775	792
Arrive On Green	0.18	0.18	0.10	0.66	0.50	0.50
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	261	199	111	1488	1351	161
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	8.8	7.4	3.8	15.5	19.4	3.6
Cycle Q Clear(g_c), s	8.8	7.4	3.8	15.5	19.4	3.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	327	291	169	2338	1775	792
V/C Ratio(X)	0.80	0.68	0.65	0.64	0.76	0.20
Avail Cap(c_a), veh/h	1187	1056	509	2338	1917	855
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	24.6	24.0	27.5	6.3	12.7	8.8
Incr Delay (d2), s/veh	1.7	1.1	4.2	0.8	2.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.1	1.7	3.4	6.2	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.4	25.1	31.8	7.1	14.8	9.0
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	460			1599	1512	
Approach Delay, s/veh	25.8			8.8	14.2	
Approach LOS	C			A	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	47.5		15.6	10.0	37.5
Change Period (Y+Rc), s	6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s	24.0		42.0	18.0	34.0
Max Q Clear Time (g_c+I1), s	17.5		10.8	5.8	21.4
Green Ext Time (p_c), s	5.6		0.7	0.2	10.1

Intersection Summary	
HCM 7th Control Delay, s/veh	13.3
HCM 7th LOS	B

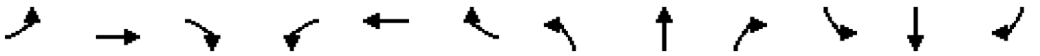
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	17	120	24	33	26	62	1506	46	32	1336	65
Future Volume (veh/h)	129	17	120	24	33	26	62	1506	46	32	1336	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	18	126	25	35	27	65	1585	48	34	1406	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	206	174	147	154	129	132	1747	762	93	1669	743
Arrive On Green	0.11	0.11	0.11	0.08	0.08	0.08	0.07	0.49	0.49	0.05	0.47	0.47
Sat Flow, veh/h	1781	1870	1581	1781	1870	1557	1781	3554	1549	1781	3554	1582
Grp Volume(v), veh/h	136	18	126	25	35	27	65	1585	48	34	1406	68
Grp Sat Flow(s),veh/h/ln	1781	1870	1581	1781	1870	1557	1781	1777	1549	1781	1777	1582
Q Serve(g_s), s	6.2	0.7	6.5	1.1	1.5	1.4	3.0	34.5	1.4	1.6	29.3	2.0
Cycle Q Clear(g_c), s	6.2	0.7	6.5	1.1	1.5	1.4	3.0	34.5	1.4	1.6	29.3	2.0
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	196	206	174	147	154	129	132	1747	762	93	1669	743
V/C Ratio(X)	0.69	0.09	0.72	0.17	0.23	0.21	0.49	0.91	0.06	0.37	0.84	0.09
Avail Cap(c_a), veh/h	423	444	375	423	444	370	423	1814	791	423	1814	807
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	36.1	33.7	36.2	36.0	36.1	36.1	37.5	19.6	11.2	38.6	19.6	12.4
Incr Delay (d2), s/veh	4.3	0.2	5.6	0.5	0.7	0.8	2.8	6.9	0.0	2.4	3.6	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	2.8	0.3	2.7	0.5	0.7	0.5	1.3	13.6	0.4	0.7	11.1	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.5	33.9	41.8	36.5	36.9	36.9	40.3	26.6	11.3	41.0	23.2	12.4
LnGrp LOS	D	C	D	D	D	D	D	C	B	D	C	B
Approach Vol, veh/h		280			87			1698			1508	
Approach Delay, s/veh		40.7			36.8			26.7			23.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.4	47.4		15.2	10.3	45.6		13.3
Change Period (Y+Rc), s	4.0	6.0		5.9	4.0	6.0		6.3
Max Green Setting (Gmax), s	20.0	43.0		20.0	20.0	43.0		20.0
Max Q Clear Time (g_c+I1), s	3.5	36.5		8.5	5.0	31.3		3.5
Green Ext Time (p_c), s	0.0	4.9		0.7	0.1	7.2		0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	26.5
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	809	469	980	796	510	336	730	530	250	920	110
Future Volume (veh/h)	170	809	469	980	796	510	336	730	530	250	920	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	179	852	494	1032	838	537	354	768	558	263	968	116
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	210	975	301	1005	1859	575	300	976	533	291	952	295
Arrive On Green	0.12	0.19	0.19	0.29	0.36	0.36	0.17	0.19	0.19	0.16	0.19	0.19
Sat Flow, veh/h	1781	5106	1575	3456	5106	1580	1781	5106	2790	1781	5106	1585
Grp Volume(v), veh/h	179	852	494	1032	838	537	354	768	558	263	968	116
Grp Sat Flow(s),veh/h/ln	1781	1702	1575	1728	1702	1580	1781	1702	1395	1781	1702	1585
Q Serve(g_s), s	10.8	17.8	21.0	32.0	13.7	36.0	18.5	15.8	21.0	15.9	20.5	7.1
Cycle Q Clear(g_c), s	10.8	17.8	21.0	32.0	13.7	36.0	18.5	15.8	21.0	15.9	20.5	7.1
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	210	975	301	1005	1859	575	300	976	533	291	952	295
V/C Ratio(X)	0.85	0.87	1.64	1.03	0.45	0.93	1.18	0.79	1.05	0.90	1.02	0.39
Avail Cap(c_a), veh/h	275	975	301	1005	1859	575	300	976	533	300	952	295
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	47.6	43.2	44.5	39.0	26.6	33.7	45.8	42.4	44.5	45.2	44.8	39.3
Incr Delay (d2), s/veh	17.8	8.9	303.8	35.4	0.2	22.5	110.6	4.3	51.8	28.3	33.6	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	5.7	8.0	33.2	17.8	5.3	16.5	17.2	6.8	10.8	9.1	11.2	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.4	52.1	348.3	74.4	26.8	56.2	156.4	46.7	96.3	73.4	78.3	40.1
LnGrp LOS	E	D	F	F	C	E	F	D	F	E	F	D
Approach Vol, veh/h		1525			2407			1680			1347	
Approach Delay, s/veh		149.6			53.7			86.3			74.1	
Approach LOS		F			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	25.5	36.5	25.5	23.0	25.0	17.5	44.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.5	20.5	32.0	21.0	18.5	20.5	17.0	36.0
Max Q Clear Time (g_c+I1), s	17.9	23.0	34.0	23.0	20.5	22.5	12.8	38.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	86.5
HCM 7th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	1251	126	200	1800	260	65	100	120	100	140	90
Future Volume (veh/h)	170	1251	126	200	1800	260	65	100	120	100	140	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	179	1317	133	211	1895	274	68	105	126	105	147	95
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	214	2393	741	178	2289	709	88	269	217	137	321	226
Arrive On Green	0.12	0.47	0.47	0.10	0.45	0.45	0.05	0.14	0.14	0.08	0.17	0.17
Sat Flow, veh/h	1781	5106	1582	1781	5106	1582	1781	1870	1506	1781	1870	1321
Grp Volume(v), veh/h	179	1317	133	211	1895	274	68	105	126	105	147	95
Grp Sat Flow(s),veh/h/ln	1781	1702	1582	1781	1702	1582	1781	1870	1506	1781	1870	1321
Q Serve(g_s), s	8.4	15.8	4.2	8.5	27.8	9.9	3.2	4.3	6.7	4.9	6.0	5.5
Cycle Q Clear(g_c), s	8.4	15.8	4.2	8.5	27.8	9.9	3.2	4.3	6.7	4.9	6.0	5.5
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	214	2393	741	178	2289	709	88	269	217	137	321	226
V/C Ratio(X)	0.84	0.55	0.18	1.19	0.83	0.39	0.77	0.39	0.58	0.77	0.46	0.42
Avail Cap(c_a), veh/h	217	2544	788	178	2431	753	182	428	344	553	818	578
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	36.7	16.2	13.1	38.4	20.6	15.7	40.1	33.1	34.1	38.6	31.8	31.6
Incr Delay (d2), s/veh	23.7	0.2	0.1	127.4	2.4	0.3	13.5	0.9	2.5	8.6	1.0	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	4.8	5.4	1.3	9.7	9.8	3.1	1.7	2.0	2.4	2.4	2.7	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.4	16.5	13.3	165.8	23.0	16.0	53.5	34.1	36.6	47.2	32.8	32.8
LnGrp LOS	E	B	B	F	C	B	D	C	D	D	C	C
Approach Vol, veh/h		1629			2380			299			347	
Approach Delay, s/veh		21.0			34.9			39.6			37.2	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	16.8	13.0	44.5	8.7	19.1	14.7	42.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	26.5	19.5	8.5	42.5	8.7	37.3	10.4	40.6
Max Q Clear Time (g_c+I1), s	6.9	8.7	10.5	17.8	5.2	8.0	10.4	29.8
Green Ext Time (p_c), s	0.2	0.7	0.0	10.3	0.0	1.2	0.0	8.5

Intersection Summary	
HCM 7th Control Delay, s/veh	30.5
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	263	993	55	660	1724	350	122	980	460	90	1180	224
Future Volume (veh/h)	263	993	55	660	1724	350	122	980	460	90	1180	224
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	277	1045	-45	695	1815	259	128	1032	157	95	1242	136
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	1565	486	502	1835	570	182	1191	531	202	1211	540
Arrive On Green	0.09	0.31	0.00	0.15	0.36	0.36	0.05	0.34	0.34	0.06	0.34	0.34
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1584	3456	3554	1584
Grp Volume(v), veh/h	277	1045	-45	695	1815	259	128	1032	157	95	1242	136
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1584	1728	1777	1584
Q Serve(g_s), s	12.1	27.0	0.0	22.0	53.5	14.9	5.5	41.2	11.1	4.0	51.6	9.4
Cycle Q Clear(g_c), s	12.1	27.0	0.0	22.0	53.5	14.9	5.5	41.2	11.1	4.0	51.6	9.4
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	297	1565	486	502	1835	570	182	1191	531	202	1211	540
V/C Ratio(X)	0.93	0.67	-0.09	1.38	0.99	0.45	0.70	0.87	0.30	0.47	1.03	0.25
Avail Cap(c_a), veh/h	297	1565	486	502	1835	570	183	1191	531	205	1211	540
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.8	45.8	0.0	64.7	48.2	22.9	70.5	47.1	37.1	69.0	49.9	36.0
Incr Delay (d2), s/veh	34.6	1.3	0.0	184.7	18.4	0.8	9.9	7.4	0.6	0.6	32.5	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	6.7	11.4	0.0	22.3	24.8	5.5	2.7	19.0	4.3	1.8	27.6	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	103.3	47.1	0.0	249.4	66.6	23.7	80.4	54.5	37.7	69.6	82.3	36.4
LnGrp LOS	F	D		F	E	C	F	D	D	E	F	D
Approach Vol, veh/h		1277			2769			1317			1473	
Approach Delay, s/veh		61.0			108.5			55.0			77.3	
Approach LOS		E			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	56.7	27.0	52.8	14.0	57.6	19.4	60.4
Change Period (Y+Rc), s	6.0	6.0	5.0	6.4	6.0	6.0	6.4	* 6
Max Green Setting (Gmax), s	9.0	50.6	22.0	45.0	8.0	51.6	13.0	* 54
Max Q Clear Time (g_c+I1), s	16.0	43.2	24.0	29.0	7.5	53.6	14.1	55.5
Green Ext Time (p_c), s	0.0	5.5	0.0	8.8	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	82.6
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1983	50	40	3274	360	30	20	50	370	40	170
Future Volume (veh/h)	70	1983	50	40	3274	360	30	20	50	370	40	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.98	1.00		1.00	0.88		0.83
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	2087	17	42	3446	297	32	21	-58	302	164	173
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	2768	819	69	2640	800	1	1	1	481	230	242
Arrive On Green	0.06	0.54	0.54	0.05	0.69	0.69	0.00	0.00	0.00	0.31	0.31	0.31
Sat Flow, veh/h	1781	5106	1512	1781	5106	1548	1781	1870	1585	1568	750	791
Grp Volume(v), veh/h	74	2087	17	42	3446	297	32	21	-58	302	0	337
Grp Sat Flow(s),veh/h/ln	1781	1702	1512	1781	1702	1548	1781	1870	1585	1568	0	1540
Q Serve(g_s), s	6.1	47.5	0.8	3.5	77.6	12.1	0.1	0.1	0.0	24.8	0.0	29.1
Cycle Q Clear(g_c), s	6.1	47.5	0.8	3.5	77.6	12.1	0.1	0.1	0.0	24.8	0.0	29.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	113	2768	819	69	2640	800	1	1	1	481	0	472
V/C Ratio(X)	0.65	0.75	0.02	0.61	1.31	0.37	26.94	16.84	-54.88	0.63	0.00	0.71
Avail Cap(c_a), veh/h	154	2768	819	89	2640	800	214	224	190	491	0	483
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.70	0.70	0.70	0.09	0.09	0.09	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	68.6	26.6	15.9	70.1	23.4	13.2	75.0	75.0	0.0	44.7	0.0	46.2
Incr Delay (d2), s/veh	1.7	1.4	0.0	0.3	137.7	0.1	1180	0.0	7249.2	0.0	1.8	0.0	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	2.8	18.6	0.3	1.6	57.0	3.7	3.9	2.6	0.0	9.9	0.0	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	70.3	28.0	15.9	70.4	161.1	13.3	1187	5.0	7324.2	0.0	46.5	0.0	50.3
LnGrp LOS	E	C	B	E	F	B	F	F		D		D
Approach Vol, veh/h		2178			3785			-5			639	
Approach Delay, s/veh		29.3			148.5			0.0			48.5	
Approach LOS		C			F			A			D	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	2.1	9.8	87.3		50.9	13.5	83.6
Change Period (Y+Rc), s	4.6	4.0	6.0		4.9	4.0	6.0
Max Green Setting (Gmax), s	18.0	7.5	58.0		47.0	13.0	52.5
Max Q Clear Time (g_c+I1), s	2.1	5.5	49.5		31.1	8.1	79.6
Green Ext Time (p_c), s	0.1	0.0	8.2		1.9	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	99.6
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1991	171	660	2997	330	447	530	290	430	940	50
Future Volume (veh/h)	210	1991	171	660	2997	330	447	530	290	430	940	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	2096	-52	695	3155	195	471	558	205	453	989	-11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	2132	525	675	2332	721	369	703	308	498	836	373
Arrive On Green	0.14	0.66	0.00	0.13	0.31	0.31	0.11	0.20	0.20	0.14	0.24	0.00
Sat Flow, veh/h	3456	6434	1585	3456	5106	1578	3456	3554	1559	3456	3554	1585
Grp Volume(v), veh/h	221	2096	-52	695	3155	195	471	558	205	453	989	-11
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1578	1728	1777	1559	1728	1777	1585
Q Serve(g_s), s	9.5	47.3	0.0	29.3	68.5	14.0	16.0	22.4	18.2	19.4	35.3	0.0
Cycle Q Clear(g_c), s	9.5	47.3	0.0	29.3	68.5	14.0	16.0	22.4	18.2	19.4	35.3	0.0
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	242	2132	525	675	2332	721	369	703	308	498	836	373
V/C Ratio(X)	0.91	0.98	-0.10	1.03	1.35	0.27	1.28	0.79	0.66	0.91	1.18	-0.03
Avail Cap(c_a), veh/h	242	2132	525	675	2332	721	369	703	308	541	836	373
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.57	0.57	0.00	0.30	0.30	0.30	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	64.1	24.9	0.0	65.2	52.1	33.1	67.0	57.2	55.6	63.2	57.4	0.0
Incr Delay (d2), s/veh	23.5	11.3	0.0	27.0	159.8	0.3	144.4	6.5	5.8	17.8	94.3	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	4.6	12.1	0.0	15.7	64.2	5.7	14.3	10.5	7.5	9.7	26.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	87.6	36.2	0.0	92.2	211.8	33.4	211.4	63.7	61.4	81.0	151.7	0.0
LnGrp LOS	F	D		F	F	C	F	E	E	F	F	
Approach Vol, veh/h		2265			4045			1234			1431	
Approach Delay, s/veh		42.0			182.7			119.7			130.5	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.6	35.4	33.3	55.7	20.0	41.0	14.5	74.5
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	23.5	27.8	29.3	49.7	16.0	35.3	10.5	68.5
Max Q Clear Time (g_c+I1), s	21.4	24.4	31.3	49.3	18.0	37.3	11.5	70.5
Green Ext Time (p_c), s	0.2	1.6	0.0	0.4	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	130.2
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	2361	340	180	3857	50	50	20	20	60	20	20
Future Volume (veh/h)	20	2361	340	180	3857	50	50	20	20	60	20	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	2485	358	189	4060	53	51	24	21	63	21	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	4330	1052	173	4477	1079	256	135	114	141	68	68
Arrive On Green	0.04	0.90	0.90	0.07	0.93	0.93	0.07	0.07	0.07	0.08	0.08	0.08
Sat Flow, veh/h	1781	6434	1563	3456	6434	1551	3563	1870	1585	1781	858	858
Grp Volume(v), veh/h	21	2485	358	189	4060	53	51	24	21	63	0	42
Grp Sat Flow(s),veh/h/ln	1781	1609	1563	1728	1609	1551	1781	1870	1585	1781	0	1716
Q Serve(g_s), s	1.7	12.5	5.2	7.5	43.9	0.4	2.0	1.8	1.9	5.1	0.0	3.5
Cycle Q Clear(g_c), s	1.7	12.5	5.2	7.5	43.9	0.4	2.0	1.8	1.9	5.1	0.0	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	48	4330	1052	173	4477	1079	256	135	114	141	0	136
V/C Ratio(X)	0.43	0.57	0.34	1.09	0.91	0.05	0.20	0.18	0.18	0.45	0.00	0.31
Avail Cap(c_a), veh/h	89	4330	1052	173	4477	1079	1330	698	592	220	0	212
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.26	0.26	0.26	0.21	0.21	0.21	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	71.2	3.2	2.8	70.0	3.3	1.7	65.5	65.4	65.5	66.0	0.0	65.2
Incr Delay (d2), s/veh	0.6	0.1	0.2	60.1	0.8	0.0	0.1	0.2	0.3	0.8	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	0.8	2.3	1.3	4.7	2.9	0.1	0.9	0.9	0.8	2.3	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	71.7	3.4	3.1	130.1	4.1	1.7	65.7	65.7	65.7	66.8	0.0	65.7
LnGrp LOS	E	A	A	F	A	A	E	E	E	E		E
Approach Vol, veh/h		2864			4302			96			105	
Approach Delay, s/veh		3.8			9.7			65.7			66.3	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	15.7	11.5	107.0	15.8	8.1	110.4
Change Period (Y+Rc), s	4.9	4.0	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	56.0	7.5	49.1	18.5	7.5	49.1
Max Q Clear Time (g_c+I1), s	4.0	9.5	14.5	7.1	3.7	45.9
Green Ext Time (p_c), s	0.2	0.0	33.6	0.1	0.0	3.2

Intersection Summary	
HCM 7th Control Delay, s/veh	8.9
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	2351	5	5	3897	260	5	5	5	140	5	40
Future Volume (veh/h)	50	2351	5	5	3897	260	5	5	5	140	5	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	2475	5	5	4102	274	5	5	5	147	0	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	5052	1218	142	4537	1118	32	33	28	179	0	318
Arrive On Green	0.11	1.00	1.00	0.71	0.71	0.71	0.02	0.02	0.02	0.10	0.00	0.10
Sat Flow, veh/h	1781	6434	1551	134	6434	1585	1781	1870	1571	1781	0	3161
Grp Volume(v), veh/h	53	2475	5	5	4102	274	5	5	5	147	0	45
Grp Sat Flow(s),veh/h/ln	1781	1609	1551	134	1609	1585	1781	1870	1571	1781	0	1580
Q Serve(g_s), s	4.2	0.0	0.0	1.7	77.8	9.2	0.4	0.4	0.5	12.1	0.0	1.9
Cycle Q Clear(g_c), s	4.2	0.0	0.0	1.7	77.8	9.2	0.4	0.4	0.5	12.1	0.0	1.9
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	95	5052	1218	142	4537	1118	32	33	28	179	0	318
V/C Ratio(X)	0.56	0.49	0.00	0.04	0.90	0.25	0.16	0.15	0.18	0.82	0.00	0.14
Avail Cap(c_a), veh/h	113	5052	1218	142	4537	1118	214	224	188	545	0	967
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.73	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	65.3	0.0	0.0	6.8	18.0	7.9	72.6	72.6	72.6	66.1	0.0	61.6
Incr Delay (d2), s/veh	1.4	0.2	0.0	0.5	3.5	0.5	2.3	2.1	3.0	3.6	0.0	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	1.9	0.1	0.0	0.1	25.8	3.1	0.2	0.2	0.2	5.7	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.7	0.2	0.0	7.2	21.5	8.4	74.9	74.6	75.6	69.7	0.0	61.6
LnGrp LOS	E	A	A	A	C	A	E	E	E	E		E
Approach Vol, veh/h		2533			4381			15			192	
Approach Delay, s/veh		1.6			20.6			75.1			67.8	
Approach LOS		A			C			E			E	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	7.2	123.8	19.1	12.0	111.8
Change Period (Y+Rc), s	4.5	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	18.0	48.6	45.9	9.5	58.1
Max Q Clear Time (g_c+I1), s	2.5	2.0	14.1	6.2	79.8
Green Ext Time (p_c), s	0.0	42.4	0.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	15.3
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	2290	181	450	3130	480	597	860	560	730	880	250
Future Volume (veh/h)	110	2290	181	450	3130	480	597	860	560	730	880	250
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	2411	50	474	3295	157	628	905	0	768	926	210
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	229	2285	555	323	2460	598	415	965		507	1523	473
Arrive On Green	0.07	0.36	0.36	0.09	0.38	0.38	0.12	0.27	0.00	0.15	0.30	0.30
Sat Flow, veh/h	3456	6434	1564	3456	6434	1565	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	116	2411	50	474	3295	157	628	905	0	768	926	210
Grp Sat Flow(s),veh/h/ln	1728	1609	1564	1728	1609	1565	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	4.9	53.3	3.2	14.0	57.3	10.3	18.0	37.3	0.0	22.0	23.3	16.1
Cycle Q Clear(g_c), s	4.9	53.3	3.2	14.0	57.3	10.3	18.0	37.3	0.0	22.0	23.3	16.1
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	229	2285	555	323	2460	598	415	965		507	1523	473
V/C Ratio(X)	0.51	1.06	0.09	1.47	1.34	0.26	1.51	0.94		1.52	0.61	0.44
Avail Cap(c_a), veh/h	242	2285	555	323	2460	598	415	978		507	1566	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	0.81	0.81	0.81	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.7	48.4	32.2	68.0	46.3	31.8	66.0	53.4	0.0	64.0	45.1	42.6
Incr Delay (d2), s/veh	0.6	35.4	0.3	224.6	155.1	0.9	243.6	16.2	0.0	241.9	1.5	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	2.1	26.3	1.3	16.1	48.6	4.0	21.8	18.4	0.0	26.6	10.0	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.3	83.8	32.5	292.6	201.4	32.7	309.6	69.6	0.0	305.9	46.6	44.9
LnGrp LOS	E	F	C	F	F	C	F	E		F	D	D
Approach Vol, veh/h		2577			3926			1533			1904	
Approach Delay, s/veh		82.1			205.7			167.9			151.0	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	46.7	18.0	59.3	22.0	50.7	13.9	63.3
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	22.0	41.3	14.0	52.7	18.0	* 46	10.5	56.2
Max Q Clear Time (g_c+I1), s	24.0	39.3	16.0	55.3	20.0	25.3	6.9	59.3
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	13.9	0.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	157.4
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2940	260	510	1580	260	550	0	1210	190	560	520
Future Volume (veh/h)	0	2940	260	510	1580	260	550	0	1210	190	560	520
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	3095	274	537	1663	0	579	0	1274	200	589	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	0	2	2	2	2
Cap, veh/h	0	3627	893	369	3559		0	0	0	397	792	
Arrive On Green	0.00	0.56	0.56	0.11	0.70	0.00	0.00	0.00	0.00	0.22	0.22	0.00
Sat Flow, veh/h	0	6696	1584	3456	5106	1585		0		1781	3554	1585
Grp Volume(v), veh/h	0	3095	274	537	1663	0		0.0		200	589	0
Grp Sat Flow(s),veh/h/ln	0	1609	1584	1728	1702	1585				1781	1777	1585
Q Serve(g_s), s	0.0	60.7	13.7	16.0	21.9	0.0				14.7	23.2	0.0
Cycle Q Clear(g_c), s	0.0	60.7	13.7	16.0	21.9	0.0				14.7	23.2	0.0
Prop In Lane	0.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3627	893	369	3559					397	792	
V/C Ratio(X)	0.00	0.85	0.31	1.46	0.47					0.50	0.74	
Avail Cap(c_a), veh/h	0	3627	893	369	3559					546	1090	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.40	0.40	1.00	1.00	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	27.5	17.3	67.0	10.2	0.0				51.0	54.3	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.4	220.1	0.4	0.0				1.9	3.0	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
%ile BackOfQ(50%),veh/ln	0.0	23.1	5.2	18.2	7.6	0.0				6.9	10.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	28.6	17.6	287.1	10.6	0.0				52.9	57.3	0.0
LnGrp LOS		C	B	F	B					D	E	
Approach Vol, veh/h		3369			2200						789	
Approach Delay, s/veh		27.7			78.1						56.2	
Approach LOS		C			E						E	

Timer - Assigned Phs		3	4		6	8						
Phs Duration (G+Y+Rc), s		20.0	90.6		39.4	110.6						
Change Period (Y+Rc), s		4.0	6.0		6.0	6.0						
Max Green Setting (Gmax), s		16.0	48.0		46.0	68.0						
Max Q Clear Time (g_c+I1), s		18.0	62.7		25.2	23.9						
Green Ext Time (p_c), s		0.0	0.0		8.0	31.6						

Intersection Summary	
HCM 7th Control Delay, s/veh	48.7
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	330	430	80	450	90	640	510	120	90	1110	5
Future Volume (veh/h)	5	330	430	80	450	90	640	510	120	90	1110	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	347	148	84	474	57	674	537	81	95	1168	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	486	216	125	712	316	753	1915	854	176	1322	590
Arrive On Green	0.01	0.14	0.14	0.07	0.20	0.20	0.22	0.54	0.54	0.05	0.37	0.37
Sat Flow, veh/h	1781	3554	1578	1781	3554	1580	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	5	347	148	84	474	57	674	537	81	95	1168	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1578	1781	1777	1580	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.2	8.3	7.9	4.1	10.9	2.6	16.8	7.3	2.2	2.4	27.2	0.2
Cycle Q Clear(g_c), s	0.2	8.3	7.9	4.1	10.9	2.6	16.8	7.3	2.2	2.4	27.2	0.2
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	12	486	216	125	712	316	753	1915	854	176	1322	590
V/C Ratio(X)	0.43	0.71	0.69	0.67	0.67	0.18	0.89	0.28	0.09	0.54	0.88	0.01
Avail Cap(c_a), veh/h	101	722	321	362	1244	553	800	1971	879	269	1425	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	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	43.8	36.6	36.4	40.2	32.7	29.4	33.6	11.1	9.9	41.0	26.0	17.5
Incr Delay (d2), s/veh	23.1	2.0	3.8	6.2	1.1	0.3	12.2	0.1	0.0	2.5	6.6	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	0.2	3.5	3.1	1.9	4.6	1.0	7.8	2.5	0.7	1.0	11.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.9	38.5	40.2	46.4	33.8	29.6	45.8	11.2	10.0	43.5	32.6	17.5
LnGrp LOS	E	D	D	D	C	C	D	B	A	D	C	B
Approach Vol, veh/h		500			615			1292			1268	
Approach Delay, s/veh		39.3			35.1			29.2			33.4	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	52.2	10.7	16.6	23.8	37.4	5.1	22.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.9	49.1	18.0	18.0	20.5	35.5	5.0	31.0
Max Q Clear Time (g_c+I1), s	4.4	9.3	6.1	10.3	18.8	29.2	2.2	12.9
Green Ext Time (p_c), s	0.0	3.8	0.1	1.5	0.5	3.7	0.0	2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	33.0
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	360	40	60	520	561	20	900	80	562	1300	100
Future Volume (veh/h)	80	360	40	60	520	561	20	900	80	562	1300	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	379	42	63	547	328	21	947	84	592	1368	105
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	310	825	361	279	793	353	57	1292	382	694	2212	665
Arrive On Green	0.09	0.23	0.23	0.08	0.22	0.22	0.03	0.25	0.25	0.20	0.43	0.43
Sat Flow, veh/h	3456	3554	1556	3456	3554	1581	1781	5106	1511	3456	5106	1535
Grp Volume(v), veh/h	84	379	42	63	547	328	21	947	84	592	1368	105
Grp Sat Flow(s),veh/h/ln	1728	1777	1556	1728	1777	1581	1781	1702	1511	1728	1702	1535
Q Serve(g_s), s	2.0	8.0	1.9	1.5	12.3	17.8	1.0	14.9	3.8	14.4	18.1	3.6
Cycle Q Clear(g_c), s	2.0	8.0	1.9	1.5	12.3	17.8	1.0	14.9	3.8	14.4	18.1	3.6
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	310	825	361	279	793	353	57	1292	382	694	2212	665
V/C Ratio(X)	0.27	0.46	0.12	0.23	0.69	0.93	0.37	0.73	0.22	0.85	0.62	0.16
Avail Cap(c_a), veh/h	823	825	361	823	793	353	530	1292	382	1780	2297	691
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	37.1	28.8	26.5	37.6	31.2	33.3	41.4	29.9	25.8	33.7	19.2	15.1
Incr Delay (d2), s/veh	0.2	1.0	0.4	0.2	3.5	31.6	1.5	2.8	0.7	1.2	1.3	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	0.8	3.3	0.7	0.6	5.3	9.4	0.4	6.0	1.4	5.9	6.8	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.3	29.8	26.8	37.8	34.7	64.8	42.9	32.7	26.5	34.9	20.5	15.6
LnGrp LOS	D	C	C	D	C	E	D	C	C	C	C	B
Approach Vol, veh/h		505			938			1052			2065	
Approach Delay, s/veh		30.8			45.4			32.5			24.4	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	27.8	11.0	26.0	6.8	43.6	11.8	25.2
Change Period (Y+Rc), s	5.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	7.5	19.3	20.8	19.5	26.0	39.3	20.8	19.5
Max Q Clear Time (g_c+I1), s	3.0	16.9	3.5	10.0	3.0	20.1	4.0	19.8
Green Ext Time (p_c), s	1.1	1.9	0.1	2.9	0.0	17.2	0.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	31.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	970	30	230	800	370	30	140	170	40	220	70
Future Volume (veh/h)	40	970	30	230	800	370	30	140	170	40	220	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	1021	32	242	842	389	32	147	97	42	232	74
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	1231	543	272	1019	468	40	183	191	43	239	76
Arrive On Green	0.07	0.35	0.35	0.15	0.43	0.43	0.12	0.12	0.12	0.20	0.20	0.20
Sat Flow, veh/h	1781	3554	1569	1781	2358	1083	331	1522	1585	216	1194	381
Grp Volume(v), veh/h	42	1021	32	242	633	598	179	0	97	348	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1569	1781	1777	1665	1854	0	1585	1791	0	0
Q Serve(g_s), s	2.4	27.7	1.4	14.0	33.1	33.5	9.9	0.0	6.0	20.3	0.0	0.0
Cycle Q Clear(g_c), s	2.4	27.7	1.4	14.0	33.1	33.5	9.9	0.0	6.0	20.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.65	0.18		1.00	0.12		0.21
Lane Grp Cap(c), veh/h	120	1231	543	272	768	719	223	0	191	358	0	0
V/C Ratio(X)	0.35	0.83	0.06	0.89	0.82	0.83	0.80	0.00	0.51	0.97	0.00	0.00
Avail Cap(c_a), veh/h	322	1346	594	305	768	719	568	0	486	358	0	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	46.8	31.5	22.9	43.6	26.3	26.5	45.0	0.0	43.3	41.8	0.0	0.0
Incr Delay (d2), s/veh	0.7	4.7	0.1	22.6	7.8	8.7	2.6	0.0	0.8	39.9	0.0	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	1.1	12.4	0.5	7.8	15.2	14.5	4.7	0.0	2.4	12.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.5	36.2	23.0	66.2	34.2	35.2	47.6	0.0	44.1	81.7	0.0	0.0
LnGrp LOS	D	D	C	E	C	D	D		D	F		
Approach Vol, veh/h		1095			1473			276			348	
Approach Delay, s/veh		36.2			39.8			46.4			81.7	
Approach LOS		D			D			D			F	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	17.9	20.1	42.1		25.0	11.1	51.1
Change Period (Y+Rc), s	5.3	4.0	5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s	32.2	18.0	39.8		21.0	19.0	38.8
Max Q Clear Time (g_c+I1), s	11.9	16.0	29.7		22.3	4.4	35.5
Green Ext Time (p_c), s	0.8	0.1	6.7		0.0	0.0	2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	43.7
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	651	538	1150	957	170	763	1147	870	150	1391	200
Future Volume (veh/h)	120	651	538	1150	957	170	763	1147	870	150	1391	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	126	685	311	1211	1007	99	803	1207	504	158	1464	116
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	1258	554	864	1903	849	558	1846	566	186	1296	402
Arrive On Green	0.07	0.35	0.35	0.25	0.54	0.54	0.16	0.36	0.36	0.05	0.25	0.25
Sat Flow, veh/h	3456	3554	1565	3456	3554	1585	3456	5106	1565	3456	5106	1585
Grp Volume(v), veh/h	126	685	311	1211	1007	99	803	1207	504	158	1464	116
Grp Sat Flow(s),veh/h/ln	1728	1777	1565	1728	1777	1585	1728	1702	1565	1728	1702	1585
Q Serve(g_s), s	4.6	20.1	20.8	32.5	23.9	4.0	21.0	25.7	39.4	5.9	33.0	7.7
Cycle Q Clear(g_c), s	4.6	20.1	20.8	32.5	23.9	4.0	21.0	25.7	39.4	5.9	33.0	7.7
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	237	1258	554	864	1903	849	558	1846	566	186	1296	402
V/C Ratio(X)	0.53	0.54	0.56	1.40	0.53	0.12	1.44	0.65	0.89	0.85	1.13	0.29
Avail Cap(c_a), veh/h	332	1258	554	864	1903	849	558	1846	566	186	1296	402
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)	0.47	0.47	0.47	1.00	1.00	1.00	0.49	0.49	0.49	0.31	0.31	0.31
Uniform Delay (d), s/veh	58.5	33.6	33.9	48.8	19.6	15.0	54.5	34.7	39.1	61.0	48.5	39.0
Incr Delay (d2), s/veh	0.3	0.8	1.9	187.8	1.1	0.3	202.4	0.5	9.2	10.6	61.8	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	2.0	8.5	8.0	36.1	9.6	1.5	24.6	10.4	15.9	2.8	20.9	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.9	34.4	35.8	236.5	20.6	15.2	256.9	35.2	48.3	71.5	110.3	39.3
LnGrp LOS	E	C	D	F	C	B	F	D	D	E	F	D
Approach Vol, veh/h		1122			2317			2514			1738	
Approach Delay, s/veh		37.5			133.2			108.6			102.0	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	53.4	36.5	52.4	25.0	39.4	12.9	76.0
Change Period (Y+Rc), s	4.0	6.4	4.0	* 6	4.0	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	7.0	46.6	32.5	* 24	21.0	* 33	12.5	43.5
Max Q Clear Time (g_c+I1), s	17.9	41.4	34.5	22.8	23.0	35.0	6.6	25.9
Green Ext Time (p_c), s	0.0	4.4	0.0	0.7	0.0	0.0	0.1	9.0

Intersection Summary	
HCM 7th Control Delay, s/veh	104.2
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	1351	200	340	1847	540	250	560	320	270	1070	280
Future Volume (veh/h)	250	1351	200	340	1847	540	250	560	320	270	1070	280
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	263	1422	0	358	1944	0	263	589	0	284	1126	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	1638		898	2654		288	917		243	1155	
Arrive On Green	0.08	0.32	0.00	0.26	0.52	0.00	0.08	0.26	0.00	0.14	0.33	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	263	1422	0	358	1944	0	263	589	0	284	1126	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	9.0	31.5	0.0	10.3	35.4	0.0	9.1	17.7	0.0	16.4	37.6	0.0
Cycle Q Clear(g_c), s	9.0	31.5	0.0	10.3	35.4	0.0	9.1	17.7	0.0	16.4	37.6	0.0
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	259	1638		898	2654		288	917		243	1155	
V/C Ratio(X)	1.01	0.87		0.40	0.73		0.91	0.64		1.17	0.97	
Avail Cap(c_a), veh/h	259	1685		898	2654		288	1036		243	1155	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.5	38.4	0.0	36.7	22.3	0.0	54.6	39.6	0.0	51.8	40.0	0.0
Incr Delay (d2), s/veh	59.7	6.5	0.0	0.1	1.2	0.0	30.9	1.6	0.0	111.6	20.7	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	6.0	13.5	0.0	4.2	13.3	0.0	5.1	7.8	0.0	14.7	19.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	115.2	44.9	0.0	36.8	23.6	0.0	85.5	41.2	0.0	163.4	60.7	0.0
LnGrp LOS	F	D		D	C		F	D		F	E	
Approach Vol, veh/h		1685			2302			852			1410	
Approach Delay, s/veh		55.9			25.6			54.9			81.4	
Approach LOS		E			C			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.1	36.6	37.5	44.2	14.0	44.7	13.0	68.7
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	14.0	* 35	12.0	* 40	10.0	39.0	9.0	42.6
Max Q Clear Time (g_c+I1), s	13.4	19.7	12.3	33.5	11.1	39.6	11.0	37.4
Green Ext Time (p_c), s	0.0	5.0	0.0	5.0	0.0	0.0	0.0	4.8

Intersection Summary	
HCM 7th Control Delay, s/veh	50.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1841	100	240	2437	170	120
Future Volume (veh/h)	1841	100	240	2437	170	120
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1938	105	253	2565	179	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3406	184	190	4189	205	182
Arrive On Green	0.69	0.69	0.11	0.82	0.12	0.12
Sat Flow, veh/h	5126	268	1781	5274	1781	1585
Grp Volume(v), veh/h	1329	714	253	2565	179	126
Grp Sat Flow(s),veh/h/ln	1702	1822	1781	1702	1781	1585
Q Serve(g_s), s	30.1	30.3	16.0	27.2	14.8	11.5
Cycle Q Clear(g_c), s	30.1	30.3	16.0	27.2	14.8	11.5
Prop In Lane		0.15	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2338	1252	190	4189	205	182
V/C Ratio(X)	0.57	0.57	1.33	0.61	0.87	0.69
Avail Cap(c_a), veh/h	2338	1252	190	4189	428	380
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	12.1	12.1	67.0	4.9	65.3	63.8
Incr Delay (d2), s/veh	1.0	1.9	180.6	0.7	4.5	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	11.8	16.7	7.0	7.0	4.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.1	14.0	247.6	5.5	69.8	65.6
LnGrp LOS	B	B	F	A	E	E
Approach Vol, veh/h	2043			2818	305	
Approach Delay, s/veh	13.4			27.3	68.1	
Approach LOS	B			C	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	21.3	20.0	108.7		128.7
Change Period (Y+Rc), s	4.0	4.0	5.7		5.7
Max Green Setting (Gmax), s	36.0	16.0	84.3		104.3
Max Q Clear Time (g_c+I1), s	16.8	18.0	32.3		29.2
Green Ext Time (p_c), s	0.4	0.0	37.6		64.4

Intersection Summary	
HCM 7th Control Delay, s/veh	24.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	1471	210	820	1677	140	320	420	710	240	1510	450
Future Volume (veh/h)	280	1471	210	820	1677	140	320	420	710	240	1510	450
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	295	1548	0	863	1765	0	337	442	0	253	1589	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	349	1666		924	2100		334	1005		191	1553	
Arrive On Green	0.10	0.33	0.00	0.18	0.41	0.00	0.10	0.28	0.00	0.06	0.24	0.00
Sat Flow, veh/h	3456	5106	1585	5023	5106	1585	3456	3554	1585	3456	6434	1585
Grp Volume(v), veh/h	295	1548	0	863	1765	0	337	442	0	253	1589	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1674	1702	1585	1728	1777	1585	1728	1609	1585
Q Serve(g_s), s	12.2	42.5	0.0	24.5	45.1	0.0	14.0	14.8	0.0	8.0	35.0	0.0
Cycle Q Clear(g_c), s	12.2	42.5	0.0	24.5	45.1	0.0	14.0	14.8	0.0	8.0	35.0	0.0
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	349	1666		924	2100		334	1005		191	1553	
V/C Ratio(X)	0.84	0.93		0.93	0.84		1.01	0.44		1.33	1.02	
Avail Cap(c_a), veh/h	841	1666		935	2100		334	1005		191	1553	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	64.1	47.2	0.0	58.3	38.4	0.0	65.5	42.6	0.0	68.5	55.0	0.0
Incr Delay (d2), s/veh	2.2	10.6	0.0	15.5	4.3	0.0	51.8	0.4	0.0	178.7	28.9	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	5.4	19.1	0.0	11.5	18.9	0.0	8.5	6.5	0.0	8.2	17.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.2	57.8	0.0	73.8	42.6	0.0	117.3	43.0	0.0	247.2	83.9	0.0
LnGrp LOS	E	E		E	D		F	D		F	F	
Approach Vol, veh/h		1843			2628			779			1842	
Approach Delay, s/veh		59.2			52.9			75.2			106.3	
Approach LOS		E			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	47.0	32.7	53.3	18.0	41.0	20.4	65.6
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	5.7	6.0
Max Green Setting (Gmax), s	8.0	41.0	27.0	* 47	14.0	35.0	35.3	39.0
Max Q Clear Time (g_c+I1), s	10.0	16.8	26.5	44.5	16.0	37.0	14.2	47.1
Green Ext Time (p_c), s	0.0	4.0	0.1	2.5	0.0	0.0	0.5	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	70.8
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1641	230	460	2127	70	280	510	320	170	1310	240
Future Volume (veh/h)	200	1641	230	460	2127	70	280	510	320	170	1310	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	211	1727	133	484	2239	0	295	537	0	179	1379	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	1678	512	1432	3613		230	1262		225	1208	533
Arrive On Green	0.05	0.33	0.33	0.41	0.71	0.00	0.07	0.36	0.00	0.06	0.34	0.34
Sat Flow, veh/h	3456	5106	1558	3456	5106	1585	3456	3554	1585	3456	3554	1568
Grp Volume(v), veh/h	211	1727	133	484	2239	0	295	537	0	179	1379	109
Grp Sat Flow(s),veh/h/ln	1728	1702	1558	1728	1702	1585	1728	1777	1585	1728	1777	1568
Q Serve(g_s), s	7.0	49.3	9.4	14.3	34.3	0.0	10.0	17.2	0.0	7.7	51.0	9.5
Cycle Q Clear(g_c), s	7.0	49.3	9.4	14.3	34.3	0.0	10.0	17.2	0.0	7.7	51.0	9.5
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	161	1678	512	1432	3613		230	1262		225	1208	533
V/C Ratio(X)	1.31	1.03	0.26	0.34	0.62		1.28	0.43		0.80	1.14	0.20
Avail Cap(c_a), veh/h	161	1678	512	1432	3613		230	1262		299	1208	533
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.5	50.3	37.0	29.9	11.4	0.0	70.0	36.8	0.0	69.2	49.5	58.5
Incr Delay (d2), s/veh	176.1	29.8	1.2	0.1	0.8	0.0	155.2	0.6	0.0	7.6	73.9	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	7.0	25.0	3.7	5.9	11.7	0.0	9.3	7.5	0.0	3.6	34.3	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	247.6	80.1	38.2	30.0	12.2	0.0	225.2	37.3	0.0	76.7	123.4	59.4
LnGrp LOS	F	F	D	C	B		F	D		E	F	E
Approach Vol, veh/h		2071			2723			832			1667	
Approach Delay, s/veh		94.5			15.4			103.9			114.2	
Approach LOS		F			B			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	59.0	68.4	55.0	15.7	57.0	11.0	112.4
Change Period (Y+Rc), s	4.0	5.7	6.0	5.7	5.7	* 6	4.0	6.0
Max Green Setting (Gmax), s	13.0	48.3	18.0	49.3	10.0	* 51	7.0	62.0
Max Q Clear Time (g_c+I1), s	9.7	19.2	16.3	51.3	12.0	53.0	9.0	36.3
Green Ext Time (p_c), s	0.1	7.2	0.2	0.0	0.0	0.0	0.0	22.1

Intersection Summary	
HCM 7th Control Delay, s/veh	70.5
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	2051	20	90	2317	100	350	80	30	70	30	20
Future Volume (veh/h)	20	2051	20	90	2317	100	350	80	30	70	30	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	2159	0	95	2439	0	368	84	0	74	32	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	2834		231	3415		238	239		93	87	
Arrive On Green	0.03	0.56	0.00	0.13	0.67	0.00	0.13	0.13	0.00	0.05	0.05	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	21	2159	0	95	2439	0	368	84	0	74	32	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.7	48.9	0.0	7.4	45.4	0.0	20.0	6.2	0.0	6.2	2.5	0.0
Cycle Q Clear(g_c), s	1.7	48.9	0.0	7.4	45.4	0.0	20.0	6.2	0.0	6.2	2.5	0.0
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	48	2834		231	3415		238	239		93	87	
V/C Ratio(X)	0.43	0.76		0.41	0.71		1.55	0.35		0.79	0.37	
Avail Cap(c_a), veh/h	309	3067		231	3415		238	239		238	163	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	71.8	25.7	0.0	60.0	15.8	0.0	65.0	59.7	0.0	70.3	69.4	0.0
Incr Delay (d2), s/veh	2.3	2.0	0.0	0.4	1.3	0.0	267.0	0.7	0.0	5.7	2.7	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	0.8	19.2	0.0	3.3	16.3	0.0	26.7	3.0	0.0	3.0	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.1	27.7	0.0	60.5	17.1	0.0	332.0	60.4	0.0	75.9	72.0	0.0
LnGrp LOS	E	C		E	B		F	E		E	E	
Approach Vol, veh/h		2180			2534			452			106	
Approach Delay, s/veh		28.2			18.7			281.6			74.8	
Approach LOS		C			B			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	24.1	25.1	89.0	24.0	11.9	8.1	106.0
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	20.0	* 14	8.2	* 90	20.0	13.1	26.0	72.3
Max Q Clear Time (g_c+I1), s	8.2	8.2	9.4	50.9	22.0	4.5	3.7	47.4
Green Ext Time (p_c), s	0.1	0.1	0.0	32.4	0.0	0.0	0.0	23.1

Intersection Summary	
HCM 7th Control Delay, s/veh	46.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	960	30	1110	1170	820	40	1291	770	730	1517	280
Future Volume (veh/h)	390	960	30	1110	1170	820	40	1291	770	730	1517	280
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	411	1011	0	1168	1232	0	42	1359	0	768	1597	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	461	1204		1005	1578		156	1127		596	1813	
Arrive On Green	0.13	0.24	0.00	0.20	0.31	0.00	0.05	0.22	0.00	0.17	0.35	0.00
Sat Flow, veh/h	3456	5106	1585	5023	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	411	1011	0	1168	1232	0	42	1359	0	768	1597	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1674	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	17.0	27.4	0.0	29.0	31.9	0.0	1.7	32.0	0.0	25.0	42.6	0.0
Cycle Q Clear(g_c), s	17.0	27.4	0.0	29.0	31.9	0.0	1.7	32.0	0.0	25.0	42.6	0.0
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	461	1204		1005	1578		156	1127		596	1813	
V/C Ratio(X)	0.89	0.84		1.16	0.78		0.27	1.21		1.29	0.88	
Avail Cap(c_a), veh/h	572	1303		1005	1578		191	1127		596	1814	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.30	0.30	0.00
Uniform Delay (d), s/veh	61.8	52.8	0.0	58.0	45.6	0.0	66.9	56.5	0.0	60.0	43.9	0.0
Incr Delay (d2), s/veh	12.3	5.1	0.0	84.3	3.9	0.0	0.3	101.3	0.0	134.0	1.7	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	8.1	12.0	0.0	19.8	13.7	0.0	0.7	24.0	0.0	21.8	17.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.1	57.9	0.0	142.3	49.5	0.0	67.3	157.8	0.0	194.0	45.6	0.0
LnGrp LOS	E	E		F	D		E	F		F	D	
Approach Vol, veh/h		1422			2400			1401			2365	
Approach Delay, s/veh		62.6			94.7			155.1			93.8	
Approach LOS		E			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.0	38.0	34.0	40.2	10.5	57.5	23.4	50.8
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	4.0	* 6	4.0	* 6
Max Green Setting (Gmax), s	25.0	32.0	29.0	37.0	8.0	* 52	24.0	* 43
Max Q Clear Time (g_c+I1), s	27.0	34.0	31.0	29.4	3.7	44.6	19.0	33.9
Green Ext Time (p_c), s	0.0	0.0	0.0	4.6	0.0	5.0	0.4	6.7

Intersection Summary	
HCM 7th Control Delay, s/veh	99.5
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	630	5	360	150	30	360	370	1931	20	180	2007	280
Future Volume (veh/h)	630	5	360	150	30	360	370	1931	20	180	2007	280
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	663	5	271	158	32	341	389	2033	21	189	2113	255
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	622	337	284	530	287	242	442	2675	28	459	2149	666
Arrive On Green	0.18	0.18	0.18	0.15	0.15	0.15	0.13	0.40	0.40	0.13	0.42	0.42
Sat Flow, veh/h	3456	1870	1577	3456	1870	1576	3456	6614	68	3456	5106	1583
Grp Volume(v), veh/h	663	5	271	158	32	341	389	1483	571	189	2113	255
Grp Sat Flow(s),veh/h/ln	1728	1870	1577	1728	1870	1576	1728	1609	1857	1728	1702	1583
Q Serve(g_s), s	27.0	0.3	25.5	6.1	2.2	23.0	16.6	39.6	39.6	7.5	61.3	16.7
Cycle Q Clear(g_c), s	27.0	0.3	25.5	6.1	2.2	23.0	16.6	39.6	39.6	7.5	61.3	16.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	622	337	284	530	287	242	442	1952	751	459	2149	666
V/C Ratio(X)	1.07	0.01	0.95	0.30	0.11	1.41	0.88	0.76	0.76	0.41	0.98	0.38
Avail Cap(c_a), veh/h	622	337	284	530	287	242	645	2004	771	459	2149	666
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	0.24	0.24	0.24	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.5	50.6	60.9	56.3	54.7	63.5	64.3	38.4	38.4	59.7	42.9	30.0
Incr Delay (d2), s/veh	54.9	0.0	40.8	0.1	0.1	207.9	1.9	0.7	1.8	0.2	15.8	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	16.6	0.2	13.4	2.7	1.1	23.2	7.4	15.8	18.4	3.3	27.9	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	116.4	50.6	101.7	56.5	54.8	271.4	66.2	39.1	40.2	59.9	58.7	31.6
LnGrp LOS	F	D	F	E	D	F	E	D	D	E	E	C
Approach Vol, veh/h		939			531			2443			2557	
Approach Delay, s/veh		111.8			194.4			43.7			56.1	
Approach LOS		F			F			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	25.6	66.4		31.0	23.2	68.8		27.0
Change Period (Y+Rc), s	5.7	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	18.3	62.3		27.0	28.0	54.3		23.0
Max Q Clear Time (g_c+I1), s	19.5	41.6		29.0	18.6	63.3		25.0
Green Ext Time (p_c), s	0.2	19.0		0.0	0.6	0.0		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	70.8
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	0	580	0	0	0	0	1921	1060	0	2087	580
Future Volume (veh/h)	140	0	580	0	0	0	0	1921	1060	0	2087	580
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	98	0	664				0	2022	1116	0	2197	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	297	0	792				0	3788	1149	0	3788	
Arrive On Green	0.17	0.00	0.17				0.00	0.74	0.74	0.00	1.00	0.00
Sat Flow, veh/h	1781	0	4755				0	5274	1549	0	5274	1585
Grp Volume(v), veh/h	98	0	664				0	2022	1116	0	2197	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1549	0	1702	1585
Q Serve(g_s), s	5.8	0.0	16.2				0.0	20.3	79.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.8	0.0	16.2				0.0	20.3	79.8	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	297	0	792				0	3788	1149	0	3788	
V/C Ratio(X)	0.33	0.00	0.84				0.00	0.53	0.97	0.00	0.58	
Avail Cap(c_a), veh/h	530	0	1415				0	3788	1149	0	3788	
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	0.00	1.00				0.00	1.00	1.00	0.00	0.73	0.00
Uniform Delay (d), s/veh	44.1	0.0	48.4				0.0	6.6	14.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.9				0.0	0.5	20.4	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
%ile BackOfQ(50%),veh/ln	2.6	0.0	6.5				0.0	6.6	29.3	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.3	0.0	49.4				0.0	7.2	34.7	0.0	0.5	0.0
LnGrp LOS	D		D					A	C		A	
Approach Vol, veh/h		762						3138			2197	
Approach Delay, s/veh		48.7						17.0			0.5	
Approach LOS		D						B			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	94.7	25.3	94.7
Change Period (Y+Rc), s	5.7	5.3	5.7
Max Green Setting (Gmax), s	73.3	35.7	73.3
Max Q Clear Time (g_c+I1), s	81.8	18.2	2.0
Green Ext Time (p_c), s	0.0	1.7	45.6

Intersection Summary	
HCM 7th Control Delay, s/veh	15.0
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	800	1210	1571	560	250	1867
Future Volume (veh/h)	800	1210	1571	560	250	1867
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	842	1274	1654	0	263	1965
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1662	1380	1857		292	2864
Arrive On Green	0.33	0.33	0.36	0.00	0.16	0.56
Sat Flow, veh/h	5023	2790	5274	1585	1781	5274
Grp Volume(v), veh/h	842	1274	1654	0	263	1965
Grp Sat Flow(s),veh/h/ln	1674	1395	1702	1585	1781	1702
Q Serve(g_s), s	16.2	39.7	36.6	0.0	17.4	33.0
Cycle Q Clear(g_c), s	16.2	39.7	36.6	0.0	17.4	33.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1662	1380	1857		292	2864
V/C Ratio(X)	0.51	0.92	0.89		0.90	0.69
Avail Cap(c_a), veh/h	1662	1380	1857		475	2864
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.82	0.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	28.2	35.9	0.0	49.2	18.8
Incr Delay (d2), s/veh	0.1	10.4	5.8	0.0	8.5	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	18.3	15.9	0.0	8.2	12.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	32.4	38.6	41.7	0.0	57.7	20.2
LnGrp LOS	C	D	D		E	C
Approach Vol, veh/h	2116		1654			2228
Approach Delay, s/veh	36.1		41.7			24.6
Approach LOS	D		D			C

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	23.7	49.3			73.0	47.0
Change Period (Y+Rc), s	4.0	5.7			5.7	7.3
Max Green Setting (Gmax), s	32.0	31.3			67.3	39.7
Max Q Clear Time (g_c+I1), s	19.4	38.6			35.0	41.7
Green Ext Time (p_c), s	0.3	0.0			24.9	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	33.4
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	610	1490	110	340	1680	90	110	1060	350	60	1110	610
Future Volume (veh/h)	610	1490	110	340	1680	90	110	1060	350	60	1110	610
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	642	1568	57	358	1768	37	116	1116	141	63	1168	415
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	585	1924	597	409	1663	516	183	1427	443	167	1403	435
Arrive On Green	0.17	0.38	0.38	0.12	0.33	0.33	0.05	0.28	0.28	0.05	0.27	0.27
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	642	1568	57	358	1768	37	116	1116	141	63	1168	415
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	22.0	35.9	3.0	13.2	42.3	2.1	4.3	26.2	9.1	2.3	27.9	33.4
Cycle Q Clear(g_c), s	22.0	35.9	3.0	13.2	42.3	2.1	4.3	26.2	9.1	2.3	27.9	33.4
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	585	1924	597	409	1663	516	183	1427	443	167	1403	435
V/C Ratio(X)	1.10	0.82	0.10	0.87	1.06	0.07	0.63	0.78	0.32	0.38	0.83	0.95
Avail Cap(c_a), veh/h	585	1924	597	452	1663	516	186	1427	443	186	1404	436
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	53.9	36.4	26.2	56.3	43.8	30.2	60.2	43.1	37.0	59.9	44.3	46.3
Incr Delay (d2), s/veh	66.4	3.4	0.2	15.0	41.0	0.2	5.0	4.0	1.6	0.5	4.7	31.6
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	14.7	14.9	1.1	6.5	23.4	0.8	2.0	11.2	3.7	1.0	12.4	16.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	120.3	39.8	26.4	71.3	84.8	30.4	65.3	47.2	38.6	60.4	49.0	77.9
LnGrp LOS	F	D	C	E	F	C	E	D	D	E	D	E
Approach Vol, veh/h		2267			2163			1373			1646	
Approach Delay, s/veh		62.2			81.6			47.8			56.7	
Approach LOS		E			F			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	42.6	20.4	55.6	11.9	42.0	27.0	49.0
Change Period (Y+Rc), s	5.0	6.3	5.0	6.7	5.0	6.3	5.0	6.7
Max Green Setting (Gmax), s	7.0	35.7	17.0	47.3	7.0	35.7	22.0	42.3
Max Q Clear Time (g_c+I1), s	4.3	28.2	15.2	37.9	6.3	35.4	24.0	44.3
Green Ext Time (p_c), s	0.0	6.3	0.1	8.4	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	64.0
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	530	1030	40	560	1190	260	30	680	300	230	670	460
Future Volume (veh/h)	530	1030	40	560	1190	260	30	680	300	230	670	460
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	558	1084	16	589	1253	172	32	716	83	242	705	163
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	629	1572	488	667	1603	497	92	1040	323	242	1288	400
Arrive On Green	0.18	0.31	0.31	0.19	0.31	0.31	0.03	0.20	0.20	0.07	0.25	0.25
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	558	1084	16	589	1253	172	32	716	83	242	705	163
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	15.7	18.6	0.7	16.6	22.3	8.3	0.9	13.0	4.4	7.0	12.0	8.6
Cycle Q Clear(g_c), s	15.7	18.6	0.7	16.6	22.3	8.3	0.9	13.0	4.4	7.0	12.0	8.6
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	629	1572	488	667	1603	497	92	1040	323	242	1288	400
V/C Ratio(X)	0.89	0.69	0.03	0.88	0.78	0.35	0.35	0.69	0.26	1.00	0.55	0.41
Avail Cap(c_a), veh/h	727	1688	524	744	1688	524	260	1866	579	242	1841	571
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	39.8	30.4	24.2	39.2	31.1	26.4	47.8	36.8	33.4	46.4	32.4	31.1
Incr Delay (d2), s/veh	10.7	1.5	0.1	11.3	2.8	0.9	2.3	0.8	0.4	57.5	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	7.4	0.3	7.7	9.0	3.1	0.4	5.4	1.7	4.9	4.9	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.5	31.9	24.2	50.5	34.0	27.2	50.0	37.6	33.8	103.9	32.5	31.4
LnGrp LOS	D	C	C	D	C	C	D	D	C	F	C	C
Approach Vol, veh/h		1658			2014			831			1110	
Approach Delay, s/veh		38.1			38.2			37.7			47.9	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	25.3	23.8	38.7	7.1	30.2	23.2	39.3
Change Period (Y+Rc), s	5.0	* 5	4.5	8.0	4.5	5.0	5.0	8.0
Max Green Setting (Gmax), s	7.0	* 37	21.5	33.0	7.5	36.0	21.0	33.0
Max Q Clear Time (g_c+I1), s	19.0	15.0	18.6	20.6	2.9	14.0	17.7	24.3
Green Ext Time (p_c), s	0.0	5.4	0.7	8.2	0.0	3.7	0.4	7.1

Intersection Summary	
HCM 7th Control Delay, s/veh	40.0
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1410	230	20	1890	150	170	100	20	70	70	20
Future Volume (veh/h)	60	1410	230	20	1890	150	170	100	20	70	70	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	1484	242	21	1989	158	179	105	21	74	74	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	2636	815	42	2515	777	219	334	281	95	204	172
Arrive On Green	0.05	0.52	0.52	0.02	0.49	0.49	0.12	0.18	0.18	0.05	0.11	0.11
Sat Flow, veh/h	1781	5106	1579	1781	5106	1579	1781	1870	1577	1781	1870	1572
Grp Volume(v), veh/h	63	1484	242	21	1989	158	179	105	21	74	74	21
Grp Sat Flow(s),veh/h/ln	1781	1702	1579	1781	1702	1579	1781	1870	1577	1781	1870	1572
Q Serve(g_s), s	2.8	15.9	7.0	0.9	25.9	4.5	7.8	3.9	0.9	3.3	2.9	1.0
Cycle Q Clear(g_c), s	2.8	15.9	7.0	0.9	25.9	4.5	7.8	3.9	0.9	3.3	2.9	1.0
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	84	2636	815	42	2515	777	219	334	281	95	204	172
V/C Ratio(X)	0.75	0.56	0.30	0.51	0.79	0.20	0.82	0.31	0.07	0.78	0.36	0.12
Avail Cap(c_a), veh/h	111	2636	815	111	2571	795	423	1098	926	111	757	637
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	37.7	13.2	11.1	38.6	16.9	11.5	34.2	28.6	27.4	37.4	33.1	32.2
Incr Delay (d2), s/veh	11.8	0.4	0.4	3.5	2.0	0.2	2.9	1.1	0.2	21.2	1.3	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	1.4	5.1	2.1	0.4	8.9	1.4	3.5	1.8	0.3	2.0	1.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.5	13.6	11.5	42.1	18.8	11.7	37.1	29.8	27.6	58.6	34.4	32.6
LnGrp LOS	D	B	B	D	B	B	D	C	C	E	C	C
Approach Vol, veh/h		1789			2168			305			169	
Approach Delay, s/veh		14.6			18.5			33.9			44.8	
Approach LOS		B			B			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	18.9	5.9	47.0	13.8	13.3	7.8	45.1
Change Period (Y+Rc), s	4.0	* 4.6	4.0	5.7	4.0	4.6	4.0	5.7
Max Green Setting (Gmax), s	5.6	* 47	5.0	40.3	19.0	32.4	5.0	40.3
Max Q Clear Time (g_c+I1), s	5.3	5.9	2.9	17.9	9.8	4.9	4.8	27.9
Green Ext Time (p_c), s	0.0	1.3	0.0	17.2	0.2	0.5	0.0	11.5

Intersection Summary	
HCM 7th Control Delay, s/veh	19.0
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	700	1090	300	350	1370	300	170	940	570	380	1450	700
Future Volume (veh/h)	700	1090	300	350	1370	300	170	940	570	380	1450	700
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	737	1147	316	368	1442	145	179	989	414	400	1526	496
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	787	1658	515	423	1120	348	232	1382	429	460	1719	888
Arrive On Green	0.23	0.32	0.32	0.12	0.22	0.22	0.07	0.27	0.27	0.13	0.34	0.34
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1565
Grp Volume(v), veh/h	737	1147	316	368	1442	145	179	989	414	400	1526	496
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1565
Q Serve(g_s), s	28.6	26.7	23.0	14.3	30.0	10.7	7.0	24.0	35.3	15.5	38.7	27.6
Cycle Q Clear(g_c), s	28.6	26.7	23.0	14.3	30.0	10.7	7.0	24.0	35.3	15.5	38.7	27.6
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	787	1658	515	423	1120	348	232	1382	429	460	1719	888
V/C Ratio(X)	0.94	0.69	0.61	0.87	1.29	0.42	0.77	0.72	0.97	0.87	0.89	0.56
Avail Cap(c_a), veh/h	834	1658	515	581	1120	348	506	1382	429	986	1740	894
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	51.8	40.2	38.9	58.9	53.4	45.8	62.7	45.1	49.2	58.1	42.9	19.0
Incr Delay (d2), s/veh	16.8	1.5	2.9	8.2	136.0	1.6	2.1	2.0	34.6	2.0	6.2	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	13.9	11.1	9.1	6.6	26.6	4.3	3.1	10.1	17.6	6.8	16.7	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.6	41.7	41.9	67.1	189.3	47.4	64.8	47.1	83.8	60.1	49.1	20.1
LnGrp LOS	E	D	D	E	F	D	E	D	F	E	D	C
Approach Vol, veh/h		2200			1955			1582			2422	
Approach Delay, s/veh		50.8			155.8			58.7			45.0	
Approach LOS		D			F			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	43.4	20.7	50.4	13.2	52.4	35.1	36.0
Change Period (Y+Rc), s	4.0	6.4	4.0	6.0	4.0	6.4	4.0	6.0
Max Green Setting (Gmax), s	39.6	27.6	23.0	40.0	20.0	46.6	33.0	30.0
Max Q Clear Time (g_c+I1), s	17.5	37.3	16.3	28.7	9.0	40.7	30.6	32.0
Green Ext Time (p_c), s	0.7	0.0	0.4	8.5	0.2	5.4	0.5	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	75.8
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	1050	90	50	1280	220	190	60	50	200	490	60
Future Volume (veh/h)	350	1050	90	50	1280	220	190	60	50	200	490	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	368	1105	95	53	1347	0	200	63	7	211	516	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	1339	596	68	991		218	69	313	153	374	
Arrive On Green	0.14	0.38	0.38	0.04	0.28	0.00	0.16	0.16	0.16	0.29	0.29	0.00
Sat Flow, veh/h	1781	3554	1583	1781	3554	1585	1370	432	1585	535	1309	1585
Grp Volume(v), veh/h	368	1105	95	53	1347	0	263	0	7	727	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1583	1781	1777	1585	1802	0	1585	1844	0	1585
Q Serve(g_s), s	20.0	41.3	5.8	4.3	41.0	0.0	21.1	0.0	0.5	42.0	0.0	0.0
Cycle Q Clear(g_c), s	20.0	41.3	5.8	4.3	41.0	0.0	21.1	0.0	0.5	42.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.76		1.00	0.29		1.00
Lane Grp Cap(c), veh/h	242	1339	596	68	991		287	0	313	527	0	
V/C Ratio(X)	1.52	0.83	0.16	0.78	1.36		0.92	0.00	0.02	1.38	0.00	
Avail Cap(c_a), veh/h	242	1339	596	87	991		324	0	345	527	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	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	63.5	41.4	30.4	70.1	53.0	0.0	60.8	0.0	47.6	52.5	0.0	0.0
Incr Delay (d2), s/veh	253.4	4.8	0.2	21.4	168.2	0.0	26.5	0.0	0.0	182.7	0.0	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	25.9	18.4	2.3	2.4	40.9	0.0	11.6	0.0	0.2	46.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	316.9	46.2	30.6	91.5	221.2	0.0	87.3	0.0	47.6	235.3	0.0	0.0
LnGrp LOS	F	D	C	F	F		F		D	F		
Approach Vol, veh/h		1568			1400			270			727	
Approach Delay, s/veh		108.8			216.3			86.3			235.3	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	28.0	9.6	61.4	48.0	24.0	47.0
Change Period (Y+Rc), s	4.6	4.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	26.4	7.2	53.8	42.0	20.0	41.0
Max Q Clear Time (g_c+I1), s	23.1	6.3	43.3	44.0	22.0	43.0
Green Ext Time (p_c), s	0.3	0.0	7.5	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	168.4
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	400	460	70	550	110	680	1330	70	150	2070	230
Future Volume (veh/h)	230	400	460	70	550	110	680	1330	70	150	2070	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	242	421	298	74	579	65	716	1400	31	158	2179	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	829	370	83	734	323	553	2696	825	203	2179	
Arrive On Green	0.07	0.23	0.23	0.05	0.21	0.21	0.16	0.53	0.53	0.06	0.43	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1564	3456	5106	1562	3456	5106	1585
Grp Volume(v), veh/h	242	421	298	74	579	65	716	1400	31	158	2179	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1564	1728	1702	1562	1728	1702	1585
Q Serve(g_s), s	10.5	15.5	26.6	6.2	23.2	5.2	24.0	26.7	1.4	6.8	64.0	0.0
Cycle Q Clear(g_c), s	10.5	15.5	26.6	6.2	23.2	5.2	24.0	26.7	1.4	6.8	64.0	0.0
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	253	829	370	83	734	323	553	2696	825	203	2179	
V/C Ratio(X)	0.95	0.51	0.81	0.89	0.79	0.20	1.29	0.52	0.04	0.78	1.00	
Avail Cap(c_a), veh/h	253	1019	454	83	941	414	553	2696	825	276	2179	
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	0.00
Uniform Delay (d), s/veh	69.3	50.0	54.3	71.1	56.4	49.3	63.0	23.0	17.0	69.6	43.0	0.0
Incr Delay (d2), s/veh	43.7	0.8	10.3	62.1	5.1	0.6	145.7	0.7	0.1	6.2	19.2	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	6.1	6.9	11.6	4.3	10.9	2.1	21.5	10.5	0.5	3.1	29.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	113.0	50.9	64.6	133.2	61.5	49.9	208.7	23.7	17.1	75.8	62.2	0.0
LnGrp LOS	F	D	E	F	E	D	F	C	B	E	E	
Approach Vol, veh/h		961			718			2147			2337	
Approach Delay, s/veh		70.8			67.9			85.3			63.1	
Approach LOS		E			E			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	85.2	11.0	41.0	28.0	70.0	15.0	37.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	12.8	68.0	7.0	43.0	24.0	56.0	11.0	* 40
Max Q Clear Time (g_c+I1), s	8.8	28.7	8.2	28.6	26.0	66.0	12.5	25.2
Green Ext Time (p_c), s	0.1	14.7	0.0	5.0	0.0	0.0	0.0	5.8

Intersection Summary	
HCM 7th Control Delay, s/veh	72.6
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	85	50	100	1341	1982	196
Future Volume (veh/h)	85	50	100	1341	1982	196
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	53	105	1412	2086	206
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	152	135	136	3765	2923	884
Arrive On Green	0.09	0.09	0.08	0.74	0.57	0.57
Sat Flow, veh/h	1781	1585	1781	5274	5274	1544
Grp Volume(v), veh/h	89	53	105	1412	2086	206
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1544
Q Serve(g_s), s	2.4	1.6	2.9	5.1	15.0	3.3
Cycle Q Clear(g_c), s	2.4	1.6	2.9	5.1	15.0	3.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	152	135	136	3765	2923	884
V/C Ratio(X)	0.59	0.39	0.77	0.38	0.71	0.23
Avail Cap(c_a), veh/h	632	563	228	4329	3222	974
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	22.3	22.0	23.0	2.4	7.8	5.3
Incr Delay (d2), s/veh	3.6	1.8	9.0	0.1	0.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.1	1.4	0.3	3.3	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	25.9	23.8	32.0	2.5	8.5	5.5
LnGrp LOS	C	C	C	A	A	A
Approach Vol, veh/h	142			1517	2292	
Approach Delay, s/veh	25.1			4.5	8.2	
Approach LOS	C			A	A	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	41.9		8.8	8.4	33.5
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	43.0		18.0	6.5	32.0
Max Q Clear Time (g_c+I1), s	7.1		4.4	4.9	17.0
Green Ext Time (p_c), s	12.7		0.3	0.0	12.1

Intersection Summary		
HCM 7th Control Delay, s/veh	7.4	
HCM 7th LOS	A	

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	20	40	1421	1972	60
Future Volume (veh/h)	20	20	40	1421	1972	60
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	21	42	1496	2076	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	82	73	82	3799	3028	907
Arrive On Green	0.05	0.05	0.05	0.74	0.59	0.59
Sat Flow, veh/h	1781	1585	1781	5274	5274	1530
Grp Volume(v), veh/h	21	21	42	1496	2076	63
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1530
Q Serve(g_s), s	0.5	0.5	1.0	4.5	11.9	0.7
Cycle Q Clear(g_c), s	0.5	0.5	1.0	4.5	11.9	0.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	82	73	82	3799	3028	907
V/C Ratio(X)	0.26	0.29	0.51	0.39	0.69	0.07
Avail Cap(c_a), veh/h	749	666	208	4530	3398	1018
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	19.7	19.8	20.0	2.0	6.0	3.7
Incr Delay (d2), s/veh	1.6	2.2	4.9	0.1	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.5	0.0	1.9	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.4	21.9	24.9	2.1	6.5	3.7
LnGrp LOS	C	C	C	A	A	A
Approach Vol, veh/h	42			1538	2139	
Approach Delay, s/veh	21.6			2.7	6.4	
Approach LOS	C			A	A	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	36.4		6.5	6.5	29.9
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	38.0		18.0	5.0	28.5
Max Q Clear Time (g_c+I1), s	6.5		2.5	3.0	13.9
Green Ext Time (p_c), s	13.1		0.1	0.0	11.5

Intersection Summary	
HCM 7th Control Delay, s/veh	5.0
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	30	5	40	60	130	5	1171	60	220	1817	120
Future Volume (veh/h)	50	30	5	40	60	130	5	1171	60	220	1817	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	32	5	42	63	137	5	1233	63	232	1913	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	176	148	207	217	184	19	1462	652	274	1972	880
Arrive On Green	0.09	0.09	0.09	0.12	0.12	0.12	0.01	0.41	0.41	0.15	0.55	0.55
Sat Flow, veh/h	1781	1870	1581	1781	1870	1581	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	53	32	5	42	63	137	5	1233	63	232	1913	126
Grp Sat Flow(s),veh/h/ln	1781	1870	1581	1781	1870	1581	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.3	1.3	0.2	1.8	2.6	7.1	0.2	26.3	2.1	10.7	43.7	3.2
Cycle Q Clear(g_c), s	2.3	1.3	0.2	1.8	2.6	7.1	0.2	26.3	2.1	10.7	43.7	3.2
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	167	176	148	207	217	184	19	1462	652	274	1972	880
V/C Ratio(X)	0.32	0.18	0.03	0.20	0.29	0.75	0.27	0.84	0.10	0.85	0.97	0.14
Avail Cap(c_a), veh/h	423	445	376	423	445	376	423	1689	753	423	1972	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	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	35.6	35.1	34.7	33.7	34.0	36.0	41.3	22.3	15.2	34.6	18.1	9.1
Incr Delay (d2), s/veh	1.1	0.5	0.1	0.5	0.7	5.9	7.4	3.6	0.1	9.2	13.9	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	0.6	0.1	0.8	1.2	2.9	0.1	10.4	0.7	5.0	18.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.7	35.6	34.7	34.1	34.7	41.9	48.8	26.0	15.2	43.8	31.9	9.1
LnGrp LOS	D	D	C	C	C	D	D	C	B	D	C	A
Approach Vol, veh/h		90			242			1301			2271	
Approach Delay, s/veh		36.2			38.7			25.5			31.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.0	40.6		11.9	4.9	52.7		14.7
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	12.7	28.3		4.3	2.2	45.7		9.1
Green Ext Time (p_c), s	0.4	6.3		0.2	0.0	0.0		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	30.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	5	107	110	10	80	121	1311	100	5	1657	200
Future Volume (veh/h)	60	5	107	110	10	80	121	1311	100	5	1657	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	63	5	-13	116	11	84	127	1380	105	5	1744	211
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	195	165	107	209	170	134	2069	921	14	1830	814
Arrive On Green	0.06	0.12	0.00	0.07	0.12	0.12	0.08	0.65	0.65	0.01	0.57	0.57
Sat Flow, veh/h	1603	1683	1427	1603	1683	1373	1603	3198	1423	1603	3198	1423
Grp Volume(v), veh/h	63	5	-13	116	11	84	127	1380	105	5	1744	211
Grp Sat Flow(s),veh/h/ln	1603	1683	1427	1603	1683	1373	1603	1599	1423	1603	1599	1423
Q Serve(g_s), s	4.6	0.3	0.0	8.0	0.7	6.8	9.4	32.0	3.4	0.4	61.3	8.9
Cycle Q Clear(g_c), s	4.6	0.3	0.0	8.0	0.7	6.8	9.4	32.0	3.4	0.4	61.3	8.9
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	94	195	165	107	209	170	134	2069	921	14	1830	814
V/C Ratio(X)	0.67	0.03	-0.08	1.08	0.05	0.49	0.95	0.67	0.11	0.35	0.95	0.26
Avail Cap(c_a), veh/h	121	549	466	107	554	452	134	2069	921	94	1839	818
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	46.9	0.0	55.7	46.2	48.8	54.5	13.1	8.0	58.9	24.0	12.8
Incr Delay (d2), s/veh	4.5	0.2	0.0	110.3	0.5	9.8	60.8	1.0	0.1	5.3	12.0	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	2.0	0.1	0.0	6.5	0.3	2.8	6.0	10.2	1.0	0.2	23.5	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.6	47.0	0.0	166.1	46.6	58.6	115.3	14.1	8.1	64.1	36.0	13.1
LnGrp LOS	E	D		F	D	E	F	B	A	E	D	B
Approach Vol, veh/h		55			211			1612			1960	
Approach Delay, s/veh		72.6			117.1			21.7			33.6	
Approach LOS		E			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	83.3	12.0	19.1	14.0	74.4	11.0	20.1
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	4.0	* 5.3
Max Green Setting (Gmax), s	7.0	71.7	8.0	39.0	10.0	68.7	9.0	* 39
Max Q Clear Time (g_c+I1), s	2.4	34.0	10.0	2.3	11.4	63.3	6.6	8.8
Green Ext Time (p_c), s	0.0	22.7	0.0	0.0	0.0	5.1	0.0	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	33.8
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	5	110	5	5	10	180	1563	50	20	1454	160
Future Volume (veh/h)	80	5	110	5	5	10	180	1563	50	20	1454	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	5	116	5	5	11	189	1645	53	21	1531	168
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	9	148	44	44	76	220	2281	1015	55	1951	868
Arrive On Green	0.09	0.09	0.09	0.05	0.05	0.05	0.12	0.64	0.64	0.03	0.55	0.55
Sat Flow, veh/h	1686	100	1570	912	912	1567	1781	3554	1581	1781	3554	1581
Grp Volume(v), veh/h	89	0	116	10	0	11	189	1645	53	21	1531	168
Grp Sat Flow(s),veh/h/ln	1786	0	1570	1825	0	1567	1781	1777	1581	1781	1777	1581
Q Serve(g_s), s	4.9	0.0	7.4	0.5	0.0	0.7	10.6	31.6	1.3	1.2	34.9	5.5
Cycle Q Clear(g_c), s	4.9	0.0	7.4	0.5	0.0	0.7	10.6	31.6	1.3	1.2	34.9	5.5
Prop In Lane	0.94		1.00	0.50		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	169	0	148	88	0	76	220	2281	1015	55	1951	868
V/C Ratio(X)	0.53	0.00	0.78	0.11	0.00	0.15	0.86	0.72	0.05	0.38	0.78	0.19
Avail Cap(c_a), veh/h	314	0	276	624	0	536	278	2451	1091	131	2156	959
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	44.2	0.0	45.3	46.6	0.0	46.7	44.0	12.2	6.8	48.7	18.3	11.7
Incr Delay (d2), s/veh	1.0	0.0	3.4	0.2	0.0	0.3	16.1	1.2	0.0	1.6	2.2	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	2.2	0.0	3.0	0.3	0.0	0.3	5.5	10.5	0.4	0.5	13.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.1	0.0	48.7	46.8	0.0	47.0	60.0	13.4	6.8	50.3	20.4	11.9
LnGrp LOS	D		D	D		D	E	B	A	D	C	B
Approach Vol, veh/h		205			21			1887			1720	
Approach Delay, s/veh		47.1			46.9			17.9			20.0	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	71.7		14.6	16.7	62.2		8.9				
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.0				
Max Green Setting (Gmax), s	7.5	70.6		18.0	16.0	62.1		35.0				
Max Q Clear Time (g_c+I1), s	3.2	33.6		9.4	12.6	36.9		2.7				
Green Ext Time (p_c), s	0.0	26.7		0.3	0.1	19.2		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	20.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	110	136	135	1442	1615	210
Future Volume (veh/h)	110	136	135	1442	1615	210
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	143	142	1518	1700	221
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	205	182	177	2737	2221	991
Arrive On Green	0.12	0.12	0.10	0.77	0.63	0.63
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	116	143	142	1518	1700	221
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	5.4	7.6	6.8	14.9	30.0	5.3
Cycle Q Clear(g_c), s	5.4	7.6	6.8	14.9	30.0	5.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	205	182	177	2737	2221	991
V/C Ratio(X)	0.57	0.78	0.80	0.55	0.77	0.22
Avail Cap(c_a), veh/h	777	691	286	3139	2405	1073
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	36.5	37.5	38.4	4.0	11.7	7.1
Incr Delay (d2), s/veh	0.9	2.8	8.2	0.3	1.7	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.7	3.2	2.8	9.5	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	37.4	40.3	46.6	4.4	13.5	7.3
LnGrp LOS	D	D	D	A	B	A
Approach Vol, veh/h	259			1660	1921	
Approach Delay, s/veh	39.0			8.0	12.8	
Approach LOS	D			A	B	

Timer - Assigned Phs	2	4	5	6
Phs Duration (G+Y+Rc), s	73.1	14.0	12.7	60.5
Change Period (Y+Rc), s	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	77.0	38.0	14.0	59.0
Max Q Clear Time (g_c+I1), s	16.9	9.6	8.8	32.0
Green Ext Time (p_c), s	32.8	0.4	0.1	22.5

Intersection Summary	
HCM 7th Control Delay, s/veh	12.5
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	40	90	100	80	40	120	1297	60	50	1551	150
Future Volume (veh/h)	150	40	90	100	80	40	120	1297	60	50	1551	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	158	42	95	105	84	42	126	1365	63	53	1633	158
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	221	187	145	153	127	153	1878	819	107	1786	795
Arrive On Green	0.12	0.12	0.12	0.08	0.08	0.08	0.09	0.53	0.53	0.06	0.50	0.50
Sat Flow, veh/h	1781	1870	1581	1781	1870	1556	1781	3554	1549	1781	3554	1582
Grp Volume(v), veh/h	158	42	95	105	84	42	126	1365	63	53	1633	158
Grp Sat Flow(s),veh/h/ln	1781	1870	1581	1781	1870	1556	1781	1777	1549	1781	1777	1582
Q Serve(g_s), s	9.0	2.1	5.9	6.0	4.5	2.7	7.3	30.9	2.1	3.0	44.4	5.8
Cycle Q Clear(g_c), s	9.0	2.1	5.9	6.0	4.5	2.7	7.3	30.9	2.1	3.0	44.4	5.8
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	211	221	187	145	153	127	153	1878	819	107	1786	795
V/C Ratio(X)	0.75	0.19	0.51	0.72	0.55	0.33	0.82	0.73	0.08	0.50	0.91	0.20
Avail Cap(c_a), veh/h	713	749	633	289	303	252	153	1878	819	144	1856	826
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	44.7	41.7	43.4	47.0	46.3	45.5	47.2	18.9	12.2	47.8	24.0	14.4
Incr Delay (d2), s/veh	5.3	0.4	2.1	6.6	3.1	1.5	29.3	1.4	0.0	3.5	7.3	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	4.2	1.0	2.4	2.9	2.2	1.1	4.4	11.6	0.7	1.4	18.3	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.0	42.1	45.5	53.6	49.4	47.0	76.4	20.4	12.2	51.3	31.3	14.5
LnGrp LOS	D	D	D	D	D	D	E	C	B	D	C	B
Approach Vol, veh/h		295			231			1554			1844	
Approach Delay, s/veh		47.4			50.9			24.6			30.5	
Approach LOS		D			D			C			C	

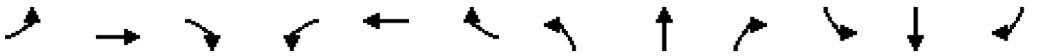
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.3	61.4		18.3	13.0	58.7		14.9
Change Period (Y+Rc), s	4.0	6.0		5.9	4.0	6.0		6.3
Max Green Setting (Gmax), s	8.5	55.3		42.0	9.0	54.8		17.0
Max Q Clear Time (g_c+I1), s	5.0	32.9		11.0	9.3	46.4		8.0
Green Ext Time (p_c), s	0.0	10.3		1.0	0.0	6.4		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	30.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Appendix K
Cumulative Year With Project Conditions
Synchro Reports



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	616	216	264	483	136	235	677	587	443	897	69
Future Volume (veh/h)	59	616	216	264	483	136	235	677	587	443	897	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	648	227	278	508	143	247	713	618	466	944	73
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	937	289	360	1239	383	289	1114	609	512	1755	545
Arrive On Green	0.04	0.18	0.18	0.10	0.24	0.24	0.16	0.22	0.22	0.29	0.34	0.34
Sat Flow, veh/h	1781	5106	1575	3456	5106	1577	1781	5106	2790	1781	5106	1585
Grp Volume(v), veh/h	62	648	227	278	508	143	247	713	618	466	944	73
Grp Sat Flow(s),veh/h/ln	1781	1702	1575	1728	1702	1577	1781	1702	1395	1781	1702	1585
Q Serve(g_s), s	3.0	10.3	12.0	6.8	7.3	6.6	11.7	11.1	19.0	22.0	13.0	2.8
Cycle Q Clear(g_c), s	3.0	10.3	12.0	6.8	7.3	6.6	11.7	11.1	19.0	22.0	13.0	2.8
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	80	937	289	360	1239	383	289	1114	609	512	1755	545
V/C Ratio(X)	0.78	0.69	0.79	0.77	0.41	0.37	0.86	0.64	1.02	0.91	0.54	0.13
Avail Cap(c_a), veh/h	186	1055	325	456	1239	383	425	1114	609	685	1859	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.2	33.2	33.9	38.0	27.7	27.5	35.5	30.9	34.0	29.9	23.0	19.7
Incr Delay (d2), s/veh	14.7	1.7	10.8	6.2	0.2	0.6	10.9	1.2	40.4	13.3	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	1.6	4.2	5.2	3.1	2.8	2.4	5.7	4.4	9.4	10.5	4.8	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.8	34.9	44.7	44.2	27.9	28.1	46.4	32.2	74.4	43.2	23.3	19.8
LnGrp LOS	E	C	D	D	C	C	D	C	F	D	C	B
Approach Vol, veh/h		937			929			1578			1483	
Approach Delay, s/veh		38.7			32.8			50.9			29.4	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.5	23.5	13.6	20.5	18.6	34.4	8.4	25.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	33.5	19.0	11.5	18.0	20.8	31.7	9.1	20.4
Max Q Clear Time (g_c+I1), s	24.0	21.0	8.8	14.0	13.7	15.0	5.0	9.3
Green Ext Time (p_c), s	1.1	0.0	0.2	1.8	0.4	5.8	0.0	2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	38.7
HCM 7th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1448	34	84	685	43	42	108	138	292	105	118
Future Volume (veh/h)	60	1448	34	84	685	43	42	108	138	292	105	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	1524	36	88	721	45	44	114	145	307	111	124
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	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	1990	616	113	2080	644	66	279	225	350	577	440
Arrive On Green	0.05	0.39	0.39	0.06	0.41	0.41	0.04	0.15	0.15	0.20	0.31	0.31
Sat Flow, veh/h	1781	5106	1581	1781	5106	1581	1781	1870	1508	1781	1870	1427
Grp Volume(v), veh/h	63	1524	36	88	721	45	44	114	145	307	111	124
Grp Sat Flow(s),veh/h/ln	1781	1702	1581	1781	1702	1581	1781	1870	1508	1781	1870	1427
Q Serve(g_s), s	3.1	23.2	1.3	4.4	8.7	1.6	2.2	4.9	8.1	15.0	3.9	5.9
Cycle Q Clear(g_c), s	3.1	23.2	1.3	4.4	8.7	1.6	2.2	4.9	8.1	15.0	3.9	5.9
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	81	1990	616	113	2080	644	66	279	225	350	577	440
V/C Ratio(X)	0.77	0.77	0.06	0.78	0.35	0.07	0.66	0.41	0.65	0.88	0.19	0.28
Avail Cap(c_a), veh/h	207	2427	751	169	2318	718	173	408	329	528	780	595
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	23.7	17.0	41.3	18.3	16.2	42.5	34.5	35.8	34.9	22.7	23.4
Incr Delay (d2), s/veh	14.3	1.2	0.0	12.4	0.1	0.0	10.9	1.0	3.1	10.5	0.2	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	1.6	8.6	0.4	2.2	3.1	0.5	1.1	2.3	3.0	7.3	1.7	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.5	25.0	17.1	53.7	18.4	16.2	53.4	35.4	38.9	45.4	22.9	23.8
LnGrp LOS	E	C	B	D	B	B	D	D	D	D	C	C
Approach Vol, veh/h		1623			854			303			542	
Approach Delay, s/veh		26.0			21.9			39.7			35.8	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.1	17.8	10.2	39.3	7.8	32.1	8.6	40.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	26.5	19.5	8.5	42.5	8.7	37.3	10.4	40.6
Max Q Clear Time (g_c+I1), s	17.0	10.1	6.4	25.2	4.2	7.9	5.1	10.7
Green Ext Time (p_c), s	0.6	0.7	0.0	9.6	0.0	1.1	0.0	4.9

Intersection Summary	
HCM 7th Control Delay, s/veh	27.8
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	1474	124	354	662	157	72	1104	503	294	912	178
Future Volume (veh/h)	273	1474	124	354	662	157	72	1104	503	294	912	178
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	287	1552	28	373	697	56	76	1162	202	309	960	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	758	1556	483	369	948	294	358	1227	547	300	1167	520
Arrive On Green	0.22	0.30	0.30	0.11	0.19	0.19	0.10	0.35	0.35	0.09	0.33	0.33
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1584	3456	3554	1584
Grp Volume(v), veh/h	287	1552	28	373	697	56	76	1162	202	309	960	87
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1584	1728	1777	1584
Q Serve(g_s), s	10.6	45.4	1.4	16.0	19.3	3.5	3.0	47.6	14.3	13.0	37.2	5.8
Cycle Q Clear(g_c), s	10.6	45.4	1.4	16.0	19.3	3.5	3.0	47.6	14.3	13.0	37.2	5.8
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	758	1556	483	369	948	294	358	1227	547	300	1167	520
V/C Ratio(X)	0.38	1.00	0.06	1.01	0.74	0.19	0.21	0.95	0.37	1.03	0.82	0.17
Avail Cap(c_a), veh/h	758	1556	483	369	1501	466	358	1235	550	300	1353	603
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	52.0	19.7	66.8	57.5	32.5	61.5	47.7	36.8	68.3	46.2	35.7
Incr Delay (d2), s/veh	0.1	22.2	0.1	49.3	1.7	0.5	0.1	15.0	0.8	59.7	4.5	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	4.5	22.0	0.7	9.4	8.2	1.8	1.3	23.0	5.5	8.1	16.7	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.9	74.2	19.8	116.1	59.1	33.0	61.6	62.7	37.6	128.1	50.7	36.0
LnGrp LOS	D	E	B	F	E	C	E	E	D	F	D	D
Approach Vol, veh/h		1867			1126			1440			1356	
Approach Delay, s/veh		69.6			76.7			59.1			67.4	
Approach LOS		E			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	57.7	21.0	52.0	21.5	55.2	39.2	33.8
Change Period (Y+Rc), s	6.0	6.0	5.0	6.4	6.0	6.0	6.4	* 6
Max Green Setting (Gmax), s	13.0	52.0	16.0	45.6	8.0	57.0	18.0	* 44
Max Q Clear Time (g_c+I1), s	15.0	49.6	18.0	47.4	5.0	39.2	12.6	21.3
Green Ext Time (p_c), s	0.0	2.0	0.0	0.0	0.0	9.9	0.3	6.5

Intersection Summary	
HCM 7th Control Delay, s/veh	67.9
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	2781	68	82	1298	156	34	28	114	480	39	53
Future Volume (veh/h)	77	2781	68	82	1298	156	34	28	114	480	39	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.98	1.00		0.68	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	81	2927	36	86	1366	82	36	29	9	581	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	2893	857	109	2809	853	149	157	90	448	235	0
Arrive On Green	0.08	0.57	0.57	0.06	0.55	0.55	0.08	0.08	0.08	0.13	0.00	0.00
Sat Flow, veh/h	1781	5106	1513	1781	5106	1550	1781	1870	1078	3563	1870	0
Grp Volume(v), veh/h	81	2927	36	86	1366	82	36	29	9	581	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1513	1781	1702	1550	1781	1870	1078	1781	1870	0
Q Serve(g_s), s	5.3	68.0	1.3	5.7	19.7	3.0	2.3	1.7	0.9	15.1	0.0	0.0
Cycle Q Clear(g_c), s	5.3	68.0	1.3	5.7	19.7	3.0	2.3	1.7	0.9	15.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	138	2893	857	109	2809	853	149	157	90	448	235	0
V/C Ratio(X)	0.58	1.01	0.04	0.79	0.49	0.10	0.24	0.18	0.10	1.30	0.00	0.00
Avail Cap(c_a), veh/h	238	2893	857	386	2809	853	303	318	183	448	235	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)	0.20	0.20	0.20	0.81	0.81	0.81	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	53.5	26.0	11.5	55.6	16.6	12.8	51.4	51.1	50.8	52.5	0.0	0.0
Incr Delay (d2), s/veh	0.3	10.6	0.0	3.8	0.5	0.2	0.3	0.2	0.2	148.9	0.0	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	2.3	27.1	0.4	2.6	7.2	1.0	1.0	0.8	0.2	15.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.8	36.7	11.6	59.4	17.1	13.0	51.7	51.4	51.0	201.4	0.0	0.0
LnGrp LOS	D	F	B	E	B	B	D	D	D	F		
Approach Vol, veh/h		3044			1534			74			581	
Approach Delay, s/veh		36.8			19.2			51.5			201.4	
Approach LOS		D			B			D			F	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	14.7	11.3	74.0		20.0	13.3	72.0
Change Period (Y+Rc), s	4.6	4.0	6.0		4.9	4.0	6.0
Max Green Setting (Gmax), s	20.4	26.0	39.0		15.1	16.0	49.0
Max Q Clear Time (g_c+I1), s	4.3	7.7	70.0		17.1	7.3	21.7
Green Ext Time (p_c), s	0.1	0.1	0.0		0.0	0.0	20.0

Intersection Summary	
HCM 7th Control Delay, s/veh	50.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	2825	428	250	1234	494	219	588	460	316	265	82
Future Volume (veh/h)	123	2825	428	250	1234	494	219	588	460	316	265	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	129	2974	219	263	1299	368	231	619	384	333	279	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	229	2917	705	276	2384	737	277	836	368	346	907	393
Arrive On Green	0.07	0.45	0.45	0.16	0.93	0.93	0.08	0.24	0.24	0.10	0.26	0.26
Sat Flow, veh/h	3456	6434	1556	3456	5106	1578	3456	3554	1563	3456	3554	1541
Grp Volume(v), veh/h	129	2974	219	263	1299	368	231	619	384	333	279	22
Grp Sat Flow(s),veh/h/ln	1728	1609	1556	1728	1702	1578	1728	1777	1563	1728	1777	1541
Q Serve(g_s), s	5.4	68.0	13.4	11.3	5.1	4.3	9.9	24.2	35.3	14.4	9.5	1.6
Cycle Q Clear(g_c), s	5.4	68.0	13.4	11.3	5.1	4.3	9.9	24.2	35.3	14.4	9.5	1.6
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	229	2917	705	276	2384	737	277	836	368	346	907	393
V/C Ratio(X)	0.56	1.02	0.31	0.95	0.54	0.50	0.83	0.74	1.04	0.96	0.31	0.06
Avail Cap(c_a), veh/h	249	2917	705	276	2384	737	357	836	368	346	907	393
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.9	41.0	26.1	62.7	2.8	2.8	68.0	53.1	57.3	67.2	45.2	42.2
Incr Delay (d2), s/veh	0.1	11.1	0.1	38.1	0.8	2.2	10.1	3.7	58.9	38.4	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	2.4	27.9	4.9	5.9	1.2	1.3	4.7	11.0	19.6	8.1	4.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.0	52.1	26.2	100.8	3.6	5.0	78.1	56.8	116.2	105.7	45.5	42.3
LnGrp LOS	E	F	C	F	A	A	E	E	F	F	D	D
Approach Vol, veh/h		3322			1930			1234			634	
Approach Delay, s/veh		51.0			17.1			79.3			77.0	
Approach LOS		D			B			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	41.0	16.0	74.0	16.0	44.0	14.0	76.0
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	15.0	35.3	12.0	68.0	15.5	34.8	10.8	69.2
Max Q Clear Time (g_c+I1), s	13.4	37.3	13.3	70.0	11.9	11.5	7.4	7.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	2.6	0.1	43.5

Intersection Summary	
HCM 7th Control Delay, s/veh	49.0
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	3589	10	22	1954	69	18	13	120	15	6	6
Future Volume (veh/h)	2	3589	10	22	1954	69	18	13	120	15	6	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	3778	11	23	2057	73	19	14	126	16	6	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	7	4483	1089	99	4644	1120	333	175	148	98	47	47
Arrive On Green	0.01	1.00	1.00	0.04	0.96	0.96	0.09	0.09	0.09	0.06	0.06	0.06
Sat Flow, veh/h	1781	6434	1563	3456	6434	1551	3563	1870	1585	1781	858	858
Grp Volume(v), veh/h	2	3778	11	23	2057	73	19	14	126	16	0	12
Grp Sat Flow(s),veh/h/ln	1781	1609	1563	1728	1609	1551	1781	1870	1585	1781	0	1716
Q Serve(g_s), s	0.2	0.0	0.0	1.0	3.3	0.3	0.7	1.0	11.7	1.3	0.0	1.0
Cycle Q Clear(g_c), s	0.2	0.0	0.0	1.0	3.3	0.3	0.7	1.0	11.7	1.3	0.0	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	7	4483	1089	99	4644	1120	333	175	148	98	0	95
V/C Ratio(X)	0.30	0.84	0.01	0.23	0.44	0.07	0.06	0.08	0.85	0.16	0.00	0.13
Avail Cap(c_a), veh/h	89	4483	1089	173	4644	1120	1330	698	592	220	0	212
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.87	0.87	0.87	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	74.2	0.0	0.0	70.5	0.9	0.8	62.0	62.1	67.0	67.6	0.0	67.4
Incr Delay (d2), s/veh	0.8	0.2	0.0	0.4	0.3	0.1	0.0	0.1	5.2	0.3	0.0	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	0.1	0.1	0.0	0.4	0.7	0.1	0.3	0.5	4.9	0.6	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	75.1	0.2	0.0	70.9	1.2	0.9	62.0	62.2	72.1	67.9	0.0	67.7
LnGrp LOS	E	A	A	E	A	A	E	E	E	E		E
Approach Vol, veh/h		3791			2153			159			28	
Approach Delay, s/veh		0.2			1.9			70.1			67.8	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	18.9	8.3	110.5	12.3	4.6	114.3
Change Period (Y+Rc), s	4.9	4.0	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	56.0	7.5	49.1	18.5	7.5	49.1
Max Q Clear Time (g_c+I1), s	13.7	3.0	2.0	3.3	2.2	5.3
Green Ext Time (p_c), s	0.3	0.0	47.0	0.0	0.0	38.0

Intersection Summary	
HCM 7th Control Delay, s/veh	2.9
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	3704	5	5	2003	75	5	5	5	248	5	37
Future Volume (veh/h)	15	3704	5	5	2003	75	5	5	5	248	5	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	3899	5	5	2108	79	5	5	5	261	0	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	52	4650	1121	67	4290	1057	32	33	28	290	0	516
Arrive On Green	0.04	0.96	0.96	0.67	0.67	0.67	0.02	0.02	0.02	0.16	0.00	0.16
Sat Flow, veh/h	1781	6434	1551	31	6434	1585	1781	1870	1571	1781	0	3164
Grp Volume(v), veh/h	16	3899	5	5	2108	79	5	5	5	261	0	42
Grp Sat Flow(s),veh/h/ln	1781	1609	1551	31	1609	1585	1781	1870	1571	1781	0	1582
Q Serve(g_s), s	1.3	18.2	0.0	11.4	24.4	2.6	0.4	0.4	0.5	21.6	0.0	1.7
Cycle Q Clear(g_c), s	1.3	18.2	0.0	21.2	24.4	2.6	0.4	0.4	0.5	21.6	0.0	1.7
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	52	4650	1121	67	4290	1057	32	33	28	290	0	516
V/C Ratio(X)	0.31	0.84	0.00	0.07	0.49	0.07	0.16	0.15	0.18	0.90	0.00	0.08
Avail Cap(c_a), veh/h	113	4650	1121	67	4290	1057	214	224	188	545	0	968
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.43	0.43	0.43	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	70.6	1.2	0.8	14.2	12.4	8.8	72.6	72.6	72.6	61.6	0.0	53.3
Incr Delay (d2), s/veh	0.5	0.9	0.0	2.2	0.4	0.1	2.3	2.1	3.0	4.1	0.0	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	0.6	1.5	0.0	0.1	8.2	0.9	0.2	0.2	0.2	10.1	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	71.1	2.0	0.8	16.4	12.8	8.9	74.9	74.6	75.6	65.6	0.0	53.3
LnGrp LOS	E	A	A	B	B	A	E	E	E	E		D
Approach Vol, veh/h		3920			2192			15			303	
Approach Delay, s/veh		2.3			12.7			75.1			63.9	
Approach LOS		A			B			E			E	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	7.2	114.4	28.4	8.4	106.0
Change Period (Y+Rc), s	4.5	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	18.0	48.6	45.9	9.5	58.1
Max Q Clear Time (g_c+I1), s	2.5	20.2	23.6	3.3	26.4
Green Ext Time (p_c), s	0.0	28.4	0.4	0.0	27.9

Intersection Summary	
HCM 7th Control Delay, s/veh	8.9
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	2950	616	516	1746	868	376	584	350	702	578	63
Future Volume (veh/h)	229	2950	616	516	1746	868	376	584	350	702	578	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	241	3105	507	543	1838	566	396	615	0	739	608	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	284	2305	560	369	2462	599	323	655		751	1575	489
Arrive On Green	0.08	0.36	0.36	0.11	0.38	0.38	0.09	0.18	0.00	0.22	0.31	0.31
Sat Flow, veh/h	3456	6434	1564	3456	6434	1565	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	241	3105	507	543	1838	566	396	615	0	739	608	13
Grp Sat Flow(s),veh/h/ln	1728	1609	1564	1728	1609	1565	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	10.3	53.7	46.2	16.0	37.0	52.5	14.0	25.6	0.0	31.9	14.0	0.9
Cycle Q Clear(g_c), s	10.3	53.7	46.2	16.0	37.0	52.5	14.0	25.6	0.0	31.9	14.0	0.9
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	284	2305	560	369	2462	599	323	655		751	1575	489
V/C Ratio(X)	0.85	1.35	0.90	1.47	0.75	0.94	1.23	0.94		0.98	0.39	0.03
Avail Cap(c_a), veh/h	290	2305	560	369	2462	599	323	656		751	1600	497
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	0.65	0.65	0.65	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.9	48.1	45.7	67.0	40.0	44.8	68.0	60.3	0.0	58.4	40.7	36.2
Incr Delay (d2), s/veh	19.0	159.1	20.6	222.4	1.4	19.0	126.8	21.8	0.0	28.7	0.6	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	5.2	46.3	20.6	18.3	14.5	22.8	11.8	13.3	0.0	16.7	5.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	86.9	207.2	66.3	289.4	41.4	63.7	194.8	82.1	0.0	87.1	41.3	36.3
LnGrp LOS	F	F	E	F	D	E	F	F		F	D	D
Approach Vol, veh/h		3853			2947			1011			1360	
Approach Delay, s/veh		181.2			91.4			126.3			66.1	
Approach LOS		F			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.6	33.7	20.0	59.7	18.0	52.3	16.3	63.4
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	32.6	27.7	16.0	53.7	14.0	* 47	12.6	57.1
Max Q Clear Time (g_c+I1), s	33.9	27.6	18.0	55.7	16.0	16.0	12.3	54.5
Green Ext Time (p_c), s	0.0	0.1	0.0	0.0	0.0	10.2	0.0	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	129.2
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	3171	329	663	1090	388	189	0	622	112	766	442
Future Volume (veh/h)	0	3171	329	663	1090	388	189	0	622	112	766	442
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	3338	346	698	1147	0	199	0	655	118	806	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	0	2	2	2	2
Cap, veh/h	0	3302	813	369	3301		0	0	0	487	972	
Arrive On Green	0.00	0.51	0.51	0.11	0.65	0.00	0.00	0.00	0.00	0.27	0.27	0.00
Sat Flow, veh/h	0	6696	1584	3456	5106	1585		0		1781	3554	1585
Grp Volume(v), veh/h	0	3338	346	698	1147	0		0.0		118	806	0
Grp Sat Flow(s),veh/h/ln	0	1609	1584	1728	1702	1585				1781	1777	1585
Q Serve(g_s), s	0.0	77.0	20.4	16.0	15.4	0.0				7.7	32.0	0.0
Cycle Q Clear(g_c), s	0.0	77.0	20.4	16.0	15.4	0.0				7.7	32.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3302	813	369	3301					487	972	
V/C Ratio(X)	0.00	1.01	0.43	1.89	0.35					0.24	0.83	
Avail Cap(c_a), veh/h	0	3302	813	369	3301					546	1090	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.34	0.34	1.00	1.00	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	36.5	22.7	67.0	12.1	0.0				42.4	51.2	0.0
Incr Delay (d2), s/veh	0.0	12.0	0.6	412.2	0.3	0.0				0.5	5.8	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	0.0	32.3	7.8	28.0	5.6	0.0				3.5	15.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	48.5	23.3	479.2	12.4	0.0				42.9	57.0	0.0
LnGrp LOS		F	C	F	B					D	E	
Approach Vol, veh/h		3684			1845						924	
Approach Delay, s/veh		46.1			189.0						55.2	
Approach LOS		D			F						E	

Timer - Assigned Phs		3	4		6	8						
Phs Duration (G+Y+Rc), s		20.0	83.0		47.0	103.0						
Change Period (Y+Rc), s		4.0	6.0		6.0	6.0						
Max Green Setting (Gmax), s		16.0	48.0		46.0	68.0						
Max Q Clear Time (g_c+I1), s		18.0	79.0		34.0	17.4						
Green Ext Time (p_c), s		0.0	0.0		7.0	21.8						

Intersection Summary	
HCM 7th Control Delay, s/veh	88.3
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	460	580	109	254	62	330	777	62	72	337	5
Future Volume (veh/h)	5	460	580	109	254	62	330	777	62	72	337	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	484	306	115	267	27	347	818	20	76	355	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	940	418	168	1251	557	403	1079	481	200	869	388
Arrive On Green	0.01	0.26	0.26	0.09	0.35	0.35	0.12	0.30	0.30	0.06	0.24	0.24
Sat Flow, veh/h	1781	3554	1581	1781	3554	1582	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	5	484	306	115	267	27	347	818	20	76	355	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1581	1781	1777	1582	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.2	7.5	11.3	4.0	3.4	0.7	6.3	13.4	0.6	1.4	5.4	0.2
Cycle Q Clear(g_c), s	0.2	7.5	11.3	4.0	3.4	0.7	6.3	13.4	0.6	1.4	5.4	0.2
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	12	940	418	168	1251	557	403	1079	481	200	869	388
V/C Ratio(X)	0.42	0.52	0.73	0.69	0.21	0.05	0.86	0.76	0.04	0.38	0.41	0.01
Avail Cap(c_a), veh/h	208	1631	726	208	1631	726	403	1521	678	403	1521	678
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	31.8	20.1	21.6	28.2	14.6	13.7	27.9	20.2	15.8	29.2	20.4	18.4
Incr Delay (d2), s/veh	22.2	0.4	2.5	6.7	0.1	0.0	16.9	1.4	0.0	1.2	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	0.1	2.7	4.0	1.9	1.2	0.2	3.3	4.9	0.2	0.5	2.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.0	20.6	24.0	34.9	14.7	13.8	44.8	21.7	15.8	30.4	20.7	18.4
LnGrp LOS	D	C	C	C	B	B	D	C	B	C	C	B
Approach Vol, veh/h		795			409			1185			436	
Approach Delay, s/veh		22.1			20.3			28.3			22.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	24.0	10.5	21.5	12.0	20.2	4.9	27.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	27.5	7.5	29.5	7.5	27.5	7.5	29.5
Max Q Clear Time (g_c+I1), s	3.4	15.4	6.0	13.3	8.3	7.4	2.2	5.4
Green Ext Time (p_c), s	0.1	4.1	0.0	3.6	0.0	2.0	0.0	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	24.5
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	502	18	97	306	528	39	1081	54	800	934	79
Future Volume (veh/h)	103	502	18	97	306	528	39	1081	54	800	934	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	528	19	102	322	556	41	1138	57	842	983	83
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	1204	528	207	1204	536	69	1395	414	655	2201	662
Arrive On Green	0.06	0.34	0.34	0.06	0.34	0.34	0.04	0.27	0.27	0.19	0.43	0.43
Sat Flow, veh/h	3456	3554	1559	3456	3554	1582	1781	5106	1515	3456	5106	1535
Grp Volume(v), veh/h	108	528	19	102	322	556	41	1138	57	842	983	83
Grp Sat Flow(s),veh/h/ln	1728	1777	1559	1728	1777	1582	1781	1702	1515	1728	1702	1535
Q Serve(g_s), s	4.5	17.0	1.2	4.2	9.7	50.0	3.3	30.8	4.2	28.0	20.0	4.8
Cycle Q Clear(g_c), s	4.5	17.0	1.2	4.2	9.7	50.0	3.3	30.8	4.2	28.0	20.0	4.8
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	208	1204	528	207	1204	536	69	1395	414	655	2201	662
V/C Ratio(X)	0.52	0.44	0.04	0.49	0.27	1.04	0.60	0.82	0.14	1.28	0.45	0.13
Avail Cap(c_a), veh/h	222	1204	528	222	1204	536	110	1456	432	655	2201	662
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	67.3	37.9	32.7	67.2	35.5	48.8	69.8	50.2	40.5	59.8	29.6	25.3
Incr Delay (d2), s/veh	0.7	0.6	0.1	0.7	0.3	49.0	3.1	4.3	0.4	139.5	0.7	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	2.0	7.4	0.5	1.9	4.2	26.4	1.6	13.4	1.6	24.8	8.2	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.0	38.5	32.7	67.9	35.8	97.8	72.9	54.5	40.9	199.3	30.2	25.6
LnGrp LOS	E	D	C	E	D	F	E	D	D	F	C	C
Approach Vol, veh/h		655			980			1236			1908	
Approach Delay, s/veh		43.2			74.3			54.5			104.7	
Approach LOS		D			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	46.0	12.9	55.7	9.7	69.3	12.9	55.7
Change Period (Y+Rc), s	5.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	28.0	42.1	9.5	50.0	9.1	62.0	9.5	50.0
Max Q Clear Time (g_c+I1), s	30.0	32.8	6.2	19.0	5.3	22.0	6.5	52.0
Green Ext Time (p_c), s	0.0	7.1	0.0	7.4	0.0	25.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	77.0
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	1043	13	120	659	181	56	122	204	54	277	101
Future Volume (veh/h)	113	1043	13	120	659	181	56	122	204	54	277	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	119	1098	5	126	694	159	59	128	34	57	292	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	1179	520	165	952	218	72	157	197	62	318	106
Arrive On Green	0.09	0.33	0.33	0.09	0.33	0.33	0.12	0.12	0.12	0.27	0.27	0.27
Sat Flow, veh/h	1781	3554	1568	1781	2865	656	581	1260	1585	229	1171	389
Grp Volume(v), veh/h	119	1098	5	126	430	423	187	0	34	446	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1568	1781	1777	1744	1841	0	1585	1789	0	0
Q Serve(g_s), s	6.8	31.5	0.2	7.3	22.5	22.5	10.4	0.0	2.0	25.5	0.0	0.0
Cycle Q Clear(g_c), s	6.8	31.5	0.2	7.3	22.5	22.5	10.4	0.0	2.0	25.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.38	0.32		1.00	0.13		0.22
Lane Grp Cap(c), veh/h	164	1179	520	165	590	579	229	0	197	485	0	0
V/C Ratio(X)	0.73	0.93	0.01	0.76	0.73	0.73	0.82	0.00	0.17	0.92	0.00	0.00
Avail Cap(c_a), veh/h	380	1191	525	245	590	579	563	0	484	577	0	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	46.5	34.0	23.6	46.7	31.0	31.0	45.0	0.0	41.3	37.3	0.0	0.0
Incr Delay (d2), s/veh	2.3	13.1	0.0	3.6	5.2	5.3	2.7	0.0	0.2	16.8	0.0	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	3.1	15.4	0.1	3.4	10.3	10.1	4.9	0.0	0.8	13.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.8	47.2	23.6	50.3	36.2	36.3	47.7	0.0	41.4	54.1	0.0	0.0
LnGrp LOS	D	D	C	D	D	D	D		D	D		
Approach Vol, veh/h		1222			979			221			446	
Approach Delay, s/veh		47.3			38.0			46.7			54.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	18.4	13.7	40.6	32.6	13.7	40.7
Change Period (Y+Rc), s	5.3	4.0	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	32.2	14.5	35.3	34.0	22.5	27.3
Max Q Clear Time (g_c+I1), s	12.4	9.3	33.5	27.5	8.8	24.5
Green Ext Time (p_c), s	0.7	0.1	1.5	1.1	0.1	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	45.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	767	644	608	503	76	408	1418	966	152	1141	77
Future Volume (veh/h)	159	767	644	608	503	76	408	1418	966	152	1141	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	167	807	277	640	529	69	429	1493	721	160	1201	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	214	1299	572	453	1544	689	191	1588	487	179	1571	488
Arrive On Green	0.06	0.37	0.37	0.13	0.43	0.43	0.06	0.31	0.31	0.05	0.31	0.31
Sat Flow, veh/h	3456	3554	1565	3456	3554	1585	3456	5106	1565	3456	5106	1585
Grp Volume(v), veh/h	167	807	277	640	529	69	429	1493	721	160	1201	33
Grp Sat Flow(s),veh/h/ln	1728	1777	1565	1728	1777	1585	1728	1702	1565	1728	1702	1585
Q Serve(g_s), s	6.9	27.0	19.8	19.0	14.3	3.7	8.0	41.3	45.1	6.7	30.9	2.1
Cycle Q Clear(g_c), s	6.9	27.0	19.8	19.0	14.3	3.7	8.0	41.3	45.1	6.7	30.9	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	214	1299	572	453	1544	689	191	1588	487	179	1571	488
V/C Ratio(X)	0.78	0.62	0.48	1.41	0.34	0.10	2.25	0.94	1.48	0.90	0.76	0.07
Avail Cap(c_a), veh/h	296	1306	575	453	1544	689	191	1588	487	179	1585	492
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)	0.20	0.20	0.20	1.00	1.00	1.00	0.09	0.09	0.09	0.55	0.55	0.55
Uniform Delay (d), s/veh	67.0	37.8	35.5	63.0	27.2	24.2	68.5	48.6	50.0	68.4	45.4	35.5
Incr Delay (d2), s/veh	1.2	0.5	0.6	198.7	0.6	0.3	564.1	1.4	217.6	25.0	1.5	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	3.0	11.6	7.5	20.7	6.1	1.4	18.4	17.2	46.5	3.5	12.9	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.2	38.2	36.1	261.7	27.8	24.5	632.6	50.0	267.6	93.3	46.9	35.6
LnGrp LOS	E	D	D	F	C	C	F	D	F	F	D	D
Approach Vol, veh/h		1251			1238			2643			1394	
Approach Delay, s/veh		41.7			148.6			203.9			52.0	
Approach LOS		D			F			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	51.5	23.0	59.0	12.0	51.0	13.0	69.0
Change Period (Y+Rc), s	4.0	6.4	4.0	* 6	4.0	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	7.5	45.1	19.0	* 53	8.0	* 45	12.4	59.6
Max Q Clear Time (g_c+I1), s	8.7	47.1	21.0	29.0	10.0	32.9	8.9	16.3
Green Ext Time (p_c), s	0.0	0.0	0.0	10.8	0.0	8.5	0.1	5.8

Intersection Summary	
HCM 7th Control Delay, s/veh	129.9
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	1579	202	200	944	220	131	909	522	385	448	243
Future Volume (veh/h)	141	1579	202	200	944	220	131	909	522	385	448	243
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	148	1662	0	211	994	0	138	957	0	405	472	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	193	1627		2017	4380		183	990		380	1601	
Arrive On Green	0.06	0.32	0.00	0.58	0.86	0.00	0.05	0.28	0.00	0.21	0.45	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	148	1662	0	211	994	0	138	957	0	405	472	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	6.3	47.8	0.0	4.1	5.2	0.0	5.9	39.9	0.0	32.0	12.6	0.0
Cycle Q Clear(g_c), s	6.3	47.8	0.0	4.1	5.2	0.0	5.9	39.9	0.0	32.0	12.6	0.0
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	193	1627		2017	4380		183	990		380	1601	
V/C Ratio(X)	0.77	1.02		0.10	0.23		0.75	0.97		1.07	0.29	
Avail Cap(c_a), veh/h	253	1627		2017	4380		253	990		380	1601	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	69.8	51.1	0.0	13.8	1.9	0.0	70.1	53.4	0.0	59.0	26.1	0.0
Incr Delay (d2), s/veh	6.8	27.9	0.0	0.0	0.0	0.0	4.7	21.0	0.0	64.7	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	2.9	24.0	0.0	1.6	1.0	0.0	2.7	20.4	0.0	21.0	5.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	76.6	79.0	0.0	13.9	1.9	0.0	74.8	74.4	0.0	123.7	26.3	0.0
LnGrp LOS	E	F		B	A		E	E		F	C	
Approach Vol, veh/h		1810			1205			1095			877	
Approach Delay, s/veh		78.8			4.0			74.4			71.3	
Approach LOS		E			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	47.5	94.7	53.5	11.9	73.3	12.4	135.8
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	12.0	* 42	9.0	* 48	11.0	62.8	11.0	45.8
Max Q Clear Time (g_c+I1), s	34.0	41.9	6.1	49.8	7.9	14.6	8.3	7.2
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.1	5.6	0.1	13.1

Intersection Summary	
HCM 7th Control Delay, s/veh	58.4
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2330	141	116	1196	103	232
Future Volume (veh/h)	2330	141	116	1196	103	232
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2453	148	122	1259	108	244
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3253	194	144	3919	299	266
Arrive On Green	0.66	0.66	0.08	0.77	0.17	0.17
Sat Flow, veh/h	5096	294	1781	5274	1781	1585
Grp Volume(v), veh/h	1685	916	122	1259	108	244
Grp Sat Flow(s),veh/h/ln	1702	1817	1781	1702	1781	1585
Q Serve(g_s), s	50.0	51.8	10.1	11.4	8.1	22.7
Cycle Q Clear(g_c), s	50.0	51.8	10.1	11.4	8.1	22.7
Prop In Lane		0.16	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2247	1200	144	3919	299	266
V/C Ratio(X)	0.75	0.76	0.85	0.32	0.36	0.92
Avail Cap(c_a), veh/h	2247	1200	178	3919	428	380
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	17.2	17.5	68.0	5.4	55.3	61.4
Incr Delay (d2), s/veh	2.4	4.6	22.3	0.2	0.3	17.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.4	21.1	5.4	3.5	3.7	10.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	19.5	22.1	90.4	5.6	55.6	78.8
LnGrp LOS	B	C	F	A	E	E
Approach Vol, veh/h	2601			1381	352	
Approach Delay, s/veh	20.4			13.1	71.7	
Approach LOS	C			B	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	29.2	16.1	104.7		120.8
Change Period (Y+Rc), s	4.0	4.0	5.7		5.7
Max Green Setting (Gmax), s	36.0	15.0	85.3		104.3
Max Q Clear Time (g_c+I1), s	24.7	12.1	53.8		13.4
Green Ext Time (p_c), s	0.5	0.0	29.3		22.7

Intersection Summary	
HCM 7th Control Delay, s/veh	22.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	502	1775	175	561	967	164	180	993	740	185	441	132
Future Volume (veh/h)	502	1775	175	561	967	164	180	993	740	185	441	132
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	528	1868	0	591	1018	0	189	1045	0	195	464	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	585	2107		603	1865		235	1066		207	1878	
Arrive On Green	0.17	0.41	0.00	0.12	0.37	0.00	0.07	0.30	0.00	0.06	0.29	0.00
Sat Flow, veh/h	3456	5106	1585	5023	5106	1585	3456	3554	1585	3456	6434	1585
Grp Volume(v), veh/h	528	1868	0	591	1018	0	189	1045	0	195	464	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1674	1702	1585	1728	1777	1585	1728	1609	1585
Q Serve(g_s), s	22.5	50.8	0.0	17.6	23.7	0.0	8.1	43.7	0.0	8.4	8.3	0.0
Cycle Q Clear(g_c), s	22.5	50.8	0.0	17.6	23.7	0.0	8.1	43.7	0.0	8.4	8.3	0.0
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	585	2107		603	1865		235	1066		207	1878	
V/C Ratio(X)	0.90	0.89		0.98	0.55		0.80	0.98		0.94	0.25	
Avail Cap(c_a), veh/h	1021	2107		603	1865		346	1066		207	1878	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	61.1	40.8	0.0	65.8	37.7	0.0	68.9	52.1	0.0	70.2	40.5	0.0
Incr Delay (d2), s/veh	3.0	6.0	0.0	31.5	1.2	0.0	4.9	22.8	0.0	45.9	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	9.9	21.7	0.0	9.1	9.9	0.0	3.7	22.5	0.0	5.0	3.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	64.1	46.8	0.0	97.3	38.9	0.0	73.8	74.9	0.0	116.1	40.6	0.0
LnGrp LOS	E	D		F	D		E	E		F	D	
Approach Vol, veh/h		2396			1609			1234			659	
Approach Delay, s/veh		50.6			60.4			74.7			63.0	
Approach LOS		D			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	51.0	24.0	68.0	14.2	49.8	31.1	60.9
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	5.7	6.0
Max Green Setting (Gmax), s	9.0	45.0	18.0	* 56	15.0	39.0	44.3	30.0
Max Q Clear Time (g_c+I1), s	10.4	45.7	19.6	52.8	10.1	10.3	24.5	25.7
Green Ext Time (p_c), s	0.0	0.0	0.0	3.2	0.1	4.5	0.9	2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	59.7
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	2218	295	159	1052	67	317	846	294	68	654	304
Future Volume (veh/h)	228	2218	295	159	1052	67	317	846	294	68	654	304
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	240	2335	311	167	1107	0	334	891	0	72	688	320
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	2379	727	809	3210		346	1073		153	828	364
Arrive On Green	0.08	0.47	0.47	0.23	0.63	0.00	0.10	0.30	0.00	0.04	0.23	0.23
Sat Flow, veh/h	3456	5106	1561	3456	5106	1585	3456	3554	1585	3456	3554	1561
Grp Volume(v), veh/h	240	2335	311	167	1107	0	334	891	0	72	688	320
Grp Sat Flow(s),veh/h/ln	1728	1702	1561	1728	1702	1585	1728	1777	1585	1728	1777	1561
Q Serve(g_s), s	10.3	67.5	19.9	5.8	15.4	0.0	14.4	35.0	0.0	3.1	27.6	31.2
Cycle Q Clear(g_c), s	10.3	67.5	19.9	5.8	15.4	0.0	14.4	35.0	0.0	3.1	27.6	31.2
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	286	2379	727	809	3210		346	1073		153	828	364
V/C Ratio(X)	0.84	0.98	0.43	0.21	0.34		0.97	0.83		0.47	0.83	0.88
Avail Cap(c_a), veh/h	369	2379	727	809	3210		346	1073		161	839	368
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.8	39.4	26.7	46.2	13.2	0.0	67.2	48.8	0.0	70.0	54.7	61.4
Incr Delay (d2), s/veh	10.3	14.6	1.8	0.0	0.3	0.0	39.2	6.4	0.0	0.8	9.5	24.9
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	4.9	30.0	7.6	2.5	5.7	0.0	8.1	16.1	0.0	1.4	13.2	14.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	78.1	54.0	28.5	46.3	13.5	0.0	106.4	55.2	0.0	70.8	64.2	86.3
LnGrp LOS	E	D	C	D	B		F	E		E	E	F
Approach Vol, veh/h		2886			1274			1225			1080	
Approach Delay, s/veh		53.2			17.8			69.1			71.2	
Approach LOS		D			B			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	51.0	42.2	75.6	20.7	41.0	16.4	101.4
Change Period (Y+Rc), s	4.0	5.7	6.0	5.7	5.7	* 6	4.0	6.0
Max Green Setting (Gmax), s	7.0	43.7	8.0	69.9	15.0	* 35	16.0	63.6
Max Q Clear Time (g_c+I1), s	5.1	37.0	7.8	69.5	16.4	33.2	12.3	17.4
Green Ext Time (p_c), s	0.0	4.5	0.0	0.4	0.0	1.8	0.2	14.0

Intersection Summary	
HCM 7th Control Delay, s/veh	52.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	2444	24	40	1171	125	55	76	38	163	28	28
Future Volume (veh/h)	14	2444	24	40	1171	125	55	76	38	163	28	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	2573	0	42	1233	0	58	80	0	172	29	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	2546		372	3559		76	107		178	215	
Arrive On Green	0.02	0.50	0.00	0.21	0.70	0.00	0.04	0.06	0.00	0.10	0.11	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	15	2573	0	42	1233	0	58	80	0	172	29	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.2	74.8	0.0	2.9	14.5	0.0	4.8	6.3	0.0	14.4	2.1	0.0
Cycle Q Clear(g_c), s	1.2	74.8	0.0	2.9	14.5	0.0	4.8	6.3	0.0	14.4	2.1	0.0
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	39	2546		372	3559		76	107		178	215	
V/C Ratio(X)	0.39	1.01		0.11	0.35		0.77	0.75		0.97	0.13	
Avail Cap(c_a), veh/h	89	2546		372	3559		125	436		178	481	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	72.4	37.6	0.0	48.1	9.1	0.0	71.1	69.6	0.0	67.2	59.7	0.0
Incr Delay (d2), s/veh	2.4	20.4	0.0	0.0	0.3	0.0	5.9	7.4	0.0	56.9	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	0.6	34.1	0.0	1.3	5.0	0.0	2.3	3.3	0.0	9.4	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.7	58.0	0.0	48.2	9.3	0.0	77.0	77.0	0.0	124.1	60.0	0.0
LnGrp LOS	E	F		D	A		E	E		F	E	
Approach Vol, veh/h		2588			1275			138			201	
Approach Delay, s/veh		58.1			10.6			77.0			114.8	
Approach LOS		E			B			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	13.5	37.0	80.5	10.4	22.1	7.3	110.2
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	5.0	* 35	7.5	* 75	10.5	38.6	7.5	74.8
Max Q Clear Time (g_c+I1), s	3.4	8.3	4.9	76.8	6.8	4.1	3.2	16.5
Green Ext Time (p_c), s	0.0	0.3	0.0	0.0	0.0	0.1	0.0	20.0

Intersection Summary	
HCM 7th Control Delay, s/veh	47.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	216	1408	24	606	1049	497	26	1369	1064	889	870	256
Future Volume (veh/h)	216	1408	24	606	1049	497	26	1369	1064	889	870	256
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	227	1482	0	638	1104	0	27	1441	0	936	916	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	1444		520	1605		126	1268		739	2208	
Arrive On Green	0.08	0.28	0.00	0.10	0.31	0.00	0.04	0.25	0.00	0.21	0.43	0.00
Sat Flow, veh/h	3456	5106	1585	5023	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	227	1482	0	638	1104	0	27	1441	0	936	916	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1674	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	9.4	41.0	0.0	15.0	27.4	0.0	1.1	36.0	0.0	31.0	18.0	0.0
Cycle Q Clear(g_c), s	9.4	41.0	0.0	15.0	27.4	0.0	1.1	36.0	0.0	31.0	18.0	0.0
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	272	1444		520	1605		126	1268		739	2208	
V/C Ratio(X)	0.83	1.03		1.23	0.69		0.21	1.14		1.27	0.41	
Avail Cap(c_a), veh/h	286	1444		520	1605		191	1268		739	2208	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.71	0.71	0.00
Uniform Delay (d), s/veh	65.9	52.0	0.0	65.0	43.5	0.0	67.8	54.5	0.0	57.0	28.5	0.0
Incr Delay (d2), s/veh	16.8	30.7	0.0	118.6	2.4	0.0	0.3	71.6	0.0	127.8	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	4.7	21.1	0.0	12.0	11.7	0.0	0.5	23.4	0.0	26.3	7.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	82.7	82.7	0.0	183.6	45.9	0.0	68.1	126.1	0.0	184.8	28.6	0.0
LnGrp LOS	F	F		F	D		E	F		F	C	
Approach Vol, veh/h		1709			1742			1468			1852	
Approach Delay, s/veh		82.7			96.3			125.1			107.6	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	42.0	20.0	47.0	9.3	68.7	15.4	51.6
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	4.0	* 6	4.0	* 6
Max Green Setting (Gmax), s	11.0	36.0	15.0	41.0	8.0	* 60	12.0	* 45
Max Q Clear Time (g_c+I1), s	13.0	38.0	17.0	43.0	3.1	20.0	11.4	29.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	11.9	0.0	9.2

Intersection Summary	
HCM 7th Control Delay, s/veh	102.2
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	257	4	144	44	2	49	215	1900	22	347	1852	202
Future Volume (veh/h)	257	4	144	44	2	49	215	1900	22	347	1852	202
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	271	4	31	46	2	52	226	2000	23	365	1949	107
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	336	182	153	213	115	96	289	2364	27	1110	3113	965
Arrive On Green	0.10	0.10	0.10	0.06	0.06	0.06	0.08	0.36	0.36	0.32	0.61	0.61
Sat Flow, veh/h	3456	1870	1570	3456	1870	1562	3456	6605	76	3456	5106	1583
Grp Volume(v), veh/h	271	4	31	46	2	52	226	1461	562	365	1949	107
Grp Sat Flow(s),veh/h/ln	1728	1870	1570	1728	1870	1562	1728	1609	1855	1728	1702	1583
Q Serve(g_s), s	9.2	0.2	2.2	1.5	0.1	3.9	7.7	33.5	33.5	9.6	28.9	3.4
Cycle Q Clear(g_c), s	9.2	0.2	2.2	1.5	0.1	3.9	7.7	33.5	33.5	9.6	28.9	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	336	182	153	213	115	96	289	1727	664	1110	3113	965
V/C Ratio(X)	0.81	0.02	0.20	0.22	0.02	0.54	0.78	0.85	0.85	0.33	0.63	0.11
Avail Cap(c_a), veh/h	662	358	301	576	312	260	749	1741	669	1110	3113	965
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	0.28	0.28	0.28	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	49.0	49.9	53.5	52.9	54.6	53.9	35.5	35.5	30.9	14.8	9.8
Incr Delay (d2), s/veh	1.7	0.0	0.2	0.2	0.0	1.7	0.5	1.6	3.9	0.1	1.0	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	4.1	0.1	0.9	0.7	0.1	1.6	3.4	13.2	15.6	3.9	10.2	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.8	49.0	50.1	53.7	52.9	56.4	54.4	37.0	39.4	31.0	15.7	10.0
LnGrp LOS	D	D	D	D	D	E	D	D	D	C	B	B
Approach Vol, veh/h		306			100			2249			2421	
Approach Delay, s/veh		54.2			55.1			39.4			17.8	
Approach LOS		D			E			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	48.7		15.7	14.1	78.9		11.4				
Change Period (Y+Rc), s	5.7	5.7		4.0	4.0	5.7		4.0				
Max Green Setting (Gmax), s	14.3	43.3		23.0	26.0	33.3		20.0				
Max Q Clear Time (g_c+I1), s	11.6	35.5		11.2	9.7	30.9		5.9				
Green Ext Time (p_c), s	0.2	7.5		0.5	0.4	2.3		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	30.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	0	577	0	0	0	0	1389	409	0	1924	386
Future Volume (veh/h)	152	0	577	0	0	0	0	1389	409	0	1924	386
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	107	0	664				0	1462	431	0	2025	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	297	0	792				0	3787	1149	0	3787	
Arrive On Green	0.17	0.00	0.17				0.00	0.74	0.74	0.00	1.00	0.00
Sat Flow, veh/h	1781	0	4755				0	5274	1549	0	5274	1585
Grp Volume(v), veh/h	107	0	664				0	1462	431	0	2025	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1549	0	1702	1585
Q Serve(g_s), s	6.4	0.0	16.2				0.0	12.4	11.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.4	0.0	16.2				0.0	12.4	11.9	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	297	0	792				0	3787	1149	0	3787	
V/C Ratio(X)	0.36	0.00	0.84				0.00	0.39	0.38	0.00	0.53	
Avail Cap(c_a), veh/h	530	0	1415				0	3787	1149	0	3787	
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	0.00	1.00				0.00	1.00	1.00	0.00	0.78	0.00
Uniform Delay (d), s/veh	44.3	0.0	48.4				0.0	5.6	5.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.9				0.0	0.3	0.9	0.0	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
%ile BackOfQ(50%),veh/ln	2.9	0.0	6.5				0.0	4.0	3.7	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.6	0.0	49.4				0.0	5.9	6.5	0.0	0.4	0.0
LnGrp LOS	D		D					A	A		A	
Approach Vol, veh/h		771						1893			2025	
Approach Delay, s/veh		48.7						6.0			0.4	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	94.7	25.3	94.7
Change Period (Y+Rc), s	5.7	5.3	5.7
Max Green Setting (Gmax), s	73.3	35.7	73.3
Max Q Clear Time (g_c+I1), s	14.4	18.2	2.0
Green Ext Time (p_c), s	34.6	1.8	40.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.6
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	823	1085	1170	371	245	1487
Future Volume (veh/h)	823	1085	1170	371	245	1487
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	866	1142	1232	0	258	1565
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1201	1117	2338		287	3332
Arrive On Green	0.24	0.24	0.61	0.00	0.16	0.65
Sat Flow, veh/h	5023	2790	5274	1585	1781	5274
Grp Volume(v), veh/h	866	1142	1232	0	258	1565
Grp Sat Flow(s),veh/h/ln	1674	1395	1702	1585	1781	1702
Q Serve(g_s), s	19.0	28.7	16.7	0.0	17.0	18.4
Cycle Q Clear(g_c), s	19.0	28.7	16.7	0.0	17.0	18.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1201	1117	2338		287	3332
V/C Ratio(X)	0.72	1.02	0.53		0.90	0.47
Avail Cap(c_a), veh/h	1201	1117	2338		520	3332
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.92	0.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	36.0	16.0	0.0	49.4	10.4
Incr Delay (d2), s/veh	1.9	32.8	0.8	0.0	4.1	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	21.0	5.7	0.0	7.7	6.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	43.8	68.7	16.8	0.0	53.5	10.9
LnGrp LOS	D	F	B		D	B
Approach Vol, veh/h	2008		1232			1823
Approach Delay, s/veh	58.0		16.8			16.9
Approach LOS	E		B			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	23.3	60.7			84.0	36.0
Change Period (Y+Rc), s	4.0	5.7			5.7	7.3
Max Green Setting (Gmax), s	35.6	39.3			78.3	28.7
Max Q Clear Time (g_c+I1), s	19.0	18.7			20.4	30.7
Green Ext Time (p_c), s	0.3	11.3			27.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	33.2
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	424	1494	62	596	1519	68	69	836	320	106	906	562
Future Volume (veh/h)	424	1494	62	596	1519	68	69	836	320	106	906	562
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	446	1573	22	627	1599	49	73	880	103	112	954	347
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	510	1678	521	666	1909	593	185	1166	362	198	1186	368
Arrive On Green	0.15	0.33	0.33	0.19	0.37	0.37	0.05	0.23	0.23	0.06	0.23	0.23
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	446	1573	22	627	1599	49	73	880	103	112	954	347
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	15.1	35.6	1.1	21.3	34.0	2.4	2.4	19.2	6.4	3.8	21.0	25.7
Cycle Q Clear(g_c), s	15.1	35.6	1.1	21.3	34.0	2.4	2.4	19.2	6.4	3.8	21.0	25.7
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	510	1678	521	666	1909	593	185	1166	362	198	1186	368
V/C Ratio(X)	0.87	0.94	0.04	0.94	0.84	0.08	0.40	0.75	0.28	0.57	0.80	0.94
Avail Cap(c_a), veh/h	695	1682	522	666	1909	593	203	1186	368	203	1186	368
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	49.8	38.8	27.3	47.5	34.0	24.1	54.6	42.9	38.0	54.8	43.2	45.0
Incr Delay (d2), s/veh	7.4	10.9	0.1	21.3	4.0	0.2	0.5	4.2	1.6	2.1	4.4	32.8
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	6.8	15.9	0.4	10.9	14.0	0.9	1.0	8.3	2.6	1.7	9.3	13.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.1	49.8	27.3	68.8	38.0	24.3	55.1	47.1	39.6	56.9	47.7	77.8
LnGrp LOS	E	D	C	E	D	C	E	D	D	E	D	E
Approach Vol, veh/h		2041			2275			1056			1413	
Approach Delay, s/veh		51.2			46.2			46.9			55.8	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	33.5	28.0	45.9	11.4	34.0	22.6	51.3
Change Period (Y+Rc), s	5.0	6.3	5.0	6.7	5.0	6.3	5.0	6.7
Max Green Setting (Gmax), s	7.0	27.7	23.0	39.3	7.0	27.7	24.0	38.3
Max Q Clear Time (g_c+I1), s	5.8	21.2	23.3	37.6	4.4	27.7	17.1	36.0
Green Ext Time (p_c), s	0.0	4.9	0.0	1.6	0.0	0.0	0.5	2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	49.8
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	461	1255	11	289	1516	179	37	536	548	275	695	632
Future Volume (veh/h)	461	1255	11	289	1516	179	37	536	548	275	695	632
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	485	1321	5	304	1596	89	39	564	414	289	732	466
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	437	1654	514	364	1523	473	98	1506	468	250	1753	544
Arrive On Green	0.13	0.32	0.32	0.11	0.30	0.30	0.03	0.29	0.29	0.07	0.34	0.34
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	485	1321	5	304	1596	89	39	564	414	289	732	466
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	14.0	26.1	0.2	9.5	33.0	4.6	1.2	9.7	27.6	8.0	12.2	30.3
Cycle Q Clear(g_c), s	14.0	26.1	0.2	9.5	33.0	4.6	1.2	9.7	27.6	8.0	12.2	30.3
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	437	1654	514	364	1523	473	98	1506	468	250	1753	544
V/C Ratio(X)	1.11	0.80	0.01	0.84	1.05	0.19	0.40	0.37	0.89	1.16	0.42	0.86
Avail Cap(c_a), veh/h	437	1654	514	390	1523	473	141	1685	523	250	1846	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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	34.1	25.4	48.5	38.8	28.9	52.8	30.9	37.2	51.3	27.8	33.8
Incr Delay (d2), s/veh	76.1	3.3	0.0	13.8	36.7	0.4	2.6	0.2	15.4	105.8	0.1	11.0
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	10.4	10.7	0.1	4.7	18.2	1.7	0.6	4.0	12.1	7.1	4.9	12.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	124.4	37.4	25.4	62.3	75.5	29.3	55.4	31.1	52.7	157.2	27.9	44.8
LnGrp LOS	F	D	C	E	F	C	E	C	D	F	C	D
Approach Vol, veh/h		1811			1989			1017			1487	
Approach Delay, s/veh		60.6			71.4			40.8			58.3	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	37.6	16.2	43.8	7.6	43.0	19.0	41.0
Change Period (Y+Rc), s	5.0	* 5	4.5	8.0	4.5	5.0	5.0	8.0
Max Green Setting (Gmax), s	8.0	* 37	12.5	35.0	4.5	40.0	14.0	33.0
Max Q Clear Time (g_c+I1), s	10.0	29.6	11.5	28.1	3.2	32.3	16.0	35.0
Green Ext Time (p_c), s	0.0	3.1	0.1	5.6	0.0	2.9	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	60.3
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	1930	163	7	1949	98	212	63	12	161	120	105
Future Volume (veh/h)	12	1930	163	7	1949	98	212	63	12	161	120	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	2032	172	7	2052	103	223	66	13	169	126	111
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	27	2754	852	16	2722	842	260	270	227	202	209	176
Arrive On Green	0.02	0.54	0.54	0.01	0.53	0.53	0.15	0.14	0.14	0.11	0.11	0.11
Sat Flow, veh/h	1781	5106	1579	1781	5106	1579	1781	1870	1575	1781	1870	1572
Grp Volume(v), veh/h	13	2032	172	7	2052	103	223	66	13	169	126	111
Grp Sat Flow(s),veh/h/ln	1781	1702	1579	1781	1702	1579	1781	1870	1575	1781	1870	1572
Q Serve(g_s), s	0.7	28.7	5.3	0.4	29.6	3.1	11.5	3.0	0.7	8.8	6.1	6.4
Cycle Q Clear(g_c), s	0.7	28.7	5.3	0.4	29.6	3.1	11.5	3.0	0.7	8.8	6.1	6.4
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	27	2754	852	16	2722	842	260	270	227	202	209	176
V/C Ratio(X)	0.48	0.74	0.20	0.44	0.75	0.12	0.86	0.24	0.06	0.84	0.60	0.63
Avail Cap(c_a), veh/h	94	2831	875	94	2831	875	510	932	785	245	642	540
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	46.1	16.6	11.2	46.5	17.2	11.0	39.3	35.8	34.8	41.0	39.9	40.0
Incr Delay (d2), s/veh	4.7	1.2	0.2	7.0	1.4	0.1	3.2	1.0	0.2	16.1	3.4	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	0.3	9.9	1.7	0.2	10.3	1.0	5.2	1.4	0.3	4.7	3.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.8	17.8	11.5	53.6	18.6	11.1	42.6	36.8	35.0	57.0	43.3	44.6
LnGrp LOS	D	B	B	D	B	B	D	D	D	E	D	D
Approach Vol, veh/h		2217			2162			302			406	
Approach Delay, s/veh		17.5			18.3			41.0			49.4	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	18.2	4.8	56.6	17.8	15.2	5.4	56.0
Change Period (Y+Rc), s	4.0	* 4.6	4.0	5.7	4.0	4.6	4.0	5.7
Max Green Setting (Gmax), s	13.0	* 47	5.0	52.3	27.0	32.4	5.0	52.3
Max Q Clear Time (g_c+I1), s	10.8	5.0	2.4	30.7	13.5	8.4	2.7	31.6
Green Ext Time (p_c), s	0.1	0.8	0.0	19.5	0.3	1.3	0.0	18.7

Intersection Summary	
HCM 7th Control Delay, s/veh	21.8
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	546	1381	109	276	1053	311	253	1275	251	459	892	1006
Future Volume (veh/h)	546	1381	109	276	1053	311	253	1275	251	459	892	1006
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	575	1454	115	291	1108	156	266	1342	78	483	939	818
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	646	1699	528	355	1269	394	329	1180	366	555	1514	760
Arrive On Green	0.19	0.33	0.33	0.10	0.25	0.25	0.10	0.23	0.23	0.16	0.30	0.30
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1565
Grp Volume(v), veh/h	575	1454	115	291	1108	156	266	1342	78	483	939	818
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1565
Q Serve(g_s), s	19.2	31.4	6.2	9.7	24.6	9.7	8.9	27.3	4.7	16.1	18.7	35.0
Cycle Q Clear(g_c), s	19.2	31.4	6.2	9.7	24.6	9.7	8.9	27.3	4.7	16.1	18.7	35.0
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	646	1699	528	355	1269	394	329	1180	366	555	1514	760
V/C Ratio(X)	0.89	0.86	0.22	0.82	0.87	0.40	0.81	1.14	0.21	0.87	0.62	1.08
Avail Cap(c_a), veh/h	966	1699	528	673	1298	403	585	1180	366	1142	1514	760
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	46.8	36.7	28.3	51.9	42.6	37.0	52.4	45.4	36.7	48.4	35.8	30.6
Incr Delay (d2), s/veh	5.2	4.8	0.4	1.8	7.2	1.3	1.8	72.5	0.5	1.7	1.0	55.0
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	8.4	13.2	2.3	4.2	10.8	3.8	3.8	19.0	1.8	6.9	7.6	31.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.0	41.6	28.7	53.7	49.7	38.2	54.2	117.9	37.2	50.1	36.8	85.5
LnGrp LOS	D	D	C	D	D	D	D	F	D	D	D	F
Approach Vol, veh/h		2144			1555			1686			2240	
Approach Delay, s/veh		43.7			49.3			104.1			57.4	
Approach LOS		D			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.9	33.7	16.1	45.3	15.2	41.4	26.1	35.3
Change Period (Y+Rc), s	4.0	6.4	4.0	6.0	4.0	6.4	4.0	6.0
Max Green Setting (Gmax), s	19.0	27.0	23.0	30.0	20.0	35.0	33.0	30.0
Max Q Clear Time (g_c+I1), s	18.1	29.3	11.7	33.4	10.9	37.0	21.2	26.6
Green Ext Time (p_c), s	0.8	0.0	0.4	0.0	0.3	0.0	0.9	2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	62.2
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	1351	124	50	834	167	232	451	82	264	88	302
Future Volume (veh/h)	222	1351	124	50	834	167	232	451	82	264	88	302
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	234	1422	131	53	878	0	244	475	40	278	93	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	1132	504	68	822		197	384	561	257	86	
Arrive On Green	0.13	0.32	0.32	0.04	0.23	0.00	0.32	0.32	0.32	0.19	0.19	0.00
Sat Flow, veh/h	1781	3554	1583	1781	3554	1585	624	1215	1585	1351	452	1585
Grp Volume(v), veh/h	234	1422	131	53	878	0	719	0	40	371	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1583	1781	1777	1585	1839	0	1585	1803	0	1585
Q Serve(g_s), s	18.8	47.8	9.2	4.4	34.7	0.0	47.4	0.0	2.5	28.5	0.0	0.0
Cycle Q Clear(g_c), s	18.8	47.8	9.2	4.4	34.7	0.0	47.4	0.0	2.5	28.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.34		1.00	0.75		1.00
Lane Grp Cap(c), veh/h	223	1132	504	68	822		581	0	561	343	0	
V/C Ratio(X)	1.05	1.26	0.26	0.78	1.07		1.24	0.00	0.07	1.08	0.00	
Avail Cap(c_a), veh/h	223	1132	504	77	822		581	0	561	343	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	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	65.6	51.1	38.0	71.5	57.6	0.0	51.3	0.0	32.1	60.8	0.0	0.0
Incr Delay (d2), s/veh	73.4	122.6	0.5	30.5	51.2	0.0	121.0	0.0	0.0	72.6	0.0	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	12.9	39.9	3.6	2.6	21.1	0.0	40.9	0.0	1.0	19.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	139.0	173.7	38.5	102.0	108.8	0.0	172.3	0.0	32.1	133.4	0.0	0.0
LnGrp LOS	F	F	D	F	F		F		C	F		
Approach Vol, veh/h		1787			931			759			371	
Approach Delay, s/veh		159.3			108.4			164.9			133.4	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	52.0	9.7	53.8	34.5	22.8	40.7
Change Period (Y+Rc), s	4.6	4.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	47.4	6.5	47.0	28.5	18.8	34.7
Max Q Clear Time (g_c+I1), s	49.4	6.4	49.8	30.5	20.8	36.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	145.6
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	456	946	55	310	84	439	1427	60	66	1090	128
Future Volume (veh/h)	179	456	946	55	310	84	439	1427	60	66	1090	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	480	810	58	326	37	462	1502	20	69	1147	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	1599	713	80	1515	667	444	1613	493	161	1194	
Arrive On Green	0.07	0.45	0.45	0.04	0.43	0.43	0.13	0.32	0.32	0.05	0.23	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1565	3456	5106	1560	3456	5106	1585
Grp Volume(v), veh/h	188	480	810	58	326	37	462	1502	20	69	1147	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1565	1728	1702	1560	1728	1702	1585
Q Serve(g_s), s	7.5	12.0	63.0	4.5	8.1	1.9	18.0	39.9	1.2	2.7	31.1	0.0
Cycle Q Clear(g_c), s	7.5	12.0	63.0	4.5	8.1	1.9	18.0	39.9	1.2	2.7	31.1	0.0
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	237	1599	713	80	1515	667	444	1613	493	161	1194	
V/C Ratio(X)	0.79	0.30	1.14	0.73	0.22	0.06	1.04	0.93	0.04	0.43	0.96	
Avail Cap(c_a), veh/h	321	1599	713	89	1515	667	444	1613	493	173	1194	
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	0.00
Uniform Delay (d), s/veh	64.2	24.5	38.5	66.0	25.4	23.6	61.0	46.4	33.2	64.9	53.0	0.0
Incr Delay (d2), s/veh	6.5	0.2	77.6	18.7	0.2	0.1	53.4	11.1	0.2	0.7	18.2	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	3.5	5.0	39.1	2.5	3.5	0.7	11.0	18.0	0.5	1.2	14.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	70.7	24.7	116.1	84.8	25.5	23.7	114.4	57.6	33.3	65.6	71.2	0.0
LnGrp LOS	E	C	F	F	C	C	F	E	C	E	E	
Approach Vol, veh/h		1478			421			1984			1216	
Approach Delay, s/veh		80.7			33.5			70.6			70.9	
Approach LOS		F			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	50.2	10.3	69.0	22.0	38.7	13.6	65.7
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	7.0	43.0	7.0	63.0	18.0	32.0	13.0	* 58
Max Q Clear Time (g_c+I1), s	4.7	41.9	6.5	65.0	20.0	33.1	9.5	10.1
Green Ext Time (p_c), s	0.0	0.9	0.0	0.0	0.0	0.0	0.1	4.8

Intersection Summary	
HCM 7th Control Delay, s/veh	70.5
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	210	125	58	1355	1290	110
Future Volume (veh/h)	210	125	58	1355	1290	110
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	132	61	1426	1358	116
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	330	294	111	2970	2058	620
Arrive On Green	0.19	0.19	0.06	0.58	0.40	0.40
Sat Flow, veh/h	1781	1585	1781	5274	5274	1539
Grp Volume(v), veh/h	221	132	61	1426	1358	116
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1539
Q Serve(g_s), s	4.5	2.9	1.3	6.3	8.4	1.9
Cycle Q Clear(g_c), s	4.5	2.9	1.3	6.3	8.4	1.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	330	294	111	2970	2058	620
V/C Ratio(X)	0.67	0.45	0.55	0.48	0.66	0.19
Avail Cap(c_a), veh/h	830	739	231	2970	2380	717
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	14.6	14.0	17.6	4.7	9.4	7.4
Incr Delay (d2), s/veh	2.4	1.1	4.2	0.1	0.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.1	0.6	0.8	2.0	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	17.0	15.1	21.8	4.8	9.9	7.6
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	353			1487	1474	
Approach Delay, s/veh	16.3			5.5	9.7	
Approach LOS	B			A	A	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	27.0		11.7	6.9	20.1
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0		18.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	8.3		6.5	3.3	10.4
Green Ext Time (p_c), s	6.2		0.9	0.0	5.1

Intersection Summary	
HCM 7th Control Delay, s/veh	8.5
HCM 7th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	47	50	17	1365	1404	10
Future Volume (veh/h)	47	50	17	1365	1404	10
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	53	18	1437	1478	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	160	142	41	3338	2565	767
Arrive On Green	0.09	0.09	0.02	0.65	0.50	0.50
Sat Flow, veh/h	1781	1585	1781	5274	5274	1526
Grp Volume(v), veh/h	49	53	18	1437	1478	11
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1526
Q Serve(g_s), s	0.9	1.1	0.3	4.8	7.1	0.1
Cycle Q Clear(g_c), s	0.9	1.1	0.3	4.8	7.1	0.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	160	142	41	3338	2565	767
V/C Ratio(X)	0.31	0.37	0.44	0.43	0.58	0.01
Avail Cap(c_a), veh/h	914	813	254	4804	3421	1022
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	14.9	15.0	16.9	2.9	6.1	4.4
Incr Delay (d2), s/veh	1.1	1.6	7.3	0.1	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.0	0.2	0.1	1.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.0	16.6	24.2	3.0	6.3	4.4
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	102			1455	1489	
Approach Delay, s/veh	16.3			3.3	6.3	
Approach LOS	B			A	A	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	27.4		7.6	5.3	22.1
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	33.0		18.0	5.0	23.5
Max Q Clear Time (g_c+I1), s	6.8		3.1	2.3	9.1
Green Ext Time (p_c), s	11.5		0.2	0.0	8.4

Intersection Summary	
HCM 7th Control Delay, s/veh	5.2
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	89	5	77	39	100	5	1580	44	37	601	26
Future Volume (veh/h)	76	89	5	77	39	100	5	1580	44	37	601	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	94	5	81	41	105	5	1663	46	39	633	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	206	174	180	189	160	19	1758	784	103	1927	859
Arrive On Green	0.11	0.11	0.11	0.10	0.10	0.10	0.01	0.49	0.49	0.06	0.54	0.54
Sat Flow, veh/h	1781	1870	1581	1781	1870	1580	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	80	94	5	81	41	105	5	1663	46	39	633	27
Grp Sat Flow(s),veh/h/ln	1781	1870	1581	1781	1870	1580	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.3	3.8	0.2	3.4	1.6	5.1	0.2	35.6	1.2	1.7	7.9	0.6
Cycle Q Clear(g_c), s	3.3	3.8	0.2	3.4	1.6	5.1	0.2	35.6	1.2	1.7	7.9	0.6
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	196	206	174	180	189	160	19	1758	784	103	1927	859
V/C Ratio(X)	0.41	0.46	0.03	0.45	0.22	0.66	0.27	0.95	0.06	0.38	0.33	0.03
Avail Cap(c_a), veh/h	445	467	395	445	467	395	445	1775	792	445	1927	859
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	33.2	33.4	31.8	33.9	33.1	34.7	39.3	19.2	10.5	36.3	10.2	8.5
Incr Delay (d2), s/veh	1.4	1.6	0.1	1.8	0.6	4.6	7.4	11.1	0.0	2.3	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	1.5	1.8	0.1	1.5	0.7	2.1	0.1	14.7	0.4	0.8	2.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.5	34.9	31.9	35.7	33.7	39.2	46.7	30.3	10.6	38.6	10.3	8.6
LnGrp LOS	C	C	C	D	C	D	D	C	B	D	B	A
Approach Vol, veh/h		179			227			1714			699	
Approach Delay, s/veh		34.7			36.9			29.8			11.8	
Approach LOS		C			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.6	45.6		12.8	4.8	49.4		13.0
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	3.7	37.6		5.8	2.2	9.9		7.1
Green Ext Time (p_c), s	0.0	2.0		0.6	0.0	4.3		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	26.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	6	280	77	4	16	213	1486	81	25	854	28
Future Volume (veh/h)	86	6	280	77	4	16	213	1486	81	25	854	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	91	6	169	81	4	17	224	1564	85	26	899	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	305	254	103	286	235	253	1654	735	58	1265	562
Arrive On Green	0.08	0.18	0.18	0.06	0.17	0.17	0.16	0.52	0.52	0.04	0.40	0.40
Sat Flow, veh/h	1603	1683	1403	1603	1683	1383	1603	3198	1422	1603	3198	1421
Grp Volume(v), veh/h	91	6	169	81	4	17	224	1564	85	26	899	29
Grp Sat Flow(s),veh/h/ln	1603	1683	1403	1603	1683	1383	1603	1599	1422	1603	1599	1421
Q Serve(g_s), s	5.3	0.3	10.8	4.8	0.2	1.0	13.1	44.4	2.9	1.5	22.7	1.2
Cycle Q Clear(g_c), s	5.3	0.3	10.8	4.8	0.2	1.0	13.1	44.4	2.9	1.5	22.7	1.2
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	122	305	254	103	286	235	253	1654	735	58	1265	562
V/C Ratio(X)	0.75	0.02	0.66	0.78	0.01	0.07	0.88	0.95	0.12	0.44	0.71	0.05
Avail Cap(c_a), veh/h	133	730	609	267	893	734	300	1664	740	133	1331	592
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	43.5	32.3	36.6	44.3	33.2	33.5	39.6	21.9	11.9	45.3	24.4	17.9
Incr Delay (d2), s/veh	15.9	0.1	9.8	4.8	0.1	0.6	20.6	11.9	0.1	2.0	2.1	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.1	4.4	2.0	0.1	0.4	6.4	17.0	0.9	0.6	8.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.4	32.4	46.4	49.1	33.3	34.1	60.2	33.8	12.0	47.3	26.5	18.0
LnGrp LOS	E	C	D	D	C	C	E	C	B	D	C	B
Approach Vol, veh/h		266			102			1873			954	
Approach Delay, s/veh		50.6			46.0			36.0			26.8	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	55.7	10.2	22.7	19.2	44.0	11.3	21.6
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	4.0	* 5.3
Max Green Setting (Gmax), s	3.5	50.0	16.0	41.7	18.0	40.0	8.0	* 51
Max Q Clear Time (g_c+I1), s	3.5	46.4	6.8	12.8	15.1	24.7	7.3	3.0
Green Ext Time (p_c), s	0.0	3.3	0.1	1.8	0.1	8.0	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	34.8
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	2	260	42	6	11	92	1492	21	11	1191	23
Future Volume (veh/h)	102	2	260	42	6	11	92	1492	21	11	1191	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	107	2	274	44	6	12	97	1571	22	12	1254	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	6	308	120	16	120	127	1762	784	36	1580	702
Arrive On Green	0.20	0.20	0.20	0.08	0.08	0.08	0.07	0.50	0.50	0.02	0.44	0.44
Sat Flow, veh/h	1750	33	1578	1577	215	1569	1781	3554	1580	1781	3554	1580
Grp Volume(v), veh/h	109	0	274	50	0	12	97	1571	22	12	1254	24
Grp Sat Flow(s),veh/h/ln	1783	0	1578	1792	0	1569	1781	1777	1580	1781	1777	1580
Q Serve(g_s), s	4.7	0.0	15.0	2.4	0.0	0.6	4.8	35.5	0.6	0.6	26.9	0.8
Cycle Q Clear(g_c), s	4.7	0.0	15.0	2.4	0.0	0.6	4.8	35.5	0.6	0.6	26.9	0.8
Prop In Lane	0.98		1.00	0.88		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	348	0	308	137	0	120	127	1762	784	36	1580	702
V/C Ratio(X)	0.31	0.00	0.89	0.37	0.00	0.10	0.76	0.89	0.03	0.33	0.79	0.03
Avail Cap(c_a), veh/h	401	0	355	403	0	353	401	1799	800	401	1599	711
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	30.7	0.0	34.9	39.0	0.0	38.2	40.5	20.2	11.5	43.0	21.2	13.9
Incr Delay (d2), s/veh	0.2	0.0	19.7	0.6	0.0	0.1	3.5	6.3	0.0	2.0	3.2	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	2.0	0.0	7.4	1.1	0.0	0.2	2.1	14.1	0.2	0.3	10.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.9	0.0	54.6	39.6	0.0	38.3	44.0	26.5	11.5	45.0	24.3	14.0
LnGrp LOS	C		D	D		D	D	C	B	D	C	B
Approach Vol, veh/h		383			62			1690			1290	
Approach Delay, s/veh		47.8			39.4			27.4			24.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	50.1		22.2	10.4	45.5		10.8
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.0
Max Green Setting (Gmax), s	20.0	45.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	2.6	37.5		17.0	6.8	28.9		4.4
Green Ext Time (p_c), s	0.0	6.6		0.3	0.1	8.2		0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	28.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	248	189	105	1430	1287	153
Future Volume (veh/h)	248	189	105	1430	1287	153
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	199	111	1505	1355	161
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	327	291	169	2339	1776	792
Arrive On Green	0.18	0.18	0.10	0.66	0.50	0.50
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	261	199	111	1505	1355	161
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	8.8	7.4	3.8	15.8	19.5	3.6
Cycle Q Clear(g_c), s	8.8	7.4	3.8	15.8	19.5	3.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	327	291	169	2339	1776	792
V/C Ratio(X)	0.80	0.68	0.66	0.64	0.76	0.20
Avail Cap(c_a), veh/h	1186	1055	508	2339	1915	854
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	24.6	24.1	27.5	6.4	12.8	8.8
Incr Delay (d2), s/veh	1.7	1.1	4.2	0.8	2.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	6.4	1.7	3.4	6.2	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.4	25.1	31.8	7.2	14.9	9.0
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	460			1616	1516	
Approach Delay, s/veh	25.8			8.9	14.3	
Approach LOS	C			A	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	47.5		15.6	10.0	37.5
Change Period (Y+Rc), s	6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s	24.0		42.0	18.0	34.0
Max Q Clear Time (g_c+I1), s	17.8		10.8	5.8	21.5
Green Ext Time (p_c), s	5.4		0.7	0.2	10.1

Intersection Summary	
HCM 7th Control Delay, s/veh	13.3
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	17	120	24	33	26	62	1522	46	32	1340	65
Future Volume (veh/h)	129	17	120	24	33	26	62	1522	46	32	1340	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	18	126	25	35	27	65	1602	48	34	1411	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	206	174	147	154	128	132	1752	764	93	1674	745
Arrive On Green	0.11	0.11	0.11	0.08	0.08	0.08	0.07	0.49	0.49	0.05	0.47	0.47
Sat Flow, veh/h	1781	1870	1581	1781	1870	1557	1781	3554	1549	1781	3554	1582
Grp Volume(v), veh/h	136	18	126	25	35	27	65	1602	48	34	1411	68
Grp Sat Flow(s),veh/h/ln	1781	1870	1581	1781	1870	1557	1781	1777	1549	1781	1777	1582
Q Serve(g_s), s	6.2	0.7	6.5	1.1	1.5	1.4	3.0	35.2	1.4	1.6	29.5	2.0
Cycle Q Clear(g_c), s	6.2	0.7	6.5	1.1	1.5	1.4	3.0	35.2	1.4	1.6	29.5	2.0
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	196	206	174	147	154	128	132	1752	764	93	1674	745
V/C Ratio(X)	0.69	0.09	0.72	0.17	0.23	0.21	0.49	0.91	0.06	0.37	0.84	0.09
Avail Cap(c_a), veh/h	421	442	374	421	442	368	421	1807	788	421	1807	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	36.3	33.8	36.4	36.1	36.3	36.2	37.6	19.8	11.2	38.7	19.6	12.4
Incr Delay (d2), s/veh	4.4	0.2	5.6	0.5	0.7	0.8	2.8	7.5	0.0	2.4	3.6	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	2.9	0.3	2.7	0.5	0.7	0.5	1.3	14.0	0.4	0.7	11.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.6	34.0	42.0	36.6	37.0	37.0	40.4	27.3	11.2	41.1	23.2	12.4
LnGrp LOS	D	C	D	D	D	D	D	C	B	D	C	B
Approach Vol, veh/h		280			87			1715			1513	
Approach Delay, s/veh		40.8			36.9			27.4			23.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	47.7		15.2	10.3	45.8		13.3				
Change Period (Y+Rc), s	4.0	6.0		5.9	4.0	6.0		6.3				
Max Green Setting (Gmax), s	20.0	43.0		20.0	20.0	43.0		20.0				
Max Q Clear Time (g_c+I1), s	3.5	37.2		8.5	5.0	31.5		3.5				
Green Ext Time (p_c), s	0.0	4.5		0.7	0.1	7.1		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	26.9
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	890	682	269	37	4
Future Vol, veh/h	30	890	682	269	37	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	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	33	967	741	292	40	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1034	0	-	0	1920	887
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	1033	-
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	672	-	-	-	74	343
Stage 1	-	-	-	-	402	-
Stage 2	-	-	-	-	343	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	672	-	-	-	70	343
Mov Cap-2 Maneuver	-	-	-	-	197	-
Stage 1	-	-	-	-	383	-
Stage 2	-	-	-	-	343	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.35	0	27.28
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	672	-	-	-	206
HCM Lane V/C Ratio	0.049	-	-	-	0.217
HCM Ctrl Dly (s/v)	10.6	-	-	-	27.3
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	0.8

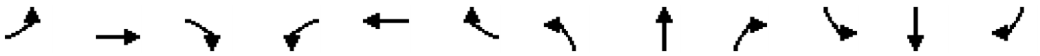
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	893	659	27	37	3
Future Vol, veh/h	3	893	659	27	37	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	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	3	971	716	29	40	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	746	0	-	0	1708	731
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	977	-
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	862	-	-	-	100	422
Stage 1	-	-	-	-	476	-
Stage 2	-	-	-	-	365	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	862	-	-	-	100	422
Mov Cap-2 Maneuver	-	-	-	-	233	-
Stage 1	-	-	-	-	475	-
Stage 2	-	-	-	-	365	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.03	0	23.21
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	862	-	-	-	241
HCM Lane V/C Ratio	0.004	-	-	-	0.181
HCM Ctrl Dly (s/v)	9.2	-	-	-	23.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.6



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	896	498	980	821	510	344	730	530	250	920	110
Future Volume (veh/h)	170	896	498	980	821	510	344	730	530	250	920	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	179	943	524	1032	864	537	362	768	558	263	968	116
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	210	975	301	1005	1859	575	300	976	533	291	952	295
Arrive On Green	0.12	0.19	0.19	0.29	0.36	0.36	0.17	0.19	0.19	0.16	0.19	0.19
Sat Flow, veh/h	1781	5106	1575	3456	5106	1580	1781	5106	2790	1781	5106	1585
Grp Volume(v), veh/h	179	943	524	1032	864	537	362	768	558	263	968	116
Grp Sat Flow(s),veh/h/ln	1781	1702	1575	1728	1702	1580	1781	1702	1395	1781	1702	1585
Q Serve(g_s), s	10.8	20.2	21.0	32.0	14.2	36.0	18.5	15.8	21.0	15.9	20.5	7.1
Cycle Q Clear(g_c), s	10.8	20.2	21.0	32.0	14.2	36.0	18.5	15.8	21.0	15.9	20.5	7.1
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	210	975	301	1005	1859	575	300	976	533	291	952	295
V/C Ratio(X)	0.85	0.97	1.74	1.03	0.46	0.93	1.21	0.79	1.05	0.90	1.02	0.39
Avail Cap(c_a), veh/h	275	975	301	1005	1859	575	300	976	533	300	952	295
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	47.6	44.2	44.5	39.0	26.8	33.7	45.8	42.4	44.5	45.2	44.8	39.3
Incr Delay (d2), s/veh	17.8	21.2	347.7	35.4	0.2	22.5	120.8	4.3	51.8	28.3	33.6	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	5.7	10.1	36.9	17.8	5.5	16.5	18.0	6.8	10.8	9.1	11.2	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.4	65.4	392.2	74.4	27.0	56.2	166.6	46.7	96.3	73.4	78.3	40.1
LnGrp LOS	E	E	F	F	C	E	F	D	F	E	F	D
Approach Vol, veh/h		1646			2433			1688			1347	
Approach Delay, s/veh		169.4			53.5			88.8			74.1	
Approach LOS		F			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	25.5	36.5	25.5	23.0	25.0	17.5	44.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.5	20.5	32.0	21.0	18.5	20.5	17.0	36.0
Max Q Clear Time (g_c+I1), s	17.9	23.0	34.0	23.0	20.5	22.5	12.8	38.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	92.6
HCM 7th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	1338	126	200	1825	260	65	100	120	100	140	90
Future Volume (veh/h)	170	1338	126	200	1825	260	65	100	120	100	140	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	179	1408	133	211	1921	274	68	105	126	105	147	95
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	214	2402	744	177	2296	711	88	268	216	137	320	226
Arrive On Green	0.12	0.47	0.47	0.10	0.45	0.45	0.05	0.14	0.14	0.08	0.17	0.17
Sat Flow, veh/h	1781	5106	1582	1781	5106	1582	1781	1870	1506	1781	1870	1320
Grp Volume(v), veh/h	179	1408	133	211	1921	274	68	105	126	105	147	95
Grp Sat Flow(s),veh/h/ln	1781	1702	1582	1781	1702	1582	1781	1870	1506	1781	1870	1320
Q Serve(g_s), s	8.4	17.3	4.2	8.5	28.4	9.9	3.2	4.4	6.7	5.0	6.1	5.5
Cycle Q Clear(g_c), s	8.4	17.3	4.2	8.5	28.4	9.9	3.2	4.4	6.7	5.0	6.1	5.5
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	214	2402	744	177	2296	711	88	268	216	137	320	226
V/C Ratio(X)	0.84	0.59	0.18	1.19	0.84	0.39	0.77	0.39	0.58	0.77	0.46	0.42
Avail Cap(c_a), veh/h	216	2533	784	177	2419	749	181	426	343	551	814	575
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	36.9	16.6	13.1	38.6	20.8	15.7	40.3	33.3	34.3	38.8	31.9	31.7
Incr Delay (d2), s/veh	23.9	0.3	0.1	129.6	2.6	0.3	13.5	0.9	2.5	8.6	1.0	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	4.9	5.9	1.3	9.8	10.1	3.2	1.7	2.0	2.4	2.4	2.7	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.8	16.9	13.2	168.2	23.4	16.0	53.7	34.2	36.8	47.4	33.0	33.0
LnGrp LOS	E	B	B	F	C	B	D	C	D	D	C	C
Approach Vol, veh/h		1720			2406			299			347	
Approach Delay, s/veh		21.2			35.3			39.7			37.3	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	16.8	13.0	44.8	8.7	19.2	14.8	43.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	26.5	19.5	8.5	42.5	8.7	37.3	10.4	40.6
Max Q Clear Time (g_c+I1), s	7.0	8.7	10.5	19.3	5.2	8.1	10.4	30.4
Green Ext Time (p_c), s	0.2	0.7	0.0	10.8	0.0	1.2	0.0	8.1

Intersection Summary	
HCM 7th Control Delay, s/veh	30.6
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	1051	69	660	1741	350	126	980	460	90	1180	228
Future Volume (veh/h)	277	1051	69	660	1741	350	126	980	460	90	1180	228
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	292	1106	-30	695	1833	259	133	1032	157	95	1242	140
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	1565	486	502	1835	570	182	1191	531	202	1211	540
Arrive On Green	0.09	0.31	0.00	0.15	0.36	0.36	0.05	0.34	0.34	0.06	0.34	0.34
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1584	3456	3554	1584
Grp Volume(v), veh/h	292	1106	-30	695	1833	259	133	1032	157	95	1242	140
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1584	1728	1777	1584
Q Serve(g_s), s	12.8	29.0	0.0	22.0	54.3	14.9	5.7	41.2	11.1	4.0	51.6	9.7
Cycle Q Clear(g_c), s	12.8	29.0	0.0	22.0	54.3	14.9	5.7	41.2	11.1	4.0	51.6	9.7
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	297	1565	486	502	1835	570	182	1191	531	202	1211	540
V/C Ratio(X)	0.98	0.71	-0.06	1.38	1.00	0.45	0.73	0.87	0.30	0.47	1.03	0.26
Avail Cap(c_a), veh/h	297	1565	486	502	1835	570	183	1191	531	205	1211	540
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.1	46.5	0.0	64.7	48.5	22.9	70.6	47.1	37.1	69.0	49.9	36.1
Incr Delay (d2), s/veh	47.5	1.7	0.0	184.8	20.7	0.8	12.2	7.4	0.6	0.6	32.5	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	7.5	12.3	0.0	22.3	25.6	5.5	2.8	19.0	4.3	1.8	27.7	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	116.6	48.2	0.0	249.5	69.2	23.7	82.9	54.5	37.7	69.6	82.4	36.6
LnGrp LOS	F	D		F	E	C	F	D	D	E	F	D
Approach Vol, veh/h		1368			2787			1322			1477	
Approach Delay, s/veh		63.9			109.9			55.4			77.2	
Approach LOS		E			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	56.7	27.0	52.8	14.0	57.6	19.4	60.4
Change Period (Y+Rc), s	6.0	6.0	5.0	6.4	6.0	6.0	6.4	* 6
Max Green Setting (Gmax), s	9.0	50.6	22.0	45.0	8.0	51.6	13.0	* 54
Max Q Clear Time (g_c+I1), s	16.0	43.2	24.0	31.0	7.7	53.6	14.8	56.3
Green Ext Time (p_c), s	0.0	5.5	0.0	8.4	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	83.5
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	2041	50	40	3291	360	30	20	50	370	40	170
Future Volume (veh/h)	70	2041	50	40	3291	360	30	20	50	370	40	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.98	1.00		1.00	0.88		0.83
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	2148	17	42	3464	297	32	21	-58	302	164	173
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	2768	819	69	2640	800	1	1	1	481	230	242
Arrive On Green	0.06	0.54	0.54	0.05	0.69	0.69	0.00	0.00	0.00	0.31	0.31	0.31
Sat Flow, veh/h	1781	5106	1512	1781	5106	1548	1781	1870	1585	1568	750	791
Grp Volume(v), veh/h	74	2148	17	42	3464	297	32	21	-58	302	0	337
Grp Sat Flow(s),veh/h/ln	1781	1702	1512	1781	1702	1548	1781	1870	1585	1568	0	1540
Q Serve(g_s), s	6.1	49.9	0.8	3.5	77.6	12.1	0.1	0.1	0.0	24.8	0.0	29.1
Cycle Q Clear(g_c), s	6.1	49.9	0.8	3.5	77.6	12.1	0.1	0.1	0.0	24.8	0.0	29.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	113	2768	819	69	2640	800	1	1	1	481	0	472
V/C Ratio(X)	0.65	0.78	0.02	0.61	1.31	0.37	26.94	16.84	-54.88	0.63	0.00	0.71
Avail Cap(c_a), veh/h	119	2768	819	89	2640	800	214	224	190	491	0	483
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	0.09	0.09	0.09	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	68.6	27.1	15.9	70.1	23.4	13.2	75.0	75.0	0.0	44.7	0.0	46.2
Incr Delay (d2), s/veh	5.9	1.5	0.0	0.3	140.7	0.1	1180	0.0	7249.2	0.0	1.8	0.0	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	2.9	19.6	0.3	1.6	57.7	3.7	3.9	2.6	0.0	9.9	0.0	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.5	28.6	15.9	70.4	164.1	13.3	1187	5.0	7324.2	0.0	46.5	0.0	50.3
LnGrp LOS	E	C	B	E	F	B	F	F		D		D
Approach Vol, veh/h		2239			3803			-5			639	
Approach Delay, s/veh		30.1			151.3			0.0			48.5	
Approach LOS		C			F			A			D	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	2.1	9.8	87.3		50.9	13.5	83.6
Change Period (Y+Rc), s	4.6	4.0	6.0		4.9	4.0	6.0
Max Green Setting (Gmax), s	18.0	7.5	58.0		47.0	10.0	55.5
Max Q Clear Time (g_c+I1), s	2.1	5.5	51.9		31.1	8.1	79.6
Green Ext Time (p_c), s	0.1	0.0	6.0		1.9	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	100.9
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	2034	185	660	3009	330	451	530	290	430	940	50
Future Volume (veh/h)	210	2034	185	660	3009	330	451	530	290	430	940	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	2141	-37	695	3167	195	475	558	205	453	989	-11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	2132	525	675	2332	721	369	703	308	498	836	373
Arrive On Green	0.14	0.66	0.00	0.13	0.31	0.31	0.11	0.20	0.20	0.14	0.24	0.00
Sat Flow, veh/h	3456	6434	1585	3456	5106	1578	3456	3554	1559	3456	3554	1585
Grp Volume(v), veh/h	221	2141	-37	695	3167	195	475	558	205	453	989	-11
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1578	1728	1777	1559	1728	1777	1585
Q Serve(g_s), s	9.5	49.7	0.0	29.3	68.5	14.0	16.0	22.4	18.2	19.4	35.3	0.0
Cycle Q Clear(g_c), s	9.5	49.7	0.0	29.3	68.5	14.0	16.0	22.4	18.2	19.4	35.3	0.0
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	242	2132	525	675	2332	721	369	703	308	498	836	373
V/C Ratio(X)	0.91	1.00	-0.07	1.03	1.36	0.27	1.29	0.79	0.66	0.91	1.18	-0.03
Avail Cap(c_a), veh/h	242	2132	525	675	2332	721	369	703	308	541	836	373
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.54	0.54	0.00	0.29	0.29	0.29	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	64.1	25.3	0.0	65.2	52.1	33.1	67.0	57.2	55.6	63.2	57.4	0.0
Incr Delay (d2), s/veh	22.6	15.4	0.0	26.7	162.0	0.3	148.9	6.5	5.8	17.8	94.3	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	4.6	13.2	0.0	15.6	64.7	5.7	14.6	10.5	7.5	9.7	26.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	86.7	40.7	0.0	91.9	214.1	33.4	215.9	63.7	61.4	81.0	151.7	0.0
LnGrp LOS	F	F		F	F	C	F	E	E	F	F	
Approach Vol, veh/h		2325			4057			1238			1431	
Approach Delay, s/veh		45.7			184.5			121.7			130.5	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.6	35.4	33.3	55.7	20.0	41.0	14.5	74.5
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	23.5	27.8	29.3	49.7	16.0	35.3	10.5	68.5
Max Q Clear Time (g_c+I1), s	21.4	24.4	31.3	51.7	18.0	37.3	11.5	70.5
Green Ext Time (p_c), s	0.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	131.7
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	2404	340	180	3869	50	50	20	20	60	20	20
Future Volume (veh/h)	20	2404	340	180	3869	50	50	20	20	60	20	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	2531	358	189	4073	53	51	24	21	63	21	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	4330	1052	173	4477	1079	256	135	114	141	68	68
Arrive On Green	0.04	0.90	0.90	0.07	0.93	0.93	0.07	0.07	0.07	0.08	0.08	0.08
Sat Flow, veh/h	1781	6434	1563	3456	6434	1551	3563	1870	1585	1781	858	858
Grp Volume(v), veh/h	21	2531	358	189	4073	53	51	24	21	63	0	42
Grp Sat Flow(s),veh/h/ln	1781	1609	1563	1728	1609	1551	1781	1870	1585	1781	0	1716
Q Serve(g_s), s	1.7	13.0	5.2	7.5	44.8	0.4	2.0	1.8	1.9	5.1	0.0	3.5
Cycle Q Clear(g_c), s	1.7	13.0	5.2	7.5	44.8	0.4	2.0	1.8	1.9	5.1	0.0	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	48	4330	1052	173	4477	1079	256	135	114	141	0	136
V/C Ratio(X)	0.43	0.58	0.34	1.09	0.91	0.05	0.20	0.18	0.18	0.45	0.00	0.31
Avail Cap(c_a), veh/h	89	4330	1052	173	4477	1079	1330	698	592	220	0	212
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.22	0.22	0.22	0.21	0.21	0.21	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	71.2	3.3	2.8	70.0	3.4	1.7	65.5	65.4	65.5	66.0	0.0	65.2
Incr Delay (d2), s/veh	0.5	0.1	0.2	60.1	0.8	0.0	0.1	0.2	0.3	0.8	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	0.8	2.4	1.3	4.7	3.0	0.1	0.9	0.9	0.8	2.3	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	71.7	3.4	3.0	130.1	4.2	1.7	65.7	65.7	65.7	66.8	0.0	65.7
LnGrp LOS	E	A	A	F	A	A	E	E	E	E		E
Approach Vol, veh/h		2910			4315			96			105	
Approach Delay, s/veh		3.8			9.7			65.7			66.3	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	15.7	11.5	107.0	15.8	8.1	110.4
Change Period (Y+Rc), s	4.9	4.0	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	56.0	7.5	49.1	18.5	7.5	49.1
Max Q Clear Time (g_c+I1), s	4.0	9.5	15.0	7.1	3.7	46.8
Green Ext Time (p_c), s	0.2	0.0	33.2	0.1	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	8.9
HCM 7th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	2394	5	5	3909	260	5	5	5	140	5	40
Future Volume (veh/h)	50	2394	5	5	3909	260	5	5	5	140	5	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	2520	5	5	4115	274	5	5	5	147	0	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	5052	1218	138	4537	1118	32	33	28	179	0	318
Arrive On Green	0.11	1.00	1.00	0.71	0.71	0.71	0.02	0.02	0.02	0.10	0.00	0.10
Sat Flow, veh/h	1781	6434	1551	128	6434	1585	1781	1870	1571	1781	0	3161
Grp Volume(v), veh/h	53	2520	5	5	4115	274	5	5	5	147	0	45
Grp Sat Flow(s),veh/h/ln	1781	1609	1551	128	1609	1585	1781	1870	1571	1781	0	1580
Q Serve(g_s), s	4.2	0.0	0.0	1.8	78.5	9.2	0.4	0.4	0.5	12.1	0.0	1.9
Cycle Q Clear(g_c), s	4.2	0.0	0.0	1.8	78.5	9.2	0.4	0.4	0.5	12.1	0.0	1.9
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	95	5052	1218	138	4537	1118	32	33	28	179	0	318
V/C Ratio(X)	0.56	0.50	0.00	0.04	0.91	0.25	0.16	0.15	0.18	0.82	0.00	0.14
Avail Cap(c_a), veh/h	113	5052	1218	138	4537	1118	214	224	188	545	0	967
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.72	0.72	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	65.3	0.0	0.0	6.8	18.1	7.9	72.6	72.6	72.6	66.1	0.0	61.6
Incr Delay (d2), s/veh	1.4	0.3	0.0	0.5	3.6	0.5	2.3	2.1	3.0	3.6	0.0	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	1.9	0.1	0.0	0.1	26.0	3.1	0.2	0.2	0.2	5.7	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.7	0.3	0.0	7.3	21.7	8.4	74.9	74.6	75.6	69.7	0.0	61.6
LnGrp LOS	E	A	A	A	C	A	E	E	E	E		E
Approach Vol, veh/h		2578			4394			15			192	
Approach Delay, s/veh		1.6			20.8			75.1			67.8	
Approach LOS		A			C			E			E	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	7.2	123.8	19.1	12.0	111.8
Change Period (Y+Rc), s	4.5	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	18.0	48.6	45.9	9.5	58.1
Max Q Clear Time (g_c+I1), s	2.5	2.0	14.1	6.2	80.5
Green Ext Time (p_c), s	0.0	42.8	0.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	15.3
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	2319	195	450	3138	480	601	860	560	730	880	250
Future Volume (veh/h)	110	2319	195	450	3138	480	601	860	560	730	880	250
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	2441	64	474	3303	157	633	905	0	768	926	210
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	229	2285	555	323	2460	598	415	965		507	1523	473
Arrive On Green	0.07	0.36	0.36	0.09	0.38	0.38	0.12	0.27	0.00	0.15	0.30	0.30
Sat Flow, veh/h	3456	6434	1564	3456	6434	1565	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	116	2441	64	474	3303	157	633	905	0	768	926	210
Grp Sat Flow(s),veh/h/ln	1728	1609	1564	1728	1609	1565	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	4.9	53.3	4.1	14.0	57.3	10.3	18.0	37.3	0.0	22.0	23.3	16.1
Cycle Q Clear(g_c), s	4.9	53.3	4.1	14.0	57.3	10.3	18.0	37.3	0.0	22.0	23.3	16.1
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	229	2285	555	323	2460	598	415	965		507	1523	473
V/C Ratio(X)	0.51	1.07	0.12	1.47	1.34	0.26	1.53	0.94		1.52	0.61	0.44
Avail Cap(c_a), veh/h	242	2285	555	323	2460	598	415	978		507	1566	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	0.81	0.81	0.81	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.7	48.4	32.5	68.0	46.3	31.8	66.0	53.4	0.0	64.0	45.1	42.6
Incr Delay (d2), s/veh	0.6	40.2	0.4	224.6	156.6	0.9	248.9	16.2	0.0	241.9	1.5	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	2.1	27.0	1.6	16.1	48.8	4.0	22.1	18.4	0.0	26.6	10.0	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.3	88.6	32.9	292.6	202.9	32.7	314.9	69.6	0.0	305.9	46.6	44.9
LnGrp LOS	E	F	C	F	F	C	F	E		F	D	D
Approach Vol, veh/h		2621			3934			1538			1904	
Approach Delay, s/veh		86.3			206.9			170.6			151.0	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	46.7	18.0	59.3	22.0	50.7	13.9	63.3
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	22.0	41.3	14.0	52.7	18.0	* 46	10.5	56.2
Max Q Clear Time (g_c+I1), s	24.0	39.3	16.0	55.3	20.0	25.3	6.9	59.3
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	13.9	0.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	159.1
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2969	260	510	1588	260	550	0	1210	190	560	520
Future Volume (veh/h)	0	2969	260	510	1588	260	550	0	1210	190	560	520
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	3125	274	537	1672	0	579	0	1274	200	589	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	0	2	2	2	2
Cap, veh/h	0	3627	893	369	3559		0	0	0	397	792	
Arrive On Green	0.00	0.56	0.56	0.11	0.70	0.00	0.00	0.00	0.00	0.22	0.22	0.00
Sat Flow, veh/h	0	6696	1584	3456	5106	1585		0		1781	3554	1585
Grp Volume(v), veh/h	0	3125	274	537	1672	0		0.0		200	589	0
Grp Sat Flow(s),veh/h/ln	0	1609	1584	1728	1702	1585				1781	1777	1585
Q Serve(g_s), s	0.0	61.8	13.7	16.0	22.1	0.0				14.7	23.2	0.0
Cycle Q Clear(g_c), s	0.0	61.8	13.7	16.0	22.1	0.0				14.7	23.2	0.0
Prop In Lane	0.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3627	893	369	3559					397	792	
V/C Ratio(X)	0.00	0.86	0.31	1.46	0.47					0.50	0.74	
Avail Cap(c_a), veh/h	0	3627	893	369	3559					546	1090	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.39	0.39	1.00	1.00	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	27.8	17.3	67.0	10.2	0.0				51.0	54.3	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.3	220.1	0.4	0.0				1.9	3.0	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
%ile BackOfQ(50%),veh/ln	0.0	23.5	5.2	18.2	7.7	0.0				6.9	10.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	28.9	17.6	287.1	10.7	0.0				52.9	57.3	0.0
LnGrp LOS		C	B	F	B					D	E	
Approach Vol, veh/h		3399			2209						789	
Approach Delay, s/veh		28.0			77.9						56.2	
Approach LOS		C			E						E	

Timer - Assigned Phs		3	4		6	8						
Phs Duration (G+Y+Rc), s		20.0	90.6		39.4	110.6						
Change Period (Y+Rc), s		4.0	6.0		6.0	6.0						
Max Green Setting (Gmax), s		16.0	48.0		46.0	68.0						
Max Q Clear Time (g_c+I1), s		18.0	63.8		25.2	24.1						
Green Ext Time (p_c), s		0.0	0.0		8.0	31.7						

Intersection Summary	
HCM 7th Control Delay, s/veh	48.7
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	330	430	80	450	90	640	527	120	90	1168	5
Future Volume (veh/h)	5	330	430	80	450	90	640	527	120	90	1168	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	347	148	84	474	57	674	555	81	95	1229	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	483	214	124	706	314	749	1937	864	174	1346	600
Arrive On Green	0.01	0.14	0.14	0.07	0.20	0.20	0.22	0.55	0.55	0.05	0.38	0.38
Sat Flow, veh/h	1781	3554	1578	1781	3554	1580	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	5	347	148	84	474	57	674	555	81	95	1229	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1578	1781	1777	1580	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.3	8.4	8.1	4.2	11.1	2.7	17.1	7.6	2.2	2.4	29.7	0.2
Cycle Q Clear(g_c), s	0.3	8.4	8.1	4.2	11.1	2.7	17.1	7.6	2.2	2.4	29.7	0.2
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	12	483	214	124	706	314	749	1937	864	174	1346	600
V/C Ratio(X)	0.43	0.72	0.69	0.68	0.67	0.18	0.90	0.29	0.09	0.55	0.91	0.01
Avail Cap(c_a), veh/h	99	708	314	355	1220	542	784	1937	864	264	1397	623
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	44.7	37.4	37.2	41.0	33.5	30.1	34.4	11.1	9.8	41.9	26.6	17.5
Incr Delay (d2), s/veh	23.2	2.0	3.9	6.3	1.1	0.3	13.1	0.1	0.0	2.7	9.2	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	0.2	3.6	3.2	2.0	4.7	1.0	8.1	2.6	0.7	1.1	13.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.9	39.4	41.2	47.4	34.6	30.3	47.5	11.2	9.9	44.6	35.9	17.5
LnGrp LOS	E	D	D	D	C	C	D	B	A	D	D	B
Approach Vol, veh/h		500			615			1310			1329	
Approach Delay, s/veh		40.2			35.9			29.8			36.4	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	53.7	10.8	16.8	24.1	38.7	5.1	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.9	49.1	18.0	18.0	20.5	35.5	5.0	31.0
Max Q Clear Time (g_c+I1), s	4.4	9.6	6.2	10.4	19.1	31.7	2.3	13.1
Green Ext Time (p_c), s	0.0	4.0	0.1	1.5	0.4	2.5	0.0	2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	34.5
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	360	40	60	520	569	20	900	80	591	1300	100
Future Volume (veh/h)	80	360	40	60	520	569	20	900	80	591	1300	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	379	42	63	547	336	21	947	84	622	1368	105
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	310	825	361	279	793	353	57	1246	368	725	2212	665
Arrive On Green	0.09	0.23	0.23	0.08	0.22	0.22	0.03	0.24	0.24	0.21	0.43	0.43
Sat Flow, veh/h	3456	3554	1556	3456	3554	1581	1781	5106	1509	3456	5106	1535
Grp Volume(v), veh/h	84	379	42	63	547	336	21	947	84	622	1368	105
Grp Sat Flow(s),veh/h/ln	1728	1777	1556	1728	1777	1581	1781	1702	1509	1728	1702	1535
Q Serve(g_s), s	2.0	8.0	1.9	1.5	12.3	18.3	1.0	15.0	3.9	15.2	18.1	3.6
Cycle Q Clear(g_c), s	2.0	8.0	1.9	1.5	12.3	18.3	1.0	15.0	3.9	15.2	18.1	3.6
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	310	825	361	279	793	353	57	1246	368	725	2212	665
V/C Ratio(X)	0.27	0.46	0.12	0.23	0.69	0.95	0.37	0.76	0.23	0.86	0.62	0.16
Avail Cap(c_a), veh/h	823	825	361	823	793	353	530	1246	368	1780	2297	691
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	37.1	28.8	26.5	37.6	31.2	33.5	41.4	30.7	26.4	33.3	19.2	15.1
Incr Delay (d2), s/veh	0.2	1.0	0.4	0.2	3.5	36.3	1.5	3.4	0.8	1.2	1.3	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	0.8	3.3	0.7	0.6	5.3	10.1	0.4	6.1	1.4	6.1	6.8	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.3	29.8	26.8	37.8	34.7	69.7	42.9	34.1	27.2	34.5	20.5	15.6
LnGrp LOS	D	C	C	D	C	E	D	C	C	C	C	B
Approach Vol, veh/h		505			946			1052			2095	
Approach Delay, s/veh		30.8			47.3			33.7			24.4	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.3	27.0	11.0	26.0	6.8	43.6	11.8	25.2
Change Period (Y+Rc), s	5.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	45.6	19.3	20.8	19.5	26.0	39.3	20.8	19.5
Max Q Clear Time (g_c+I1), s	17.3	17.0	3.5	10.0	3.0	20.1	4.0	20.3
Green Ext Time (p_c), s	1.2	1.8	0.1	2.9	0.0	17.2	0.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	31.9
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	999	30	230	808	370	30	140	170	40	220	70
Future Volume (veh/h)	40	999	30	230	808	370	30	140	170	40	220	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	1052	32	242	851	389	32	147	97	42	232	74
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	1244	549	272	1032	469	40	183	190	43	237	75
Arrive On Green	0.07	0.35	0.35	0.15	0.44	0.44	0.12	0.12	0.12	0.20	0.20	0.20
Sat Flow, veh/h	1781	3554	1569	1781	2368	1076	331	1522	1585	216	1194	381
Grp Volume(v), veh/h	42	1052	32	242	637	603	179	0	97	348	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1569	1781	1777	1666	1854	0	1585	1791	0	0
Q Serve(g_s), s	2.4	29.0	1.4	14.1	33.5	33.9	10.0	0.0	6.1	20.5	0.0	0.0
Cycle Q Clear(g_c), s	2.4	29.0	1.4	14.1	33.5	33.9	10.0	0.0	6.1	20.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.65	0.18		1.00	0.12		0.21
Lane Grp Cap(c), veh/h	119	1244	549	272	774	726	223	0	190	355	0	0
V/C Ratio(X)	0.35	0.85	0.06	0.89	0.82	0.83	0.80	0.00	0.51	0.98	0.00	0.00
Avail Cap(c_a), veh/h	319	1334	589	302	774	726	563	0	481	355	0	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	47.3	31.8	22.9	44.0	26.3	26.4	45.4	0.0	43.7	42.3	0.0	0.0
Incr Delay (d2), s/veh	0.7	5.4	0.1	23.1	7.7	8.6	2.6	0.0	0.8	42.4	0.0	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	1.1	13.1	0.5	7.9	15.3	14.7	4.7	0.0	2.4	13.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.9	37.2	22.9	67.1	34.0	35.0	48.0	0.0	44.5	84.7	0.0	0.0
LnGrp LOS	D	D	C	E	C	C	D		D	F		
Approach Vol, veh/h		1126			1482			276			348	
Approach Delay, s/veh		37.2			39.8			46.8			84.7	
Approach LOS		D			D			D			F	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	18.0	20.2	42.8		25.0	11.1	51.9
Change Period (Y+Rc), s	5.3	4.0	5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s	32.2	18.0	39.8		21.0	19.0	38.8
Max Q Clear Time (g_c+I1), s	12.0	16.1	31.0		22.5	4.4	35.9
Green Ext Time (p_c), s	0.8	0.1	6.1		0.0	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	44.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	680	538	1150	965	170	763	1147	870	150	1391	200
Future Volume (veh/h)	120	680	538	1150	965	170	763	1147	870	150	1391	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	126	716	311	1211	1016	99	803	1207	504	158	1464	116
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	1271	560	917	1971	879	558	1767	542	186	1218	378
Arrive On Green	0.07	0.36	0.36	0.27	0.55	0.55	0.16	0.35	0.35	0.05	0.24	0.24
Sat Flow, veh/h	3456	3554	1565	3456	3554	1585	3456	5106	1565	3456	5106	1585
Grp Volume(v), veh/h	126	716	311	1211	1016	99	803	1207	504	158	1464	116
Grp Sat Flow(s),veh/h/ln	1728	1777	1565	1728	1777	1585	1728	1702	1565	1728	1702	1585
Q Serve(g_s), s	4.6	21.1	20.7	34.5	23.2	3.9	21.0	26.3	40.4	5.9	31.0	7.8
Cycle Q Clear(g_c), s	4.6	21.1	20.7	34.5	23.2	3.9	21.0	26.3	40.4	5.9	31.0	7.8
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	237	1271	560	917	1971	879	558	1767	542	186	1218	378
V/C Ratio(X)	0.53	0.56	0.56	1.32	0.52	0.11	1.44	0.68	0.93	0.85	1.20	0.31
Avail Cap(c_a), veh/h	385	1271	560	917	1971	879	558	1767	542	186	1218	378
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)	0.45	0.45	0.45	1.00	1.00	1.00	0.49	0.49	0.49	0.30	0.30	0.30
Uniform Delay (d), s/veh	58.5	33.6	33.5	47.8	18.1	13.7	54.5	36.4	41.0	61.0	49.5	40.7
Incr Delay (d2), s/veh	0.3	0.8	1.8	151.9	1.0	0.3	202.4	0.6	13.7	10.3	93.6	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	2.0	8.9	7.9	33.7	9.2	1.4	24.6	10.7	17.0	2.8	23.3	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.8	34.4	35.2	199.6	19.0	14.0	256.9	37.0	54.7	71.2	143.1	40.9
LnGrp LOS	E	C	D	F	B	B	F	D	D	E	F	D
Approach Vol, veh/h		1153			2326			2514			1738	
Approach Delay, s/veh		37.3			112.8			110.8			129.8	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	51.4	38.5	53.0	25.0	37.4	12.9	78.6
Change Period (Y+Rc), s	4.0	6.4	4.0	* 6	4.0	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	7.0	44.6	34.5	* 24	21.0	* 31	14.5	43.5
Max Q Clear Time (g_c+I1), s	7.9	42.4	36.5	23.1	23.0	33.0	6.6	25.2
Green Ext Time (p_c), s	0.0	2.0	0.0	0.5	0.0	0.0	0.1	9.3

Intersection Summary	
HCM 7th Control Delay, s/veh	104.7
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	1380	200	340	1855	540	250	560	320	270	1070	280
Future Volume (veh/h)	250	1380	200	340	1855	540	250	560	320	270	1070	280
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	263	1453	0	358	1953	0	263	589	0	284	1126	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	1585		1120	3014		288	917		266	1201	
Arrive On Green	0.06	0.31	0.00	0.32	0.59	0.00	0.08	0.26	0.00	0.15	0.34	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	263	1453	0	358	1953	0	263	589	0	284	1126	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	7.0	32.9	0.0	9.4	30.4	0.0	9.1	17.7	0.0	17.9	36.8	0.0
Cycle Q Clear(g_c), s	7.0	32.9	0.0	9.4	30.4	0.0	9.1	17.7	0.0	17.9	36.8	0.0
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	202	1585		1120	3014		288	917		266	1201	
V/C Ratio(X)	1.30	0.92		0.32	0.65		0.91	0.64		1.07	0.94	
Avail Cap(c_a), veh/h	202	1600		1120	3014		288	1036		266	1214	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.5	39.9	0.0	30.6	16.3	0.0	54.6	39.6	0.0	51.0	38.5	0.0
Incr Delay (d2), s/veh	168.3	9.9	0.0	0.1	0.6	0.0	30.9	1.6	0.0	74.5	13.7	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	7.7	14.6	0.0	3.8	10.8	0.0	5.1	7.8	0.0	13.3	17.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	224.8	49.8	0.0	30.6	16.9	0.0	85.5	41.2	0.0	125.5	52.2	0.0
LnGrp LOS	F	D		C	B		F	D		F	D	
Approach Vol, veh/h		1716			2311			852			1410	
Approach Delay, s/veh		76.6			19.0			54.9			67.0	
Approach LOS		E			B			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.6	36.6	44.9	42.9	14.0	46.3	11.0	76.9
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	16.6	* 35	12.0	* 38	10.0	41.0	7.0	42.6
Max Q Clear Time (g_c+I1), s	19.9	19.7	11.4	34.9	11.1	38.8	9.0	32.4
Green Ext Time (p_c), s	0.0	5.0	0.1	2.3	0.0	1.7	0.0	9.2

Intersection Summary	
HCM 7th Control Delay, s/veh	50.4
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1870	100	240	2445	170	120
Future Volume (veh/h)	1870	100	240	2445	170	120
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1968	105	253	2574	179	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3442	183	178	4189	205	182
Arrive On Green	0.69	0.69	0.10	0.82	0.12	0.12
Sat Flow, veh/h	5131	264	1781	5274	1781	1585
Grp Volume(v), veh/h	1348	725	253	2574	179	126
Grp Sat Flow(s),veh/h/ln	1702	1823	1781	1702	1781	1585
Q Serve(g_s), s	30.1	30.4	15.0	27.4	14.8	11.5
Cycle Q Clear(g_c), s	30.1	30.4	15.0	27.4	14.8	11.5
Prop In Lane		0.14	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2361	1264	178	4189	205	182
V/C Ratio(X)	0.57	0.57	1.42	0.61	0.87	0.69
Avail Cap(c_a), veh/h	2361	1264	178	4189	428	380
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	11.7	11.7	67.5	4.9	65.3	63.8
Incr Delay (d2), s/veh	1.0	1.9	218.7	0.7	4.5	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	11.8	17.5	7.1	7.0	4.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	12.7	13.6	286.2	5.6	69.8	65.6
LnGrp LOS	B	B	F	A	E	E
Approach Vol, veh/h	2073			2827	305	
Approach Delay, s/veh	13.0			30.7	68.1	
Approach LOS	B			C	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	21.3	19.0	109.7		128.7
Change Period (Y+Rc), s	4.0	4.0	5.7		5.7
Max Green Setting (Gmax), s	36.0	15.0	85.3		104.3
Max Q Clear Time (g_c+I1), s	16.8	17.0	32.4		29.4
Green Ext Time (p_c), s	0.4	0.0	38.7		64.5

Intersection Summary	
HCM 7th Control Delay, s/veh	25.8
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	1500	210	820	1685	140	320	420	710	240	1510	450
Future Volume (veh/h)	280	1500	210	820	1685	140	320	420	710	240	1510	450
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	295	1579	0	863	1774	0	337	442	0	253	1589	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	349	1666		924	2101		286	1005		191	1642	
Arrive On Green	0.10	0.33	0.00	0.18	0.41	0.00	0.08	0.28	0.00	0.06	0.26	0.00
Sat Flow, veh/h	3456	5106	1585	5023	5106	1585	3456	3554	1585	3456	6434	1585
Grp Volume(v), veh/h	295	1579	0	863	1774	0	337	442	0	253	1589	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1674	1702	1585	1728	1777	1585	1728	1609	1585
Q Serve(g_s), s	12.2	43.7	0.0	24.5	45.4	0.0	12.0	14.8	0.0	8.0	35.4	0.0
Cycle Q Clear(g_c), s	12.2	43.7	0.0	24.5	45.4	0.0	12.0	14.8	0.0	8.0	35.4	0.0
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	349	1666		924	2101		286	1005		191	1642	
V/C Ratio(X)	0.85	0.95		0.93	0.84		1.18	0.44		1.33	0.97	
Avail Cap(c_a), veh/h	817	1666		935	2101		286	1005		191	1642	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	64.1	47.6	0.0	58.3	38.5	0.0	66.5	42.6	0.0	68.5	53.4	0.0
Incr Delay (d2), s/veh	2.2	12.7	0.0	15.5	4.4	0.0	110.5	0.4	0.0	178.7	15.3	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	5.4	19.9	0.0	11.5	19.1	0.0	9.6	6.5	0.0	8.2	15.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.2	60.3	0.0	73.8	42.9	0.0	177.0	43.0	0.0	247.2	68.7	0.0
LnGrp LOS	E	E		E	D		F	D		F	E	
Approach Vol, veh/h		1874			2637			779			1842	
Approach Delay, s/veh		61.3			53.0			101.0			93.2	
Approach LOS		E			D			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	47.0	32.7	53.3	16.0	43.0	20.3	65.7
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	5.7	6.0
Max Green Setting (Gmax), s	8.0	41.0	27.0	* 47	12.0	37.0	34.3	40.0
Max Q Clear Time (g_c+I1), s	10.0	16.8	26.5	45.7	14.0	37.4	14.2	47.4
Green Ext Time (p_c), s	0.0	4.0	0.1	1.4	0.0	0.0	0.5	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	70.8
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1670	230	460	2135	70	280	510	320	170	1310	240
Future Volume (veh/h)	200	1670	230	460	2135	70	280	510	320	170	1310	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	211	1758	133	484	2247	0	295	537	0	179	1379	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	1678	512	1432	3613		230	1262		225	1208	533
Arrive On Green	0.05	0.33	0.33	0.41	0.71	0.00	0.07	0.36	0.00	0.06	0.34	0.34
Sat Flow, veh/h	3456	5106	1558	3456	5106	1585	3456	3554	1585	3456	3554	1568
Grp Volume(v), veh/h	211	1758	133	484	2247	0	295	537	0	179	1379	109
Grp Sat Flow(s),veh/h/ln	1728	1702	1558	1728	1702	1585	1728	1777	1585	1728	1777	1568
Q Serve(g_s), s	7.0	49.3	9.4	14.3	34.5	0.0	10.0	17.2	0.0	7.7	51.0	9.5
Cycle Q Clear(g_c), s	7.0	49.3	9.4	14.3	34.5	0.0	10.0	17.2	0.0	7.7	51.0	9.5
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	161	1678	512	1432	3613		230	1262		225	1208	533
V/C Ratio(X)	1.31	1.05	0.26	0.34	0.62		1.28	0.43		0.80	1.14	0.20
Avail Cap(c_a), veh/h	161	1678	512	1432	3613		230	1262		299	1208	533
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.5	50.3	37.0	29.9	11.5	0.0	70.0	36.8	0.0	69.2	49.5	58.5
Incr Delay (d2), s/veh	176.1	35.6	1.2	0.1	0.8	0.0	155.2	0.6	0.0	7.6	73.9	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	7.0	25.9	3.7	5.9	11.8	0.0	9.3	7.5	0.0	3.6	34.3	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	247.6	86.0	38.2	30.0	12.3	0.0	225.2	37.3	0.0	76.7	123.4	59.4
LnGrp LOS	F	F	D	C	B		F	D		E	F	E
Approach Vol, veh/h		2102			2731			832			1667	
Approach Delay, s/veh		99.2			15.4			103.9			114.2	
Approach LOS		F			B			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	59.0	68.4	55.0	15.7	57.0	11.0	112.4
Change Period (Y+Rc), s	4.0	5.7	6.0	5.7	5.7	* 6	4.0	6.0
Max Green Setting (Gmax), s	13.0	48.3	18.0	49.3	10.0	* 51	7.0	62.0
Max Q Clear Time (g_c+I1), s	9.7	19.2	16.3	51.3	12.0	53.0	9.0	36.5
Green Ext Time (p_c), s	0.1	7.2	0.2	0.0	0.0	0.0	0.0	22.0

Intersection Summary	
HCM 7th Control Delay, s/veh	71.9
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	2080	20	90	2325	100	350	80	30	70	30	20
Future Volume (veh/h)	20	2080	20	90	2325	100	350	80	30	70	30	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	2189	0	95	2447	0	368	84	0	74	32	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	2833		231	3415		238	239		93	87	
Arrive On Green	0.03	0.55	0.00	0.13	0.67	0.00	0.13	0.13	0.00	0.05	0.05	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	21	2189	0	95	2447	0	368	84	0	74	32	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.7	50.1	0.0	7.4	45.7	0.0	20.0	6.2	0.0	6.2	2.5	0.0
Cycle Q Clear(g_c), s	1.7	50.1	0.0	7.4	45.7	0.0	20.0	6.2	0.0	6.2	2.5	0.0
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	48	2833		231	3415		238	239		93	87	
V/C Ratio(X)	0.43	0.77		0.41	0.72		1.55	0.35		0.79	0.37	
Avail Cap(c_a), veh/h	297	3033		231	3415		238	239		238	176	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	71.8	26.0	0.0	60.0	15.8	0.0	65.0	59.7	0.0	70.3	69.4	0.0
Incr Delay (d2), s/veh	2.3	2.1	0.0	0.4	1.3	0.0	267.0	0.7	0.0	5.7	2.7	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	0.8	19.7	0.0	3.3	16.5	0.0	26.7	3.0	0.0	3.0	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.1	28.1	0.0	60.4	17.1	0.0	332.0	60.4	0.0	75.9	72.0	0.0
LnGrp LOS	E	C		E	B		F	E		E	E	
Approach Vol, veh/h		2210			2542			452			106	
Approach Delay, s/veh		28.6			18.7			281.6			74.8	
Approach LOS		C			B			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	24.1	25.2	88.9	24.0	11.9	8.1	106.0
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	20.0	* 15	8.2	* 89	20.0	14.1	25.0	72.3
Max Q Clear Time (g_c+I1), s	8.2	8.2	9.4	52.1	22.0	4.5	3.7	47.7
Green Ext Time (p_c), s	0.1	0.1	0.0	31.1	0.0	0.0	0.0	22.9

Intersection Summary	
HCM 7th Control Delay, s/veh	46.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	960	30	1114	1170	820	40	1305	784	730	1521	280
Future Volume (veh/h)	390	960	30	1114	1170	820	40	1305	784	730	1521	280
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	411	1011	0	1173	1232	0	42	1374	0	768	1601	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	460	1204		1005	1580		156	1162		572	1813	
Arrive On Green	0.13	0.24	0.00	0.20	0.31	0.00	0.05	0.23	0.00	0.17	0.35	0.00
Sat Flow, veh/h	3456	5106	1585	5023	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	411	1011	0	1173	1232	0	42	1374	0	768	1601	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1674	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	17.0	27.4	0.0	29.0	31.8	0.0	1.7	33.0	0.0	24.0	42.7	0.0
Cycle Q Clear(g_c), s	17.0	27.4	0.0	29.0	31.8	0.0	1.7	33.0	0.0	24.0	42.7	0.0
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	460	1204		1005	1580		156	1162		572	1813	
V/C Ratio(X)	0.89	0.84		1.17	0.78		0.27	1.18		1.34	0.88	
Avail Cap(c_a), veh/h	548	1303		1005	1580		191	1162		572	1813	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.26	0.26	0.00
Uniform Delay (d), s/veh	61.8	52.8	0.0	58.0	45.6	0.0	66.9	56.0	0.0	60.5	43.9	0.0
Incr Delay (d2), s/veh	13.7	5.1	0.0	86.3	3.9	0.0	0.3	91.1	0.0	157.4	1.6	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	8.2	12.0	0.0	20.0	13.7	0.0	0.7	23.6	0.0	22.8	17.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	75.5	57.9	0.0	144.3	49.4	0.0	67.3	147.1	0.0	217.9	45.6	0.0
LnGrp LOS	E	E		F	D		E	F		F	D	
Approach Vol, veh/h		1422			2405			1416			2369	
Approach Delay, s/veh		63.0			95.7			144.7			101.4	
Approach LOS		E			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.0	39.0	34.0	40.2	10.5	57.5	23.3	50.9
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	4.0	* 6	4.0	* 6
Max Green Setting (Gmax), s	24.0	33.0	29.0	37.0	8.0	* 50	23.0	* 44
Max Q Clear Time (g_c+I1), s	26.0	35.0	31.0	29.4	3.7	44.7	19.0	33.8
Green Ext Time (p_c), s	0.0	0.0	0.0	4.6	0.0	4.9	0.3	7.3

Intersection Summary	
HCM 7th Control Delay, s/veh	100.5
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	630	5	360	150	30	360	370	1945	20	180	2011	280
Future Volume (veh/h)	630	5	360	150	30	360	370	1945	20	180	2011	280
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	663	5	271	158	32	341	389	2047	21	189	2117	255
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	645	349	294	530	287	242	442	2680	27	434	2115	656
Arrive On Green	0.19	0.19	0.19	0.15	0.15	0.15	0.13	0.41	0.41	0.13	0.41	0.41
Sat Flow, veh/h	3456	1870	1577	3456	1870	1576	3456	6615	68	3456	5106	1583
Grp Volume(v), veh/h	663	5	271	158	32	341	389	1493	575	189	2117	255
Grp Sat Flow(s),veh/h/ln	1728	1870	1577	1728	1870	1576	1728	1609	1857	1728	1702	1583
Q Serve(g_s), s	28.0	0.3	25.3	6.1	2.2	23.0	16.6	40.0	40.0	7.6	62.1	16.9
Cycle Q Clear(g_c), s	28.0	0.3	25.3	6.1	2.2	23.0	16.6	40.0	40.0	7.6	62.1	16.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	645	349	294	530	287	242	442	1955	752	434	2115	656
V/C Ratio(X)	1.03	0.01	0.92	0.30	0.11	1.41	0.88	0.76	0.76	0.44	1.00	0.39
Avail Cap(c_a), veh/h	645	349	294	530	287	242	645	2004	771	434	2115	656
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	0.26	0.26	0.26	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	49.7	59.9	56.3	54.7	63.5	64.3	38.4	38.4	60.7	43.9	30.7
Incr Delay (d2), s/veh	42.7	0.0	31.9	0.1	0.1	207.9	2.0	0.8	2.0	0.3	19.8	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	16.1	0.2	12.7	2.7	1.1	23.2	7.5	15.9	18.6	3.3	29.0	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	103.7	49.8	91.8	56.5	54.8	271.4	66.3	39.2	40.4	60.9	63.7	32.4
LnGrp LOS	F	D	F	E	D	F	E	D	D	E	F	C
Approach Vol, veh/h		939			531			2457			2561	
Approach Delay, s/veh		100.0			194.4			43.8			60.4	
Approach LOS		F			F			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	24.5	66.5		32.0	23.2	67.8		27.0
Change Period (Y+Rc), s	5.7	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	17.3	62.3		28.0	28.0	53.3		23.0
Max Q Clear Time (g_c+I1), s	19.6	42.0		30.0	18.6	64.1		25.0
Green Ext Time (p_c), s	0.2	18.8		0.0	0.6	0.0		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	70.8
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	0	580	0	0	0	0	1935	1060	0	2091	580
Future Volume (veh/h)	140	0	580	0	0	0	0	1935	1060	0	2091	580
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	98	0	664				0	2037	1116	0	2201	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	288	0	769				0	3812	1157	0	3812	
Arrive On Green	0.16	0.00	0.16				0.00	0.75	0.75	0.00	1.00	0.00
Sat Flow, veh/h	1781	0	4755				0	5274	1549	0	5274	1585
Grp Volume(v), veh/h	98	0	664				0	2037	1116	0	2201	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1549	0	1702	1585
Q Serve(g_s), s	5.9	0.0	16.3				0.0	20.2	78.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.9	0.0	16.3				0.0	20.2	78.3	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	288	0	769				0	3812	1157	0	3812	
V/C Ratio(X)	0.34	0.00	0.86				0.00	0.53	0.96	0.00	0.58	
Avail Cap(c_a), veh/h	352	0	939				0	3812	1157	0	3812	
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	0.00	1.00				0.00	1.00	1.00	0.00	0.73	0.00
Uniform Delay (d), s/veh	44.6	0.0	49.0				0.0	6.4	13.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	6.2				0.0	0.5	19.2	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
%ile BackOfQ(50%),veh/ln	2.6	0.0	6.9				0.0	6.5	28.4	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.9	0.0	55.2				0.0	7.0	33.0	0.0	0.5	0.0
LnGrp LOS	D		E					A	C		A	
Approach Vol, veh/h		762						3153			2201	
Approach Delay, s/veh		53.9						16.2			0.5	
Approach LOS		D						B			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	95.3	24.7	95.3
Change Period (Y+Rc), s	5.7	5.3	5.7
Max Green Setting (Gmax), s	85.3	23.7	85.3
Max Q Clear Time (g_c+I1), s	80.3	18.3	2.0
Green Ext Time (p_c), s	4.9	1.1	50.2

Intersection Summary	
HCM 7th Control Delay, s/veh	15.2
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	800	1210	1585	560	250	1871
Future Volume (veh/h)	800	1210	1585	560	250	1871
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	842	1274	1668	0	263	1969
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1662	1380	1857		292	2864
Arrive On Green	0.33	0.33	0.36	0.00	0.16	0.56
Sat Flow, veh/h	5023	2790	5274	1585	1781	5274
Grp Volume(v), veh/h	842	1274	1668	0	263	1969
Grp Sat Flow(s),veh/h/ln	1674	1395	1702	1585	1781	1702
Q Serve(g_s), s	16.2	39.7	37.0	0.0	17.4	33.1
Cycle Q Clear(g_c), s	16.2	39.7	37.0	0.0	17.4	33.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1662	1380	1857		292	2864
V/C Ratio(X)	0.51	0.92	0.90		0.90	0.69
Avail Cap(c_a), veh/h	1662	1380	1857		475	2864
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.83	0.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	28.2	36.1	0.0	49.2	18.8
Incr Delay (d2), s/veh	0.1	10.4	6.3	0.0	8.5	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	18.3	16.2	0.0	8.2	12.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	32.4	38.6	42.3	0.0	57.7	20.2
LnGrp LOS	C	D	D		E	C
Approach Vol, veh/h	2116		1668			2232
Approach Delay, s/veh	36.1		42.3			24.6
Approach LOS	D		D			C

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	23.7	49.3			73.0	47.0
Change Period (Y+Rc), s	4.0	5.7			5.7	7.3
Max Green Setting (Gmax), s	32.0	31.3			67.3	39.7
Max Q Clear Time (g_c+I1), s	19.4	39.0			35.1	41.7
Green Ext Time (p_c), s	0.3	0.0			24.9	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	33.6
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	610	1490	110	340	1680	98	110	1068	350	89	1139	610
Future Volume (veh/h)	610	1490	110	340	1680	98	110	1068	350	89	1139	610
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	642	1568	57	358	1768	45	116	1124	141	94	1199	415
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	585	1923	597	409	1663	516	183	1408	437	180	1403	435
Arrive On Green	0.17	0.38	0.38	0.12	0.33	0.33	0.05	0.28	0.28	0.05	0.27	0.27
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	642	1568	57	358	1768	45	116	1124	141	94	1199	415
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	22.0	35.9	3.0	13.2	42.3	2.6	4.3	26.6	9.2	3.4	28.9	33.4
Cycle Q Clear(g_c), s	22.0	35.9	3.0	13.2	42.3	2.6	4.3	26.6	9.2	3.4	28.9	33.4
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	585	1923	597	409	1663	516	183	1408	437	180	1403	435
V/C Ratio(X)	1.10	0.82	0.10	0.87	1.06	0.09	0.63	0.80	0.32	0.52	0.85	0.95
Avail Cap(c_a), veh/h	585	1923	597	452	1663	516	186	1408	437	186	1404	436
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	53.9	36.4	26.2	56.3	43.8	30.4	60.2	43.7	37.4	60.0	44.6	46.3
Incr Delay (d2), s/veh	66.4	3.4	0.2	15.0	41.0	0.2	5.0	4.5	1.6	1.0	5.6	31.6
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	14.7	14.9	1.1	6.5	23.4	1.0	2.0	11.4	3.7	1.5	12.9	16.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	120.3	39.8	26.4	71.3	84.8	30.6	65.3	48.2	39.0	60.9	50.3	77.8
LnGrp LOS	F	D	C	E	F	C	E	D	D	E	D	E
Approach Vol, veh/h		2267			2171			1381			1708	
Approach Delay, s/veh		62.2			81.4			48.7			57.6	
Approach LOS		E			F			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	42.1	20.4	55.6	11.9	42.0	27.0	49.0
Change Period (Y+Rc), s	5.0	6.3	5.0	6.7	5.0	6.3	5.0	6.7
Max Green Setting (Gmax), s	7.0	35.7	17.0	47.3	7.0	35.7	22.0	42.3
Max Q Clear Time (g_c+I1), s	5.4	28.6	15.2	37.9	6.3	35.4	24.0	44.3
Green Ext Time (p_c), s	0.0	6.1	0.1	8.4	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	64.2
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	530	1059	40	560	1198	260	30	680	300	230	670	460
Future Volume (veh/h)	530	1059	40	560	1198	260	30	680	300	230	670	460
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	558	1115	16	589	1261	172	32	716	83	242	705	163
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	629	1575	489	666	1605	498	92	1040	323	242	1288	400
Arrive On Green	0.18	0.31	0.31	0.19	0.31	0.31	0.03	0.20	0.20	0.07	0.25	0.25
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	558	1115	16	589	1261	172	32	716	83	242	705	163
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	15.7	19.3	0.7	16.6	22.5	8.3	0.9	13.0	4.4	7.0	12.0	8.6
Cycle Q Clear(g_c), s	15.7	19.3	0.7	16.6	22.5	8.3	0.9	13.0	4.4	7.0	12.0	8.6
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	629	1575	489	666	1605	498	92	1040	323	242	1288	400
V/C Ratio(X)	0.89	0.71	0.03	0.88	0.79	0.35	0.35	0.69	0.26	1.00	0.55	0.41
Avail Cap(c_a), veh/h	726	1686	523	743	1686	523	259	1865	579	242	1839	571
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	39.9	30.6	24.2	39.3	31.2	26.4	47.8	36.9	33.4	46.5	32.4	31.2
Incr Delay (d2), s/veh	10.7	1.7	0.1	11.4	2.9	0.9	2.3	0.8	0.4	57.8	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	7.7	0.3	7.7	9.1	3.1	0.4	5.4	1.7	4.9	4.9	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.6	32.3	24.2	50.6	34.1	27.2	50.1	37.7	33.9	104.3	32.6	31.4
LnGrp LOS	D	C	C	D	C	C	D	D	C	F	C	C
Approach Vol, veh/h		1689			2022			831			1110	
Approach Delay, s/veh		38.3			38.3			37.8			48.0	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	25.4	23.8	38.8	7.1	30.2	23.2	39.4
Change Period (Y+Rc), s	5.0	* 5	4.5	8.0	4.5	5.0	5.0	8.0
Max Green Setting (Gmax), s	7.0	* 37	21.5	33.0	7.5	36.0	21.0	33.0
Max Q Clear Time (g_c+I1), s	9.0	15.0	18.6	21.3	2.9	14.0	17.7	24.5
Green Ext Time (p_c), s	0.0	5.4	0.7	8.0	0.0	3.7	0.4	6.9

Intersection Summary	
HCM 7th Control Delay, s/veh	40.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1439	230	20	1898	150	170	100	20	70	70	20
Future Volume (veh/h)	60	1439	230	20	1898	150	170	100	20	70	70	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	1515	242	21	1998	158	179	105	21	74	74	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	2637	815	42	2516	778	219	334	281	95	204	171
Arrive On Green	0.05	0.52	0.52	0.02	0.49	0.49	0.12	0.18	0.18	0.05	0.11	0.11
Sat Flow, veh/h	1781	5106	1579	1781	5106	1579	1781	1870	1577	1781	1870	1572
Grp Volume(v), veh/h	63	1515	242	21	1998	158	179	105	21	74	74	21
Grp Sat Flow(s),veh/h/ln	1781	1702	1579	1781	1702	1579	1781	1870	1577	1781	1870	1572
Q Serve(g_s), s	2.8	16.3	7.0	0.9	26.1	4.5	7.8	3.9	0.9	3.3	2.9	1.0
Cycle Q Clear(g_c), s	2.8	16.3	7.0	0.9	26.1	4.5	7.8	3.9	0.9	3.3	2.9	1.0
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	84	2637	815	42	2516	778	219	334	281	95	204	171
V/C Ratio(X)	0.75	0.57	0.30	0.51	0.79	0.20	0.82	0.31	0.07	0.78	0.36	0.12
Avail Cap(c_a), veh/h	111	2637	815	111	2570	794	423	1098	926	111	757	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	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	37.7	13.3	11.1	38.6	16.9	11.5	34.3	28.6	27.4	37.4	33.1	32.2
Incr Delay (d2), s/veh	11.9	0.5	0.4	3.5	2.0	0.2	2.9	1.1	0.2	21.2	1.3	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	1.4	5.3	2.1	0.4	8.9	1.4	3.5	1.8	0.3	2.0	1.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.6	13.8	11.4	42.2	18.9	11.7	37.2	29.8	27.6	58.7	34.4	32.6
LnGrp LOS	D	B	B	D	B	B	D	C	C	E	C	C
Approach Vol, veh/h		1820			2177			305			169	
Approach Delay, s/veh		14.7			18.6			34.0			44.8	
Approach LOS		B			B			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	18.9	5.9	47.1	13.8	13.3	7.8	45.2
Change Period (Y+Rc), s	4.0	* 4.6	4.0	5.7	4.0	4.6	4.0	5.7
Max Green Setting (Gmax), s	5.6	* 47	5.0	40.3	19.0	32.4	5.0	40.3
Max Q Clear Time (g_c+I1), s	5.3	5.9	2.9	18.3	9.8	4.9	4.8	28.1
Green Ext Time (p_c), s	0.0	1.3	0.0	17.2	0.2	0.5	0.0	11.3

Intersection Summary	
HCM 7th Control Delay, s/veh	19.1
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	700	1104	314	350	1374	300	174	940	570	380	1450	700
Future Volume (veh/h)	700	1104	314	350	1374	300	174	940	570	380	1450	700
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	737	1162	331	368	1446	145	183	989	414	400	1526	496
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	786	1656	514	422	1119	347	236	1386	430	460	1717	887
Arrive On Green	0.23	0.32	0.32	0.12	0.22	0.22	0.07	0.27	0.27	0.13	0.34	0.34
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1565
Grp Volume(v), veh/h	737	1162	331	368	1446	145	183	989	414	400	1526	496
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1565
Q Serve(g_s), s	28.7	27.3	24.4	14.3	30.0	10.8	7.1	24.0	35.3	15.5	38.7	27.7
Cycle Q Clear(g_c), s	28.7	27.3	24.4	14.3	30.0	10.8	7.1	24.0	35.3	15.5	38.7	27.7
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	786	1656	514	422	1119	347	236	1386	430	460	1717	887
V/C Ratio(X)	0.94	0.70	0.64	0.87	1.29	0.42	0.78	0.71	0.96	0.87	0.89	0.56
Avail Cap(c_a), veh/h	833	1656	514	580	1119	347	505	1386	430	984	1738	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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.9	40.5	39.5	59.0	53.5	46.0	62.8	45.1	49.2	58.2	43.0	19.1
Incr Delay (d2), s/veh	16.9	1.6	3.6	8.2	138.5	1.6	2.1	2.0	33.9	2.0	6.3	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	13.9	11.4	9.8	6.6	26.8	4.3	3.1	10.1	17.6	6.8	16.7	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.8	42.1	43.1	67.3	192.0	47.5	64.9	47.1	83.1	60.2	49.3	20.1
LnGrp LOS	E	D	D	E	F	D	E	D	F	E	D	C
Approach Vol, veh/h		2230			1959			1586			2422	
Approach Delay, s/veh		51.1			157.9			58.5			45.1	
Approach LOS		D			F			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	43.6	20.7	50.4	13.3	52.4	35.2	36.0
Change Period (Y+Rc), s	4.0	6.4	4.0	6.0	4.0	6.4	4.0	6.0
Max Green Setting (Gmax), s	39.6	27.6	23.0	40.0	20.0	46.6	33.0	30.0
Max Q Clear Time (g_c+I1), s	17.5	37.3	16.3	29.3	9.1	40.7	30.7	32.0
Green Ext Time (p_c), s	0.7	0.0	0.4	8.3	0.2	5.3	0.5	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	76.3
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	1064	90	50	1284	220	190	60	50	200	490	60
Future Volume (veh/h)	350	1064	90	50	1284	220	190	60	50	200	490	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	368	1120	95	53	1352	0	200	63	7	211	516	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	1339	596	68	991		218	69	313	153	374	
Arrive On Green	0.14	0.38	0.38	0.04	0.28	0.00	0.16	0.16	0.16	0.29	0.29	0.00
Sat Flow, veh/h	1781	3554	1583	1781	3554	1585	1370	432	1585	535	1309	1585
Grp Volume(v), veh/h	368	1120	95	53	1352	0	263	0	7	727	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1583	1781	1777	1585	1802	0	1585	1844	0	1585
Q Serve(g_s), s	20.0	42.2	5.8	4.3	41.0	0.0	21.1	0.0	0.5	42.0	0.0	0.0
Cycle Q Clear(g_c), s	20.0	42.2	5.8	4.3	41.0	0.0	21.1	0.0	0.5	42.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.76		1.00	0.29		1.00
Lane Grp Cap(c), veh/h	242	1339	596	68	991		287	0	313	527	0	
V/C Ratio(X)	1.52	0.84	0.16	0.78	1.36		0.92	0.00	0.02	1.38	0.00	
Avail Cap(c_a), veh/h	242	1339	596	87	991		324	0	345	527	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	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	63.5	41.7	30.4	70.1	53.0	0.0	60.8	0.0	47.6	52.5	0.0	0.0
Incr Delay (d2), s/veh	253.4	5.2	0.2	21.4	170.4	0.0	26.5	0.0	0.0	182.7	0.0	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	25.9	18.9	2.3	2.4	41.2	0.0	11.6	0.0	0.2	46.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	316.9	46.9	30.6	91.5	223.4	0.0	87.3	0.0	47.6	235.3	0.0	0.0
LnGrp LOS	F	D	C	F	F		F		D	F		
Approach Vol, veh/h		1583			1405			270			727	
Approach Delay, s/veh		108.7			218.4			86.3			235.3	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	28.0	9.6	61.4	48.0	24.0	47.0
Change Period (Y+Rc), s	4.6	4.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	26.4	7.2	53.8	42.0	20.0	41.0
Max Q Clear Time (g_c+I1), s	23.1	6.3	44.2	44.0	22.0	43.0
Green Ext Time (p_c), s	0.3	0.0	7.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	169.0
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	414	460	70	554	110	680	1330	70	150	2070	230
Future Volume (veh/h)	230	414	460	70	554	110	680	1330	70	150	2070	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	242	436	298	74	583	65	716	1400	31	158	2179	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	832	371	83	738	325	553	2691	823	203	2174	
Arrive On Green	0.07	0.23	0.23	0.05	0.21	0.21	0.16	0.53	0.53	0.06	0.43	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1564	3456	5106	1562	3456	5106	1585
Grp Volume(v), veh/h	242	436	298	74	583	65	716	1400	31	158	2179	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1564	1728	1702	1562	1728	1702	1585
Q Serve(g_s), s	10.5	16.1	26.6	6.2	23.3	5.2	24.0	26.8	1.4	6.8	63.9	0.0
Cycle Q Clear(g_c), s	10.5	16.1	26.6	6.2	23.3	5.2	24.0	26.8	1.4	6.8	63.9	0.0
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	253	832	371	83	738	325	553	2691	823	203	2174	
V/C Ratio(X)	0.95	0.52	0.80	0.89	0.79	0.20	1.29	0.52	0.04	0.78	1.00	
Avail Cap(c_a), veh/h	253	1019	454	83	941	414	553	2691	823	276	2174	
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	0.00
Uniform Delay (d), s/veh	69.3	50.1	54.2	71.1	56.3	49.1	63.0	23.1	17.1	69.6	43.1	0.0
Incr Delay (d2), s/veh	43.7	0.9	10.0	62.1	5.2	0.6	145.7	0.7	0.1	6.2	19.8	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	6.1	7.1	11.6	4.3	11.0	2.1	21.5	10.6	0.5	3.1	29.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	113.0	51.0	64.2	133.2	61.5	49.8	208.7	23.8	17.2	75.8	62.9	0.0
LnGrp LOS	F	D	E	F	E	D	F	C	B	E	F	
Approach Vol, veh/h		976			722			2147			2337	
Approach Delay, s/veh		70.4			67.8			85.4			63.8	
Approach LOS		E			E			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	85.0	11.0	41.1	28.0	69.9	15.0	37.1
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	12.0	68.0	7.0	43.0	24.0	56.0	11.0	* 40
Max Q Clear Time (g_c+I1), s	8.8	28.8	8.2	28.6	26.0	65.9	12.5	25.3
Green Ext Time (p_c), s	0.1	14.7	0.0	5.1	0.0	0.0	0.0	5.8

Intersection Summary	
HCM 7th Control Delay, s/veh	72.8
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	85	50	100	1349	2011	196
Future Volume (veh/h)	85	50	100	1349	2011	196
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	53	105	1420	2117	206
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	151	135	135	3771	2932	886
Arrive On Green	0.08	0.08	0.08	0.74	0.57	0.57
Sat Flow, veh/h	1781	1585	1781	5274	5274	1544
Grp Volume(v), veh/h	89	53	105	1420	2117	206
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1544
Q Serve(g_s), s	2.5	1.6	3.0	5.1	15.4	3.3
Cycle Q Clear(g_c), s	2.5	1.6	3.0	5.1	15.4	3.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	151	135	135	3771	2932	886
V/C Ratio(X)	0.59	0.39	0.78	0.38	0.72	0.23
Avail Cap(c_a), veh/h	629	560	227	4308	3206	969
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	22.5	22.1	23.1	2.4	7.9	5.3
Incr Delay (d2), s/veh	3.6	1.9	9.2	0.1	0.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.5	1.4	0.3	3.4	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.1	23.9	32.3	2.5	8.6	5.5
LnGrp LOS	C	C	C	A	A	A
Approach Vol, veh/h	142			1525	2323	
Approach Delay, s/veh	25.3			4.5	8.4	
Approach LOS	C			A	A	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	42.1		8.8	8.4	33.8
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	43.0		18.0	6.5	32.0
Max Q Clear Time (g_c+I1), s	7.1		4.5	5.0	17.4
Green Ext Time (p_c), s	12.8		0.3	0.0	11.9

Intersection Summary	
HCM 7th Control Delay, s/veh	7.5
HCM 7th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	20	40	1429	2001	60
Future Volume (veh/h)	20	20	40	1429	2001	60
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	21	42	1504	2106	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	82	73	82	3805	3037	910
Arrive On Green	0.05	0.05	0.05	0.75	0.59	0.59
Sat Flow, veh/h	1781	1585	1781	5274	5274	1530
Grp Volume(v), veh/h	21	21	42	1504	2106	63
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1530
Q Serve(g_s), s	0.5	0.6	1.0	4.6	12.2	0.7
Cycle Q Clear(g_c), s	0.5	0.6	1.0	4.6	12.2	0.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	82	73	82	3805	3037	910
V/C Ratio(X)	0.26	0.29	0.51	0.40	0.69	0.07
Avail Cap(c_a), veh/h	745	663	207	4506	3379	1013
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	19.8	19.9	20.1	2.0	6.0	3.7
Incr Delay (d2), s/veh	1.6	2.2	4.9	0.1	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.5	0.5	0.0	2.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.5	22.0	25.0	2.0	6.6	3.7
LnGrp LOS	C	C	C	A	A	A
Approach Vol, veh/h	42			1546	2169	
Approach Delay, s/veh	21.8			2.7	6.5	
Approach LOS	C			A	A	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	36.6		6.5	6.5	30.1
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	38.0		18.0	5.0	28.5
Max Q Clear Time (g_c+I1), s	6.6		2.6	3.0	14.2
Green Ext Time (p_c), s	13.2		0.1	0.0	11.4

Intersection Summary	
HCM 7th Control Delay, s/veh	5.1
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	30	5	40	60	130	5	1185	60	220	1821	120
Future Volume (veh/h)	50	30	5	40	60	130	5	1185	60	220	1821	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	32	5	42	63	137	5	1247	63	232	1917	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	175	148	206	217	183	19	1469	655	274	1979	883
Arrive On Green	0.09	0.09	0.09	0.12	0.12	0.12	0.01	0.41	0.41	0.15	0.56	0.56
Sat Flow, veh/h	1781	1870	1581	1781	1870	1581	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	53	32	5	42	63	137	5	1247	63	232	1917	126
Grp Sat Flow(s),veh/h/ln	1781	1870	1581	1781	1870	1581	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.4	1.3	0.2	1.8	2.6	7.1	0.2	26.8	2.1	10.7	43.9	3.2
Cycle Q Clear(g_c), s	2.4	1.3	0.2	1.8	2.6	7.1	0.2	26.8	2.1	10.7	43.9	3.2
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	167	175	148	206	217	183	19	1469	655	274	1979	883
V/C Ratio(X)	0.32	0.18	0.03	0.20	0.29	0.75	0.27	0.85	0.10	0.85	0.97	0.14
Avail Cap(c_a), veh/h	421	442	373	421	442	373	421	1679	749	421	1979	883
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	35.9	35.4	34.9	33.9	34.2	36.2	41.6	22.4	15.2	34.8	18.0	9.0
Incr Delay (d2), s/veh	1.1	0.5	0.1	0.5	0.7	6.0	7.4	3.9	0.1	9.4	13.6	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	1.1	0.6	0.1	0.8	1.2	3.0	0.1	10.6	0.7	5.1	18.1	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.9	35.9	35.0	34.4	35.0	42.2	49.0	26.3	15.2	44.3	31.6	9.1
LnGrp LOS	D	D	C	C	C	D	D	C	B	D	C	A
Approach Vol, veh/h		90			242			1315			2275	
Approach Delay, s/veh		36.5			39.0			25.9			31.7	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	41.0		11.9	4.9	53.2		14.7				
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9				
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0				
Max Q Clear Time (g_c+I1), s	12.7	28.8		4.4	2.2	45.9		9.1				
Green Ext Time (p_c), s	0.4	6.2		0.2	0.0	0.0		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	30.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	5	107	110	10	80	121	1325	100	5	1661	200
Future Volume (veh/h)	60	5	107	110	10	80	121	1325	100	5	1661	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	63	5	-13	116	11	84	127	1395	105	5	1748	211
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	195	165	107	209	170	134	2069	921	14	1830	814
Arrive On Green	0.06	0.12	0.00	0.07	0.12	0.12	0.08	0.65	0.65	0.01	0.57	0.57
Sat Flow, veh/h	1603	1683	1427	1603	1683	1373	1603	3198	1423	1603	3198	1423
Grp Volume(v), veh/h	63	5	-13	116	11	84	127	1395	105	5	1748	211
Grp Sat Flow(s),veh/h/ln	1603	1683	1427	1603	1683	1373	1603	1599	1423	1603	1599	1423
Q Serve(g_s), s	4.6	0.3	0.0	8.0	0.7	6.8	9.4	32.6	3.4	0.4	61.6	8.9
Cycle Q Clear(g_c), s	4.6	0.3	0.0	8.0	0.7	6.8	9.4	32.6	3.4	0.4	61.6	8.9
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	94	195	165	107	209	170	134	2069	921	14	1830	814
V/C Ratio(X)	0.67	0.03	-0.08	1.08	0.05	0.49	0.95	0.67	0.11	0.35	0.95	0.26
Avail Cap(c_a), veh/h	121	549	465	107	553	451	134	2069	921	94	1838	818
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	46.9	0.0	55.8	46.2	48.9	54.5	13.2	8.0	58.9	24.1	12.8
Incr Delay (d2), s/veh	4.5	0.2	0.0	110.4	0.5	9.8	60.9	1.1	0.1	5.3	12.2	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	2.0	0.1	0.0	6.5	0.3	2.8	6.0	10.4	1.0	0.2	23.6	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.7	47.1	0.0	166.2	46.6	58.6	115.4	14.3	8.1	64.2	36.3	13.1
LnGrp LOS	E	D		F	D	E	F	B	A	E	D	B
Approach Vol, veh/h		55			211			1627			1964	
Approach Delay, s/veh		72.6			117.1			21.8			33.9	
Approach LOS		E			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	83.3	12.0	19.1	14.0	74.4	11.0	20.1
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	4.0	* 5.3
Max Green Setting (Gmax), s	7.0	71.7	8.0	39.0	10.0	68.7	9.0	* 39
Max Q Clear Time (g_c+I1), s	2.4	34.6	10.0	2.3	11.4	63.6	6.6	8.8
Green Ext Time (p_c), s	0.0	22.8	0.0	0.0	0.0	4.8	0.0	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	33.9
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	5	110	5	5	10	180	1577	50	20	1458	160
Future Volume (veh/h)	80	5	110	5	5	10	180	1577	50	20	1458	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	5	116	5	5	11	189	1660	53	21	1535	168
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	9	148	44	44	75	220	2282	1016	55	1952	868
Arrive On Green	0.09	0.09	0.09	0.05	0.05	0.05	0.12	0.64	0.64	0.03	0.55	0.55
Sat Flow, veh/h	1686	100	1570	912	912	1567	1781	3554	1581	1781	3554	1581
Grp Volume(v), veh/h	89	0	116	10	0	11	189	1660	53	21	1535	168
Grp Sat Flow(s),veh/h/ln	1786	0	1570	1825	0	1567	1781	1777	1581	1781	1777	1581
Q Serve(g_s), s	4.9	0.0	7.4	0.5	0.0	0.7	10.7	32.1	1.3	1.2	35.1	5.5
Cycle Q Clear(g_c), s	4.9	0.0	7.4	0.5	0.0	0.7	10.7	32.1	1.3	1.2	35.1	5.5
Prop In Lane	0.94		1.00	0.50		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	169	0	148	88	0	75	220	2282	1016	55	1952	868
V/C Ratio(X)	0.53	0.00	0.78	0.11	0.00	0.15	0.86	0.73	0.05	0.38	0.79	0.19
Avail Cap(c_a), veh/h	314	0	276	623	0	535	278	2448	1089	130	2153	958
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	44.2	0.0	45.4	46.7	0.0	46.8	44.0	12.3	6.8	48.7	18.3	11.6
Incr Delay (d2), s/veh	1.0	0.0	3.4	0.2	0.0	0.3	16.1	1.3	0.0	1.6	2.2	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	2.2	0.0	3.0	0.3	0.0	0.3	5.5	10.7	0.4	0.5	13.1	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.2	0.0	48.8	46.9	0.0	47.1	60.2	13.6	6.8	50.4	20.5	11.9
LnGrp LOS	D		D	D		D	E	B	A	D	C	B
Approach Vol, veh/h		205			21			1902			1724	
Approach Delay, s/veh		47.2			47.0			18.0			20.0	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	71.8		14.6	16.7	62.3		8.9
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.0
Max Green Setting (Gmax), s	7.5	70.6		18.0	16.0	62.1		35.0
Max Q Clear Time (g_c+I1), s	3.2	34.1		9.4	12.7	37.1		2.7
Green Ext Time (p_c), s	0.0	26.6		0.3	0.1	19.2		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	20.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	110	136	135	1446	1629	210
Future Volume (veh/h)	110	136	135	1446	1629	210
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	143	142	1522	1715	221
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	205	182	177	2739	2224	992
Arrive On Green	0.11	0.11	0.10	0.77	0.63	0.63
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	116	143	142	1522	1715	221
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	5.4	7.7	6.8	15.0	30.5	5.3
Cycle Q Clear(g_c), s	5.4	7.7	6.8	15.0	30.5	5.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	205	182	177	2739	2224	992
V/C Ratio(X)	0.57	0.78	0.80	0.56	0.77	0.22
Avail Cap(c_a), veh/h	774	688	285	3127	2396	1069
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	36.7	37.7	38.6	4.0	11.8	7.1
Incr Delay (d2), s/veh	0.9	2.8	8.2	0.3	1.8	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.1	3.2	2.8	9.7	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	37.6	40.5	46.8	4.4	13.6	7.3
LnGrp LOS	D	D	D	A	B	A
Approach Vol, veh/h	259			1664	1936	
Approach Delay, s/veh	39.2			8.0	12.9	
Approach LOS	D			A	B	

Timer - Assigned Phs	2	4	5	6
Phs Duration (G+Y+Rc), s	73.4	14.1	12.7	60.8
Change Period (Y+Rc), s	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	77.0	38.0	14.0	59.0
Max Q Clear Time (g_c+I1), s	17.0	9.7	8.8	32.5
Green Ext Time (p_c), s	33.0	0.4	0.1	22.2

Intersection Summary	
HCM 7th Control Delay, s/veh	12.6
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	40	90	100	80	40	120	1301	60	50	1565	150
Future Volume (veh/h)	150	40	90	100	80	40	120	1301	60	50	1565	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	158	42	95	105	84	42	126	1369	63	53	1647	158
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	221	187	145	152	127	152	1881	820	107	1790	797
Arrive On Green	0.12	0.12	0.12	0.08	0.08	0.08	0.09	0.53	0.53	0.06	0.50	0.50
Sat Flow, veh/h	1781	1870	1581	1781	1870	1556	1781	3554	1549	1781	3554	1582
Grp Volume(v), veh/h	158	42	95	105	84	42	126	1369	63	53	1647	158
Grp Sat Flow(s),veh/h/ln	1781	1870	1581	1781	1870	1556	1781	1777	1549	1781	1777	1582
Q Serve(g_s), s	9.0	2.1	5.9	6.1	4.5	2.7	7.3	31.0	2.1	3.0	45.1	5.8
Cycle Q Clear(g_c), s	9.0	2.1	5.9	6.1	4.5	2.7	7.3	31.0	2.1	3.0	45.1	5.8
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	211	221	187	145	152	127	152	1881	820	107	1790	797
V/C Ratio(X)	0.75	0.19	0.51	0.72	0.55	0.33	0.83	0.73	0.08	0.50	0.92	0.20
Avail Cap(c_a), veh/h	711	746	631	288	302	251	152	1881	820	144	1850	824
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	44.9	41.9	43.5	47.2	46.5	45.6	47.4	19.0	12.1	47.9	24.2	14.4
Incr Delay (d2), s/veh	5.3	0.4	2.1	6.6	3.1	1.5	29.8	1.4	0.0	3.5	7.9	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	4.2	1.0	2.4	2.9	2.2	1.1	4.4	11.7	0.7	1.4	18.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.2	42.3	45.7	53.8	49.6	47.1	77.2	20.4	12.2	51.5	32.0	14.5
LnGrp LOS	D	D	D	D	D	D	E	C	B	D	C	B
Approach Vol, veh/h		295			231			1558			1858	
Approach Delay, s/veh		47.6			51.1			24.7			31.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.3	61.7		18.4	13.0	59.0		14.9
Change Period (Y+Rc), s	4.0	6.0		5.9	4.0	6.0		6.3
Max Green Setting (Gmax), s	8.5	55.3		42.0	9.0	54.8		17.0
Max Q Clear Time (g_c+I1), s	5.0	33.0		11.0	9.3	47.1		8.1
Green Ext Time (p_c), s	0.0	10.3		1.0	0.0	5.9		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	31.0
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	75.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1475	1269	48	233	26
Future Vol, veh/h	5	1475	1269	48	233	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	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	5	1603	1379	52	253	28

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1432	0	-	0	3020	1405
Stage 1	-	-	-	-	1405	-
Stage 2	-	-	-	-	1614	-
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	475	-	-	-	~ 15	171
Stage 1	-	-	-	-	~ 227	-
Stage 2	-	-	-	-	~ 179	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	475	-	-	-	~ 14	171
Mov Cap-2 Maneuver	-	-	-	-	~ 97	-
Stage 1	-	-	-	-	~ 224	-
Stage 2	-	-	-	-	~ 179	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.04	0	$ 887.28
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	475	-	-	-	102
HCM Lane V/C Ratio	0.011	-	-	-	2.766
HCM Ctrl Dly (s/v)	12.7	-	-	-	$ 887.3
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	26.5

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1453	1268	27	27	3
Future Vol, veh/h	3	1453	1268	27	27	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	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	3	1579	1378	29	29	3

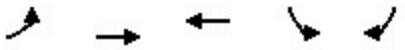
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1408	0	-	0	2979	1393
Stage 1	-	-	-	-	1393	-
Stage 2	-	-	-	-	1586	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	485	-	-	-	~ 16	174
Stage 1	-	-	-	-	230	-
Stage 2	-	-	-	-	185	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	485	-	-	-	~ 15	174
Mov Cap-2 Maneuver	-	-	-	-	100	-
Stage 1	-	-	-	-	228	-
Stage 2	-	-	-	-	185	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.03	0	54.25
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	485	-	-	-	105
HCM Lane V/C Ratio	0.007	-	-	-	0.312
HCM Ctrl Dly (s/v)	12.5	-	-	-	54.2
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	1.2

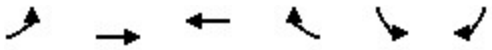
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Appendix L
Cumulative Year With Project and Improvements Conditions Synchro Reports



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	33	967	1033	40	4
v/c Ratio	0.16	0.75	0.82	0.17	0.02
Control Delay (s/veh)	4.7	9.4	12.2	26.3	17.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.7	9.4	12.2	26.3	17.3
Queue Length 50th (ft)	3	137	153	12	0
Queue Length 95th (ft)	11	285	348	39	8
Internal Link Dist (ft)		868	1129	470	
Turn Bay Length (ft)	200				50
Base Capacity (vph)	254	1613	1558	639	574
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.13	0.60	0.66	0.06	0.01

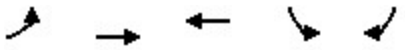
Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	890	682	269	37	4
Future Volume (veh/h)	30	890	682	269	37	4
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	967	741	292	40	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	310	1309	893	352	191	170
Arrive On Green	0.70	0.70	0.70	0.70	0.11	0.11
Sat Flow, veh/h	546	1870	1277	503	1781	1585
Grp Volume(v), veh/h	33	967	0	1033	40	4
Grp Sat Flow(s),veh/h/ln	546	1870	0	1780	1781	1585
Q Serve(g_s), s	2.1	15.0	0.0	19.4	1.0	0.1
Cycle Q Clear(g_c), s	21.5	15.0	0.0	19.4	1.0	0.1
Prop In Lane	1.00			0.28	1.00	1.00
Lane Grp Cap(c), veh/h	310	1309	0	1245	191	170
V/C Ratio(X)	0.11	0.74	0.00	0.83	0.21	0.02
Avail Cap(c_a), veh/h	484	1906	0	1814	707	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.7	4.4	0.0	5.0	19.0	18.6
Incr Delay (d2), s/veh	0.1	0.9	0.0	2.2	0.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.3	0.0	3.2	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	12.9	5.2	0.0	7.2	19.5	18.7
LnGrp LOS	B	A		A	B	B
Approach Vol, veh/h		1000	1033		44	
Approach Delay, s/veh		5.5	7.2		19.5	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	8
Phs Duration (G+Y+Rc), s	37.1	9.5	37.1
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	47.5	18.5	47.5
Max Q Clear Time (g_c+I1), s	23.5	3.0	21.4
Green Ext Time (p_c), s	9.1	0.1	10.4

Intersection Summary	
HCM 7th Control Delay, s/veh	6.7
HCM 7th LOS	A

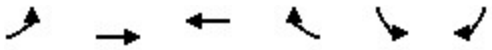


Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	5	1553	1387	245	27
v/c Ratio	0.05	1.02	0.91	1.33	0.16
Control Delay (s/veh)	3.2	39.3	18.8	223.1	36.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.2	39.3	18.8	223.1	36.2
Queue Length 50th (ft)	1	~1110	592	~246	11
Queue Length 95th (ft)	3	#1535	#1273	#411	41
Internal Link Dist (ft)		1100	762	437	
Turn Bay Length (ft)	200				50
Base Capacity (vph)	99	1529	1522	184	174
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.05	1.02	0.91	1.33	0.16

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	1475	1269	48	233	26
Future Volume (veh/h)	5	1475	1269	48	233	26
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	1553	1336	51	245	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	174	1535	1469	56	186	165
Arrive On Green	0.82	0.82	0.82	0.82	0.10	0.10
Sat Flow, veh/h	390	1870	1790	68	1781	1585
Grp Volume(v), veh/h	5	1553	0	1387	245	27
Grp Sat Flow(s),veh/h/ln	390	1870	0	1858	1781	1585
Q Serve(g_s), s	1.1	98.5	0.0	63.3	12.5	1.9
Cycle Q Clear(g_c), s	64.4	98.5	0.0	63.3	12.5	1.9
Prop In Lane	1.00			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	174	1535	0	1525	186	165
V/C Ratio(X)	0.03	1.01	0.00	0.91	1.32	0.16
Avail Cap(c_a), veh/h	174	1535	0	1525	186	165
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	10.8	0.0	7.6	53.7	49.0
Incr Delay (d2), s/veh	0.1	25.8	0.0	8.4	176.8	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	37.4	0.0	20.4	14.7	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	30.4	36.6	0.0	16.0	230.5	49.4
LnGrp LOS	C	F		B	F	D
Approach Vol, veh/h		1558	1387		272	
Approach Delay, s/veh		36.6	16.0		212.6	
Approach LOS		D	B		F	

Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			103.0		17.0	103.0
Change Period (Y+Rc), s			4.5		4.5	4.5
Max Green Setting (Gmax), s			98.5		12.5	98.5
Max Q Clear Time (g_c+I1), s			100.5		14.5	65.3
Green Ext Time (p_c), s			0.0		0.0	20.5

Intersection Summary	
HCM 7th Control Delay, s/veh	42.6
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.