EXHIBIT #26

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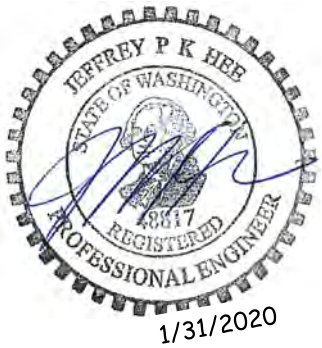
Western State Hospital

Master Plan Update

Traffic Impact Analysis

January 31, 2020



Prepared for:

Western State Hospital,

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&

City of Lakewood

Table of Contents

List of Tables

List of Figures

Appendices

Abbreviations

DSHS	Departments of Social and Health Services
WSH	Western State Hospital
EIS	Environmental Impact Statement
CFS	Center for Forensic Services
Civil	Civil Commitment
CSTC	Child Study and Treatment Center
FHWA	Federal Highways Administration
WSDOT	Washington State Department of Transportation
MUTCD	Manual of Uniform Traffic Control Devices
HCM	Highway Capacity Manual
LOS	Level-of-Service
V/C	Volume-to-Capacity
Blvd.	Boulevard
Ave.	Avenue
St.	Street
Rd.	Road
Dr.	Drive
Pl.	Place
Ln.	Lane
Ct.	Court

Executive Summary

This Traffic Report summarizes the traffic impacts associated with an update of the Master Plan for WSH.

Over the next 10 years, the DSHS is proposing to reduce the overall number of patient beds at WSH. For the Master Plan, the number civil patient beds will reduce from 530 to 153, the number forensic patient beds will increase from 330 to 533, the number of CSTC patient beds will increase from 47 to 65, and a new 48 bed community hospital would be added to the campus.

The Master Plan proposes to vacate the South St. driveway off Sentinel Dr. SW and remove and relocate the existing CSTC Entrance driveway off Steilacoom Blvd. SW to a new location on Steilacoom Blvd. SW. Build-out of the Master Plan is intended to enhance access to the campus to and from Steilacoom Blvd. SW and to reduce traffic impacts on Sentinel Dr. SW and 87th Ave SW via Golf Course Rd. New traffic signals are also proposed at Chapel Gate Dr. and CSTC Entrance. Also, the existing signal at Circle Dr. is proposed to be removed and the intersection reconfigured.

Future traffic conditions were forecast for year 2030.

Proposed Action

The proposed changes are forecast to generate:

- 731 AM trips, between 6:30 and 7:30 AM, a 12% reduction from the campus' current trip generation.
- 603 AM trips, between 7:00 and 8:00 AM, an 11% reduction from the campus' current trip generation.
- 673 PM trips, between 2:15 and 3:15 PM, a 12% reduction from the campus' current trip generation.
- 325 PM trips, between 4:00 and 5:00 PM, a 12% reduction from the campus' current trip generation.
- 5,407 average weekday daily trips, a 12% reduction from the campus' current trip generation.

The technical analysis focuses on the AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak hour periods.

Level-of-Service/Operations

Currently, the CSTC Entrance driveway off Steilacoom Blvd. SW is computed to operate at LOS E (AM peak hour) and LOS F (PM peak hour) and outside of the City of Lakewood's LOS standards.

In the future No Action, the Chapel Gate Dr. and CSTC Entrance driveways off Steilacoom Blvd. SW are forecast to operate outside of the City of Lakewood's LOS standards:

- Chapel Gate Dr. LOS F (PM peak hour).
- CSTC Entrance. LOS F (AM and PM peak hours)

In the future with the Proposed Action, the Chapel Gate Dr. and CSTC Entrance driveways off Steilacoom Blvd. SW are forecast to operate similar to the No Action conditions.

When signalized, both driveways are forecast to operate at LOS B or better and the traffic conditions around the campus meet the City of Lakewood standards.

Circulation

Revised on-campus circulation patterns are not forecast to adversely impact traffic on the campus.

With the Proposed Action, a new forensic hospital would be built on the west side of the campus west of Chapel Gate Dr. This will shift more traffic to the Chapel Gate Dr. driveway.

Use of the central area of the campus will be reduced and less traffic is anticipated to use the Circle Dr. driveway.

The relocation of the CSTC Entrance off Steilacoom Blvd. SW allows for direct access to the new community hospital and expanded services at the CTSC and east WSH campus buildings. The new access location is also more midblock from Circle Dr. and 87th Ave SW, allowing for more spacing between the intersections.

The primary patient discharge route is anticipated to shift to the new CSTC Entrance. The primary service vehicles route is anticipated to be via Sentinel Dr. SW.

Safety

There were no existing safety deficiencies identified after review of the historical collision data. Improved access to the campus would reduce the potential safety risks with the revised traffic patterns on the campus.

Non-Motorized Impacts

On-campus pedestrian facilities will be upgraded to support campus activities.

The City of Lakewood and Town of Steilacoom are planning non-motorized improvements on Steilacoom Blvd. SW. The City of Lakewood's scope and timing for constructions of improvements on Steilacoom Blvd. SW including curb, gutter, sidewalk, sharrows, turn lanes, street lighting, drainage and overlay is undefined.

The Proposed Action is not forecast to change or adversely impact the current transit network.

Recommendations

The recommendations based on the Proposed Action are similar to those for the No Action.

- Circulation. Improve the campus's internal circulation by increasing the spacing between internal roadways and intersections and driveways.
- Access. Improve access to the campus by enhancing traffic flow to and from Steilacoom Blvd. SW via:
  - Install traffic control signals at Chapel Gate Dr. and at CSTC Entrance, with the intent to concentrate more traffic to these campus accesses and reduce traffic impacts on Sentinel Dr., 87th Ave. SW and Golf Course Rd. Traffic control signal installation requires certain "warrants" to be satisfied and these are discussed later in this document.
  - Widen Steilacoom Blvd. SW to provide left turn pockets and acceleration lanes to improve left turn maneuvers to and from the campus. Left turn lanes would enhance site access by providing a "pocket" off of the mainline for vehicles to queue in before making a left turn to the campus. Acceleration lanes, in the form of a center turn lane, would allow staged left turn maneuvers (left turn out of campus to turn lane to merge with opposing traffic volume). Widening requires right-of-way acquisition.
  - Remove the existing signal at Circle Drive and Steilacoom Blvd SW, and repurposing the intersection to be right-in and right-out only restricted. This will decentralize access at Circle Dr. and refocus traffic to the Chapel Gate Dr. and CSTC Entrance driveways.
  - An alternative to a traffic signal is a roundabout. Roundabouts do not create fixed stops and do not have adopted "warrant" criteria. Roundabouts do involve additional right-of-way.
  - Close or add gates (restrictions) to existing main campus access off Sentinel Dr. and Golf Course Rd. West St. could be gated and restricted for service vehicles only. Kids First Pl. could also be gated, for fire and emergency vehicle access to the site only. Also, vehicle access to campus' other secondary entrances off Golf Course Rd. could be restricted. By restricting or eliminating these access, the

campus traffic would be forced to access the site off Steilacoom Blvd SW, which would mitigate neighborhood concerns with campus traffic impacting the high school and residents.

  - The Proposed Action includes new buildings nearer to the Chapel Gate Dr. and CSTC Entrance where enhanced accessibility would allow support improvements to driveway traffic control off Steilacoom Blvd SW.

- Support. DSHS should provide their support for non-motorized and turn lane improvements on Steilacoom Blvd. SW, planned by both the Town of Steilacoom and City of Lakewood. The Proposed Action to support improvements by the Town of Steilacoom and City of Lakewood.
- Parking. Consolidate, mark, pave and manage parking areas to reduce parking sprawl on campus. Designate areas for staff based on the location and function of employees. The Proposed Action is consolidating parking and parking designations will be addressed with building-out of the site.

Introduction

This report describes the traffic impacts associated with an update of the Master Plan for WSH. The purpose of this report is to identify potentially significant and adverse traffic impacts and, where appropriate, outline programmatic and/or physical improvements to minimize or eliminate those impacts.

The study area for this analysis focuses on the public roadways and intersections fronting the WSH campus.

Project Location and Existing Use

WSH is located at 9601 Steilacoom Blvd. SW, in the City of Lakewood, WA.

Figure 1 shows the campus and surrounding roadway network.

The main campus is bordered by Steilacoom Blvd. SW and Fort Steilacoom Park, to the south; the former Fort Steilacoom Golf Course and Golf Course Rd., to the north, Sentinel Dr. SW/Farwest Dr. SW and Steilacoom High School, to the west; and 87th Ave. SW, to the east. Sentinel Dr. SW/Farwest Dr. SW separates the City of Lakewood from the Town of Steilacoom.

The site is zoned "Public/Institutional (PI)" by the City of Lakewood.

Project Description

The campus includes two major zones: Adult Hospital Zone and Adolescent Hospital Zone. Figure 1 shows the campus divided into four sub-zone: Adult Hospital West, Adult Hospital Central, Adult Hospital East, and Adolescent Hospital Zone. The Oakridge Group Home and West Pierce Fire and Rescue Station (No. 24) are on the campus but are under separate ownerships and are not connected to the campus by internal roadways.

The DSHS is proposing to reduce the number of civil patients on campus and expand both forensic and child services over a 10-year period. The Master Plan includes demolishing about 264,825 sq. ft. of existing building area, adding about 720,740 sq. ft. of new building area to the campus, including upgrading the existing central campus area and historic For Steilacoom Fort, and constructing a new community hospital on the campus.

Table 1 summarizes the number of patient beds of the existing and proposed for the future campus, broken down by bed type.

Table 1: Existing and Proposed Number of Beds

Bed Type	Existing Baseline	Near Term (1-5 years)[1]	Mid Term (6-10 years)[1]
Center for Forensic Services (CFS)	360	458	533
Civil Commitment (Civil)	500	348	153
Child Study and Treatment Center (CSTC)	47	65	65
New CFS Hospital	0	0	350
New Community Hospital	0	0	48
Oakridge Group Home[2]	16	16	16
Total	923	887	815

1. Master Plan
2. Not part of main campus

A conceptual site plan included as Figure 2.

Figure 1: Vicinity Map

Figure 2: Conceptual Site Plan

In additional to reducing the total number of beds on the campus, DSHS has also expressed their desire to increase accessibility to Steilacoom Blvd. SW. Site access enhancements on Steilacoom Blvd SW include improving traffic control at Chapel Gate Dr., removal of the existing signal and restricting turning movements at Circle Dr., and relocating the existing CSTC Entrance further east and improving traffic control. Traffic control improvements may include signalization. Additionally, the South St. driveway on Sentinel Dr. would be vacated and use of the 87th Ave. SW as an access-way to/from the campus' existing gravel lot is contemplated as being permanently gated and closed.

These access enhancements are intended to encourage more campus vehicle traffic on and off Steilacoom Blvd. SW as opposed to Sentinel Dr. and 87th Ave. SW.

Campus Accesses

The existing main campus includes six major driveways off the public roadway network:

- Two driveways off Sentinel Dr., at West St. and South St.
- Three driveways off Steilacoom Blvd. SW, at Chapel Gate Dr., Circle Dr. and CSTC Entrance
- Two driveways off Golf Course Rd., at Kid's First Pl. and at WSH's gravel lot

Gated accesses include South St. off Sentinel Dr. and the WSH's gravel lot off Golf Course Rd.

Internal roadways connect between the major campus areas.

Oakridge Group Home and the fire station are adjacent uses to the campus; however, both are operated independently of the campus. There are not internal roadway connections between the campus and Oakridge Group Home and the fire station.

Parking

The existing campus parking is dispersed around the campus grounds. The future Master Plan includes consolidating parking areas and improving visitor, staff, maintenance and service vehicle parking, adding pavement markings and signing. The future parking supply will meet the needs of the campus.

Study Area

This focuses on the following study intersections:

- Sentinel Dr. / Farwest Dr. SW and West St. (campus access)
- Sentinel Dr. / Farwest Dr. SW and South St. (campus access)
- Farwest Dr. SW and Steilacoom Blvd. SW
- Chapel Gate Dr. and Steilacoom Blvd. SW (campus access)
- Circle Dr. and Steilacoom Blvd. SW (campus access)
- CSTC Entrance and Steilacoom Blvd. SW (campus access)
- 87th Ave. SE and Steilacoom Blvd. SW
- 87th Ave. SE and Oakridge Group Home (standalone campus access)
- 87th Ave. SE and Golf Course Rd.
- Kids First Pl. and Golf Course Rd. (campus access)

Existing Traffic Conditions

The following describes the existing transportation system and its operational characteristics.

Major Roadway Network

- Steilacoom Blvd. SW is classified as a Principal Arterial in the City of Lakewood. West of Farwest Dr. SW, the roadway has a 3-lane cross-section with a center turn lane. Fronting WSH, the roadway has a 4-lane cross-section with no center turn lane. East of 87th Ave. SW, the roadway has a 5-lane cross-section with a center turn lane. The posted speed limit is 35-mph. Fronting WSH, signalized intersections are at Farwest Dr. SW, Circle Dr., and 87th Ave. SW. Both sides of Steilacoom Blvd. SW are lined with curb and gutter. A shared-use path is on the Fort Steilacoom Park side of Steilacoom Blvd. SW.
- Farwest Dr. SW/Sentinel Dr. is classified as a Minor Arterial in the Town of Steilacoom. North of Steilacoom Blvd. SW, Farwest Drive SW becomes Sentinel Dr. approaching Steilacoom High School. Farwest Dr. SW has a 5-lane cross-section and a posted speed limit of 35-mph south of Steilacoom Blvd. SW. Sentinel Dr. is 2-lanes wide and has posted 20-mph school zone speed signs. On Sentinel Dr. SW, curb, gutter and sidewalk extend from Steilacoom Blvd. SW to the high school. The intersection of Farwest Dr. SW and Sentinel Dr. SW is signalized at Steilacoom Blvd. SW.
- 87th Ave. SW is classified as a Minor Arterial at Steilacoom Blvd. SW and a Collector Arterial to the north of Golf Course Rd. Near Steilacoom Blvd. SW, the roadway has a 5-land cross-section that transitions into a 3-lane section near Oakridge Group Home and later transitions into a 2-lane roadway at Onyx Dr. SW, north of Golf Course Rd. The posted speed limit is 30-mph and the roadway include curb, gutter and sidewalk on both sides.
- Golf Course Rd. is an access road between the former Fort Steilacoom Golf Course, which closed in September 2018, and 87th Ave. SW. Golf Course Rd. is stop sign controlled at 87th Ave. SW. The roadway is paved but includes no pavement markings or marked pedestrian facilities. Disc golf players currently use the open field areas accessible off Golf Course Rd. There are pullouts for parking alongside the roadway to the east of Kids First Pl. and the CSTC campus.

Traffic Volumes

Year 2019 traffic volumes were collected by Traffic Count Consultants, Inc., an independent traffic data collection firm.

Pneumatic tube counters were located to capture daily traffic volumes at seven of the eight campus accesses and on Steilacoom Blvd. SW near the Chapel Gate Dr. and CSTC Entrance between May 28 and May 30, 2019. Figure 3 illustrates the calibrated daily traffic volumes around and at the campus.

Tube counters were not located at the gated WSH gravel lot access since the access was closed during the initial field reviews, WSH management indicated that this access is opened periodically to support campus traffic flows. It is noted that the former Steilacoom Golf Course and public land area surrounding Golf Course Rd. is currently used for disc golf course and other recreational activities.

The AM and PM peak hour periods are defined as the highest 4 consecutive 15-minute traffic volume intervals between 7 and 9 AM and between 4 and 6 PM. These periods represent conditions when traffic volumes on the local roadways are typically at their highest and correspond, in general, to traditional peak commute times.

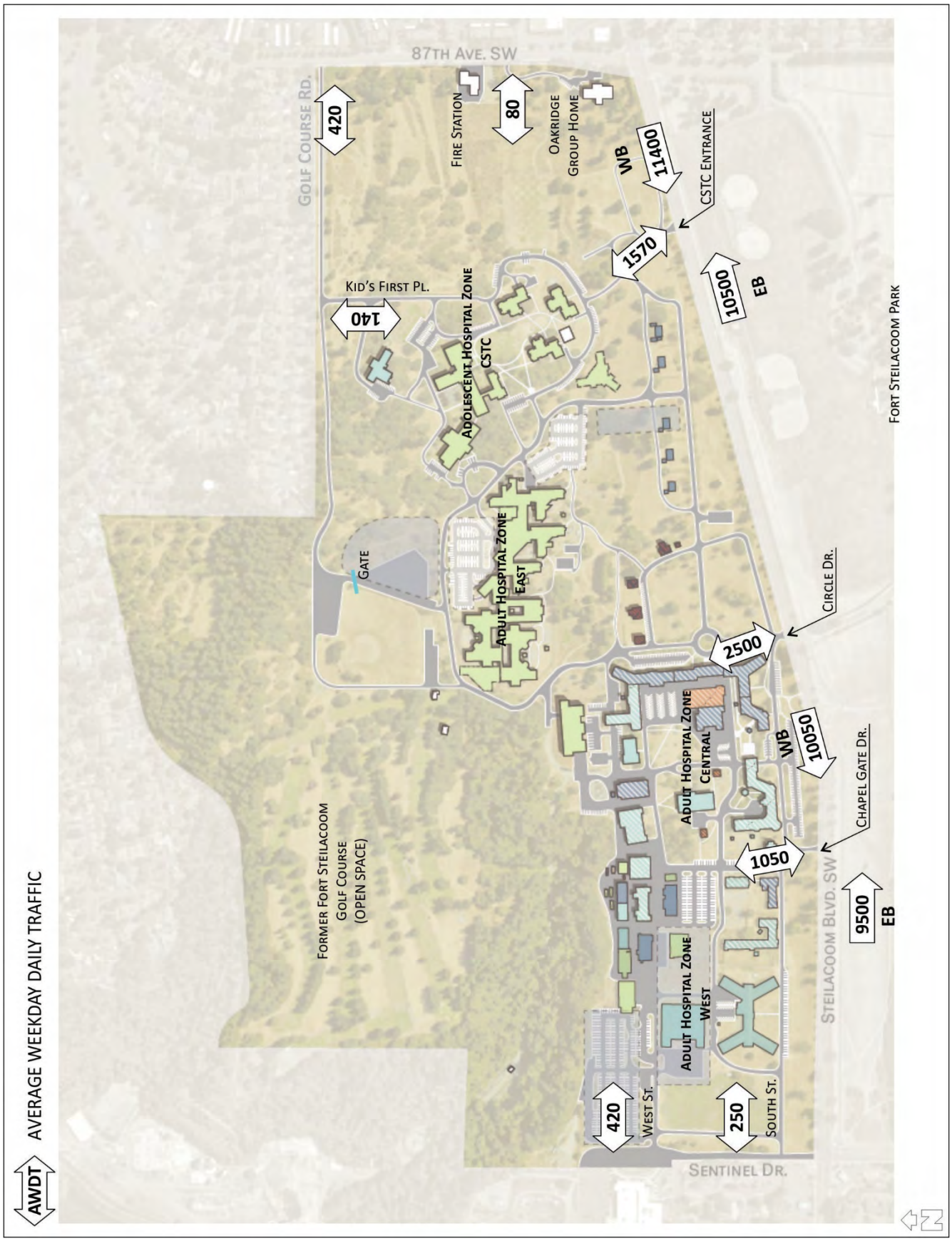


Figure 3: Average Weekday Daily Traffic Volumes

AM and PM peak hour intersection turning movement volumes were collected at the study intersections on Thursday, May 30, 2019 and Thursday, July 20, 2019. The driveway and intersection turning movement volumes were calibrated to be consistent with the daily traffic volumes. The raw count data is attached. Figure 4 illustrates the existing AM and PM peak hour traffic volumes at the study intersections and driveways.

Level-of-Service

Study area LOS was evaluated using the Synchro computer program and HCM 2010 methodology. Table 2 summarizes the intersection level-of-service and delay categories.

Table 2: Intersection Level-of-Service and Delay Categories

LOS	Signalized Intersection Delay	Stop-Controlled Intersection Delay
A	≤ 10 seconds	≤ 10 seconds
B	10-20 seconds	10-15 seconds
C	20-35 seconds	15-25 seconds
D	35-55 seconds	25-35 seconds
E	55-80 seconds	35-50 seconds
F	> 80 seconds	> 50 seconds

The City of Lakewood's level-of-service standards are as follows:

- Maintain LOS D with a V/C ratio threshold of 0.90 during weekday PM peak hour conditions on all arterial streets and intersections in the city, including state highways of statewide significance except as otherwise identified.
- Maintain LOS D during weekday PM peak hour conditions at all arterial street intersections in the city, including state highways of statewide significance except as otherwise identified.
- Maintain LOS F with a V/C ratio threshold of 1.10 in the Steilacoom Blvd. corridor between 88th St. SW and 83rd Ave. SW.
- Maintain LOS F with a V/C ratio threshold of 1.30 on Gravelly Lake Dr. between I-5 and Washington Blvd. SW and Washington Blvd. SW, west of Gravelly Lake Dr.
- The City may allow two-way and one-way stop-controlled intersections to operate worse than the level-of-service standards. However, the City requires that these instances be thoroughly analyzed from an operational and safety perspective.

Intersection Level of Service

Table 3 summarizes the existing peak hour intersection operations and the output is included in the Appendix.

The study intersections are calculated to operate at LOS D or better and satisfy the City of Lakewood's LOS threshold, except the CSTC Entrance at Steilacoom Blvd. SW. The southbound stop-controlled approach at CSTC Entrance is calculated to operate at LOS F, in the AM peak hour, and LOS E, in the PM peak hour.

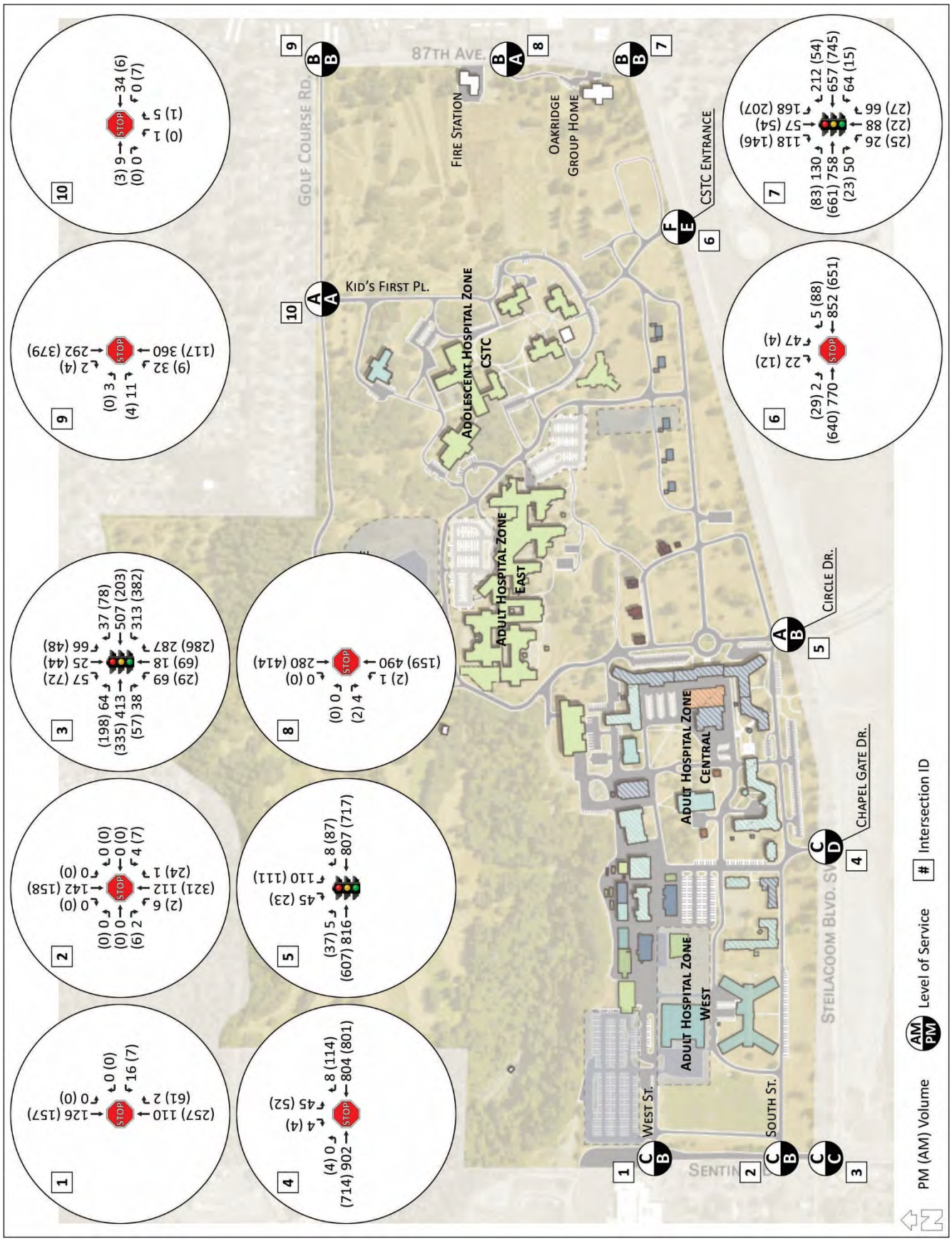


Figure 4: Existing AM and PM Peak Hour Traffic Volumes

Table 3: Existing AM and PM Peak Hour Intersection LOS

Intersection	Control	AM Peak Hour		PM Peak Hour	
		LOS	Delay	LOS	Delay
Sentinel Dr. / West St.	WB Stop	C	19.1	B	11.3
Sentinel Dr. / South St.	WB Stop	C	22.1	B	10.8
Farwest Dr. / Steilacoom Blvd.	Signal	C	28.3	C	33.4
Chapel Gate Dr. / Steilacoom Blvd.	SB Stop	C	15.2	D	32.8
Circle Dr. / Steilacoom Blvd.	Signal	A	5.3	B	14.6
CSTC Entrance / Steilacoom Blvd.	SB Stop	F	52.7	E	39.9
87th Ave. / Steilacoom Blvd.	Signal	B	16.6	B	19.1
87th Ave. / Oakridge Group Home	EB Stop	B	10.9	A	9.9
87th Ave. / Golf Course Rd.	EB Stop	B	10.9	B	10.6
Kids First Pl. / Golf Course Rd.	NB Stop	A	8.3	A	8.4

Arterial Level of Service

Table 4 summarizes the existing peak hour arterial LOS on Steilacoom Blvd. SW. The arterial capacity is from the City of Lakewood's Comprehensive Plan EIS and the LOS is expressed as a V/C ratio. The arterial volumes on Steilacoom Blvd. SW in the vicinity of the campus satisfies the V/C threshold from the City of Lakewood.

Table 4: Existing Arterial LOS on Steilacoom Blvd. SW

Direction	Capacity[1]	Maximum Volume[2]	V/C Ratio
Eastbound	1,825	992	0.54
Westbound	1,825	933	0.51

1. City of Lakewood Comprehensive Plan Final EIS – June 2000
2. Maximum PM peak hour volume in one direction

Vehicle Queuing (Stacking)

Existing vehicle queues were computed at the existing study intersections using the HCM 2010 95th-percentile queue equations to identify existing vehicle queue impacts around the campus. 95th-percentile queues are typically used for traffic design and are a statistical calculation of the vehicle queue length that has a 5% probability of occurring during the analysis hour. Table 5 summarizes the queue output.

- The 95th-percentile queues are noticeable, but the intersection and driveway spacing on Steilacoom Blvd. SW are more than sufficient to support the computed queues.
- The westbound left turn queue on Steilacoom Blvd. SW approaching Farwest Drive. SW is computed to exceed the 200-foot storage pocket in both the AM and PM peak hours, by up to 150 feet. Overall, the westbound approach queues, overall, do not extend into the adjacent Chapel Game Dr. intersection.
- The southbound queue at Chapel Gate Dr. approaching Sentinel Dr. SW is computed to be up to 40 feet.
- The southbound queue at Circle Dr. approaching Steilacoom Blvd. SW is computed to be 80 feet. The Circle Dr. and internal Front St. intersection is located approximately 25 feet north of the signalized intersection. Peak hour queues were observed to frequently extend through the internal intersection from Steilacoom Blvd. SW.
- The southbound queue at CSTC Entrance approaching Sentinel Dr. SW is computed to be up to 55 feet.
- The eastbound left turn queue Steilacoom Blvd. SW approaching 87th Ave. SW is computed to fit within the 200-foot storage pocket in both the AM and PM peak hours.
- The AM peak hour southbound left turn queue on 87th Ave. SW approaching Steilacoom Blvd. SW is computed to exceed the 125-foot storage pocket, by 40 feet or roughly two vehicle lengths.

Table 5: Existing Steilacoom Blvd. SW 95th-Percentile Queue Analysis

Intersection	Mvmt.	AM Peak Hour			PM Peak Hour			Storage (feet)
		Q-V/L[1]	Q-feet[2]	V/C	Q-V/L[1]	Q-feet[2]	V/C	
Farwest Dr. / Steilacoom Blvd.	WB L	14.0	350	0.77	12.9	325	0.74	200
	WB T	6.3	160	0.25	11.9	300	0.45	1,380
	WB TR	6.3	160	0.26	12.2	305	0.45	1,380
	SB L	2.7	70	0.26	4	100	0.51	125
	SB TR	7.1	180	0.68	5.1	130	0.69	140
Chapel Gate Dr. / Steilacoom Blvd.	SB App.	0.1	5	0.05	1.6	40	0.36	
Circle Dr. / Steilacoom Blvd.	EB LT	3.3	85	0.36	10.1	255	0.58	1,000
	EB T	3.0	75	0.40	9.1	230	0.63	1,000
	WB T	4.2	105	0.47	9.2	230	0.60	1,955
	WB TR	4.2	105	0.47	9.6	240	0.60	1,955
	SB LT	2.1	55	0.50	3.1	80	0.21	25
CSTC Entrance / Steilacoom Blvd.	SB App.	2.1	55	0.47	1.4	35	0.34	
87th Ave. / Steilacoom Blvd.	EB L	2.9	75	0.78	5.3	135	0.79	200
	EB T	7.7	195	0.42	9.8	245	0.51	685
	EB TR	7.9	200	0.42	10	250	0.51	685
	SB L	6.6	165	0.58	0.7	20	0.48	125
	SB TR	1.6	40	0.19	1.6	40	0.18	550
	SB R	4.6	115	0.59	3.6	90	0.42	250

1. queue expressed as vehicles per lane
2. queue lengths are converted to fee with approximately 25 feet per vehicle and are rounded to the nearest multiple of "5"

Traffic Circulation

- Figure 5 shows the existing major traffic circulation routes on the campus.
- Figure 6 shows the existing patient admissions and discharge route to and from the WSH campus.
- Figure 7 shows the existing on-campus shuttle routes.
- Figure 8 shows the existing service routes.

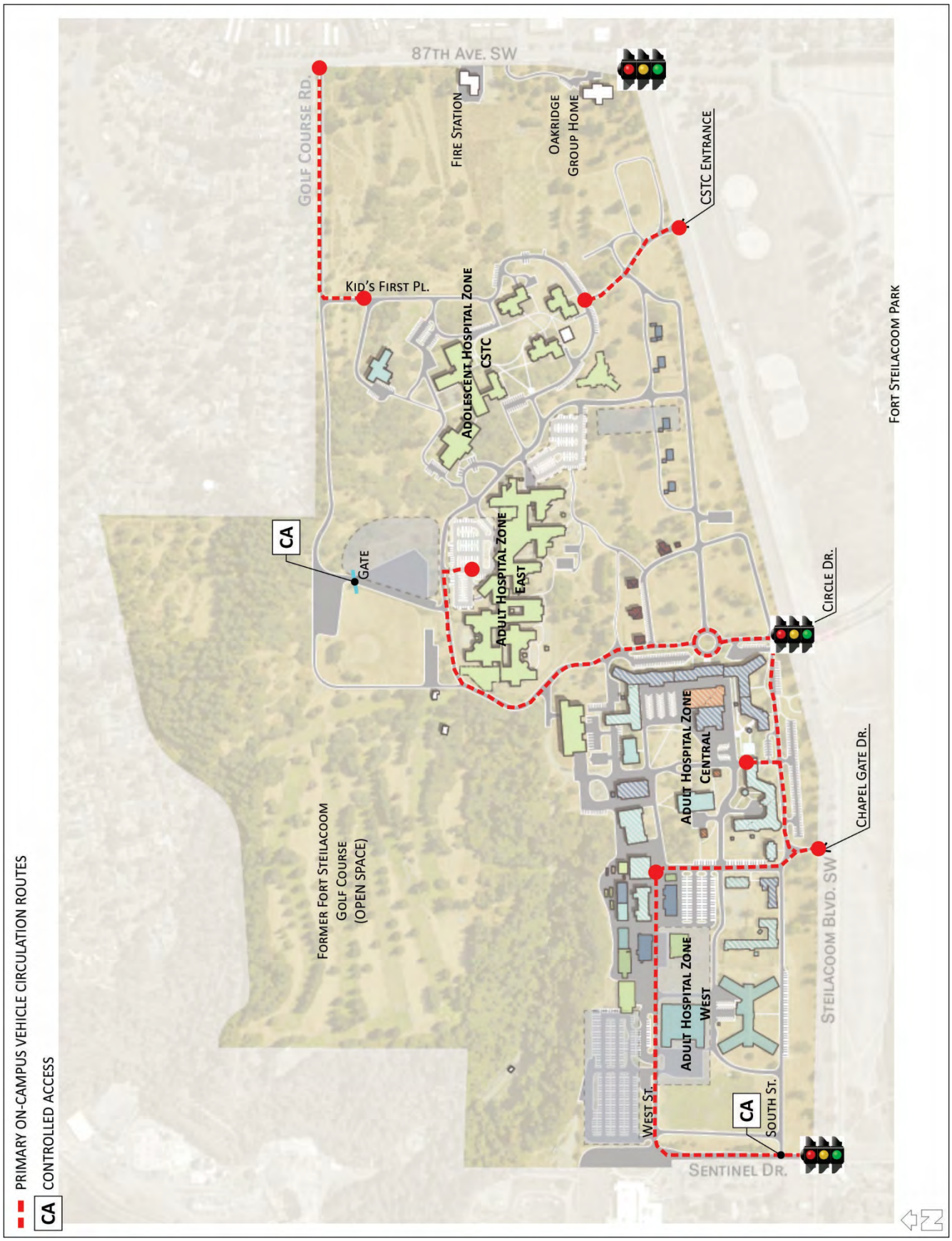


Figure 5: Existing On-Campus Primary Vehicle Circulation Routes

Figure 6: Existing Patient Admissions and Discharge Route

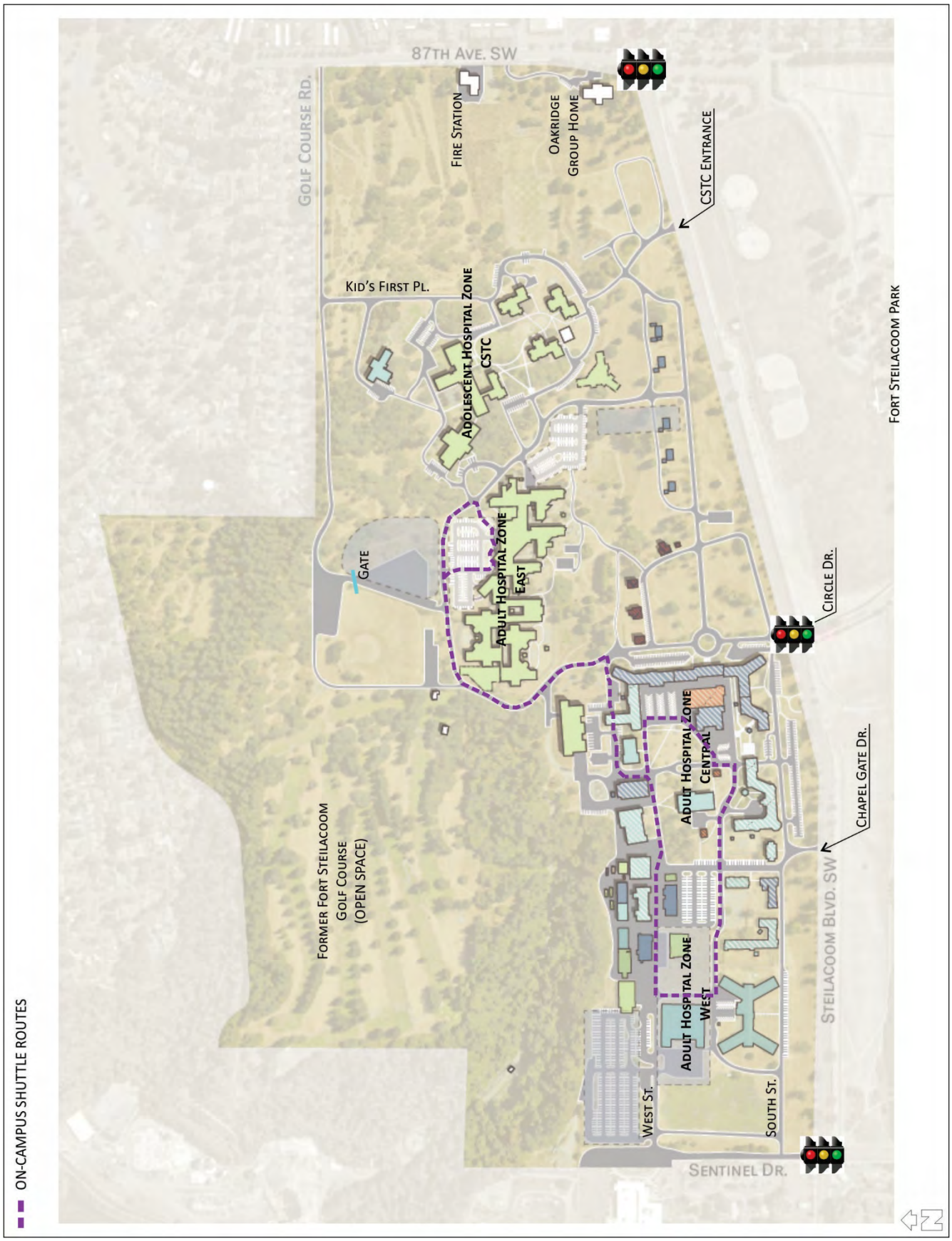


Figure 7: Existing On-Campus Shuttle Route

Figure 8: Existing Service Routes

Safety

A 6-year crash history was provided by the WSDOT for the area surrounding the campus on Sentinel Drive, Steilacoom Blvd SW, 87th Ave SW, and Golf Course Road Table 6 summarizes the crash history by year and resulting crash rates. Table 7 summarizes the crashes by location and by crash type.

Table 6: Crash History per Year

Location	Number of Crashes Reported per Year					Avg. Crashes	Est. AWDT [1]	Crash Rate
	2013	2014	2015	2016	2017			
Intersection								**MEV [2]**
87th Ave. at 82nd Street	0	0	0	1	0	0.20	6,000	0.09
87th Ave. at 83rd Street Ct.	0	1	1	0	1	0.60	6,000	0.27
87th Ave. at Oakridge Group Home	0	2	0	0	0	0.40	7,700	0.14
Steilacoom Blvd. at Farwest Drive	4	12	3	4	2	5.00	18,900	0.72
Steilacoom Blvd. at Chapel Gate Dr.	1	0	2	0	1	0.80	17,000	0.13
Steilacoom Blvd. at Circle Dr.	1	3	0	2	2	1.60	18,000	0.24
Steilacoom Blvd. at CSTC Entrance	0	0	0	0	1	0.20	17,700	0.03
Steilacoom Blvd. at 87th Ave.	3	1	3	3	5	3.00	23,900	0.34
Segment								**MVM [3]**
87th Ave. north of 82nd St.	0	0	1	0	0	0.20	6,000	1.29
87th Ave.: 82nd Street to 83rd St.	0	0	0	0	0	0.00	6,000	0.00
87th Ave.: 83rd Street to Steilacoom Blvd.	0	3	0	0	1	0.80	7,700	1.77
Sentinel Dr. north of Steilacoom Blvd.	0	1	0	0	0	0.20	2,700	4.76
Steilacoom Blvd.: Farwest to Chapel Gate	2	5	5	4	0	3.20	16,500	1.91
Steilacoom Blvd.: Chapel Gate to Circle Dr.	3	2	3	0	0	1.60	16,800	1.32
Steilacoom Blvd.: Circle Dr. to CSTC Entry	0	0	0	1	1	0.40	17,500	0.16
Steilacoom Blvd.: CSTC Entry to 87th Ave.	0	0	0	1	3	0.80	17,600	0.82
Golf Course Rd. west of 87th Ave.	0	0	0	0	1	0.20	500	1.10

1. Estimated Average Weekday Daily Traffic
2. Crashes per Million Entering Vehicles
3. Crashes per Million Vehicle Miles Traveled

Table 7: Crash History by Type

Location	Rear-End	Fixed Object	Opp. Dir. Left[1]	Side-swipe	Entering at Angle	Ped. / Bike	Other
Intersection							
87th Ave. at 82nd Street	0	1	0	0	0	0	0
87th Ave. at 83rd Street Ct.	1	0	0	0	2	0	0
87th Ave. at Oakridge Group Home	0	1	0	0	0	1	0
Steilacoom Blvd. at Farwest Drive	11	3	8	1	1	0	1
Steilacoom Blvd. at Chapel Gate Dr.	1	0	0	0	2	0	1
Steilacoom Blvd. at Circle Dr.	4	1	1	0	2	0	0
Steilacoom Blvd. at CSTC Entrance	0	0	1	0	0	0	0
Steilacoom Blvd. at 87th Ave.	5	1	3	4	2	0	0
Segment							
87th Ave. north of 82nd St.	0	0	0	0	0	1	0
87th Ave.: 82nd Street to 83rd St.	0	0	0	0	0	0	0
87th Ave.: 83rd Street to Steilacoom Blvd.	2	1	0	0	0	1	0
Sentinel Dr. north of Steilacoom Blvd.	1	0	0	0	0	0	0
Steilacoom Blvd.: Farwest to Chapel Gate	9	3	0	2	0	0	2
Steilacoom Blvd.: Chapel Gate to Circle Dr.	2	2	0	3	0	0	1
Steilacoom Blvd.: Circle Dr. to CSTC Entry	1	0	0	0	0	0	1
Steilacoom Blvd.: CSTC Entry to 87th Ave.	1	1	0	2	0	0	0
Golf Course Rd. west of 87th Ave.	0	0	0	0	0	0	1

1. Reported as “Opposite Direction - One Left - One Straight” and not “Entering at Angle”

Between 2013 and 2017 there were 96 collisions reported and 69% of those crashes resulted in property damage only. In 2015 there was one fatality reported on Steilacoom Blvd. SW with a vehicle in the eastbound direction colliding with the rock wall along the roadway.

Overall, the number of reported crashes peaked in 2014, with 30 total crashes reported. Compared to the other years, where the annual number of crashes ranged from 14 to 18 per year.

In general, intersections with crash rates of 1.00 crashes per million entering vehicles and roadway segments with crash rates of 10.00 crashes per million vehicle miles traveled are considered as high crash locations. None of the study area intersections or roadway segments meeting these crash rate thresholds.

The study area crashes included: rear-end (40%), fixed object (15%), opposite direction (14%), sideswipe (12%), entering at angle (9%), pedestrian or bicyclist (3%) and other (7%). On Steilacoom Blvd. SW the low rock walls on both sides of the roadway and lack of a center lane or turn lane factors into the types of crashes reported, with rear ends, opposite direction, sideswipes, entering at angle crashes.

Non-Motorized Conditions

Sentinel Dr. SW includes sidewalks on both sides of the roadway from Steilacoom Blvd. SW to the high school. There is one east-west crossing at the south end of the southmost high school driveway.

A shared-use path is along the Fort Steilacoom Park side of Steilacoom Blvd. SW. A tunnel under Steilacoom Blvd. SW provides direct access between the campus to the park. The signalized intersection at Circle Dr. includes marked crosswalks on the north and west legs of the intersection.

87th Ave. SW includes sidewalks and bicycle lanes on both sides of the roadway from Steilacoom Blvd. SW to Onyx Dr. SW, just north of Golf Course Rd.

There are no marked pedestrian facilities on Golf Course Rd.

Transit Conditions

Pierce Transit Route 212 Steilacoom provides weekday and weekend services along Steilacoom Blvd. SW and to Pierce College. Weekday headways are about 50 minutes in length. Transit stops are located at Farwest Dr. SW, between Chapel Gate Dr. and Circle Dr. and at 87th Ave. SW.

Future No Action

This section summarizes the future traffic conditions prior without improvement and modifications to the existing campus. The future "No Action" condition represents a baseline condition against which to measure specific impacts related to the proposed Master Plan.

Horizon Year

The Master Plan represents a 10-year build-out plan for WSH. For this analysis the horizon year is 2030.

The Comprehensive Plans from the City of Lakewood Comprehensive Plan and Town of Steilacoom were reviewed to estimate traffic growth in the study area. On Steilacoom Blvd. SW, the traffic volumes were forecast to grow by less than 0.5% per year, based on information from the Town of Steilacoom.

To be conservative, between now and 2030 traffic volumes around the WSH campus is estimated to grow at a rate of 1.0% annually. The growth rate includes both regional and local traffic growth.

The No Action analysis does not assume any growth on the campus and at the high school.

Transportation Improvements

The City of Lakewood's Six-Year 2020-2025 Transportation Improvement Plan (TIP) identifies the following transportation facility improvements near the campus:

- 302.0024 Steilacoom Blvd. SW – Farwest Dr. SW to Phillips Rd. SW. Acquire right-of-way to design and construct curb, gutter, sidewalk, sharrows, turn lanes, street lighting, drainage and overlay. Right-of-way acquisition and design are funded, and construction is not. With the exception of design, the project is anticipated to be complete by 2021. (Lakewood TIP)
- 302.0117 Roundabout 87th Ave. SW, Dresden Ln. SW and Fort Steilacoom Park Entrance. Constructs roundabout, with curb, gutter, sidewalk, sharrows, street lighting, drainage, roadway reconstruction and signage at the park entrance on 87th Ave. SW. This project is not currently funded. (Lakewood TIP)

The Town of Steilacoom's Six-Year Transportation Improvement Plan 2019 to 2024 and Comprehensive Plan identify the following transportation facility improvements near the campus:

- Steilacoom Blvd. SW Non-Motorized Improvements. Design and construct curb, gutter, sidewalk and bike lanes on Steilacoom Blvd. SW from Puyallup St. to Farwest D. SW. The project is fully funded, and completion is anticipated in 2019. (Steilacoom TIP/Comprehensive Plan)

Transportation facility improvements are incorporated into the analyses of future traffic conditions.

Traffic Volumes

Figure 9 illustrates the future no action traffic volumes.

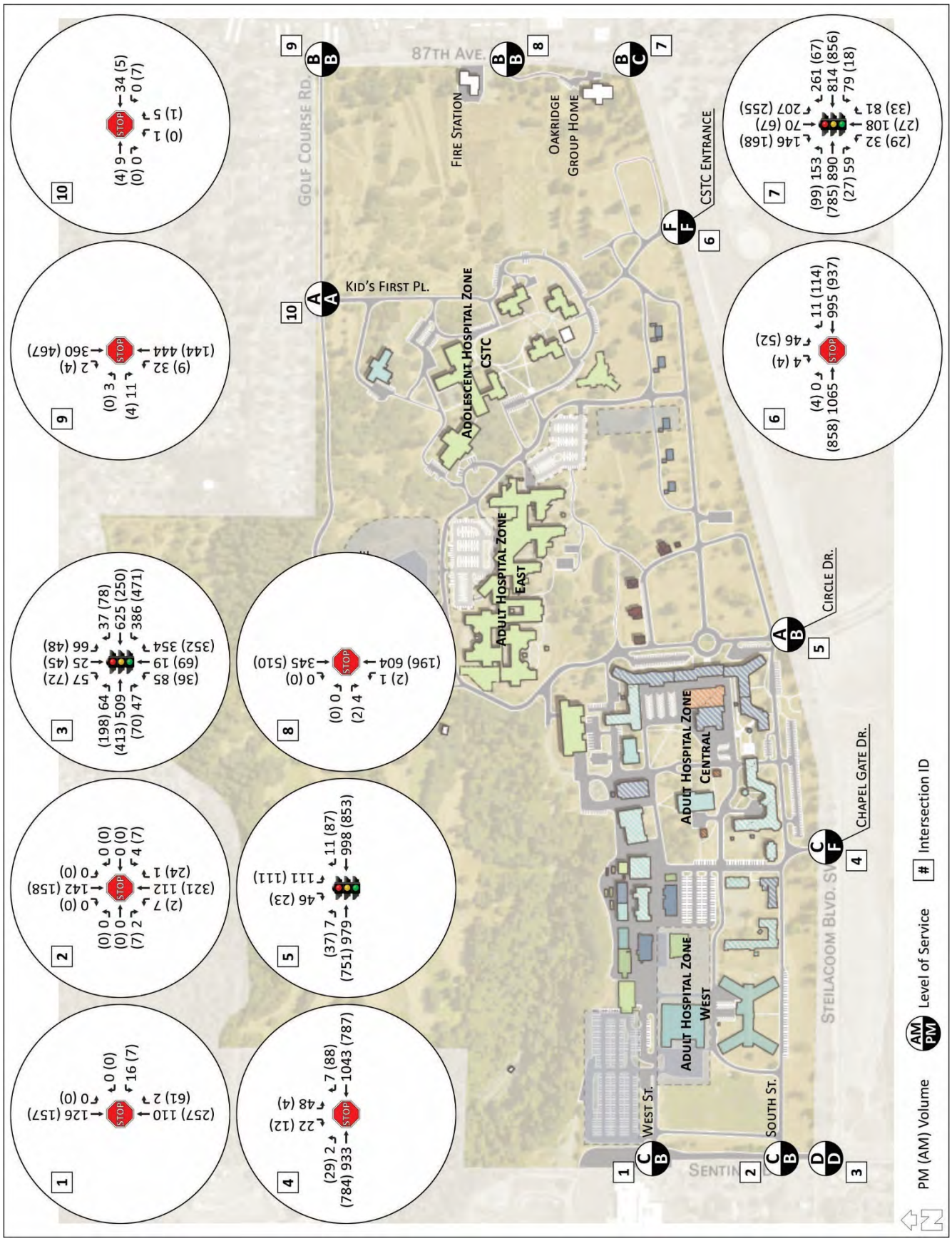


Figure 9: Future No Action AM and PM Peak Hour Traffic Volumes

Level of Service

Intersection Level of Service

Table 8 summarizes the future no action study intersection LOS.

Table 8: Future No Action AM and PM Peak Hour Intersection LOS

Intersection	Control	AM Peak Hour				PM Peak Hour			
		Existing		No Action		Existing		No Action	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Sentinel Dr. / West St.	WB Stop	C	19.1	C	19.1	B	11.3	B	11.3
Sentinel Dr. / South St.	WB Stop	C	22.1	C	18.8	B	10.8	B	10.8
Farwest Dr. / Steilacoom Blvd.	Signal	C	28.3	D	36.9	C	33.4	D	41.5
Chapel Gate Dr. / Steilacoom Blvd.	SB Stop	C	15.2	C	18.3	D	32.8	F	60.1
Circle Dr. / Steilacoom Blvd.	Signal	A	5.3	A	5.3	B	14.6	B	14.4
CSTC Entrance / Steilacoom Blvd.	SB Stop	F	52.7	F	100	E	39.9	F	74.8
87th Ave. / Steilacoom Blvd.	Signal	B	16.6	B	19.3	B	19.1	C	21.8
87th Ave. / Oakridge Group Home	EB Stop	B	10.9	B	11.8	A	9.9	B	10.4
87th Ave. / Golf Course Rd.	EB Stop	B	10.9	B	11.7	B	10.6	B	11.3
Kids First Pl. / Golf Course Rd.	NB Stop	A	8.3	A	8.4	A	8.4	A	8.5

In the future, the additional non-WSH traffic volumes result in increases in control delay at the study intersections. The study intersections are forecast to operate at LOS D or better and satisfy the City of Lakewood's LOS threshold, except the Chapel Gate Dr. and CSTC Entrance driveways off Steilacoom Blvd. SW.

- In the AM peak hour, the Chapel Gate Dr. stop-controlled approach to Steilacoom Blvd. SW is calculated to operate at LOS C (existing) and LOS C (No Action). In the PM peak hour, the approach is calculated to operate at LOS D (existing) and LOS F (No Action).
- In the AM peak hour, the CSTC Entrance stop-controlled approach to Steilacoom Blvd. SW is calculated to operate at LOS F (existing) and LOS F (No Action). In the PM peak hour, the approach is calculated to operate at LOS E (existing) and LOS F (No Action).

Arterial Level of Service

Table 9 summarizes the future No Action peak hour arterial LOS on Steilacoom Blvd. SW. The future arterial volumes on Steilacoom Blvd. SW in the vicinity of the campus satisfy the City of Lakewood's V/C threshold.

Table 9: No Action Arterial LOS on Steilacoom Blvd. SW

Direction	Capacity[1]	Existing V/C	No Action Vol.[2]	No Action V/C
Eastbound	1,825	0.54	1,178	0.65
Westbound	1,825	0.51	1,154	0.63

1. City of Lakewood Comprehensive Plan Final EIS – June 2000
2. Maximum PM peak hour volume in one direction

Vehicle Queuing (Stacking)

Vehicle queues were computed using the HCM 2010 95th-percentile queue equations to evaluate future vehicle queue impacts around the campus. Table 10 summarizes the queue output.

Table 10: Future No Action Steilacoom Blvd SW Queues

Intersection	Mvmt.	AM Peak Hour			PM Peak Hour			Storage (feet)
		Q-V/L[1]	Q-feet[2]	V/C	Q-V/L[1]	Q-feet[2]	V/C	
Farwest Dr. / Steilacoom Blvd.	WB L	22.3	560	0.95	12.8	320	0.97	200
	WB T	7.8	195	0.29	14.5	365	0.55	1,380
	WB TR	7.8	195	0.30	14.9	375	0.55	1,380
	SB L	2.8	70	0.26	4.0	100	0.51	125
	SB TR	7.4	185	0.69	5.1	130	0.69	140
Chapel Gate Dr. / Steilacoom Blvd.	SB	0.2	5	0.06	2.7	70	0.54	
Circle Dr. / Steilacoom Blvd.	EB LT	4.2	105	0.42	11.6	290	0.63	1,000
	EB T	4.0	100	0.74	10.8	270	0.68	1,000
	WB T	5.1	130	0.52	11.1	280	0.66	1,955
	WB TR	5.2	130	0.52	11.5	290	0.66	1,955
	SB LT	2.4	60	0.54	3.3	85	0.23	25
CSTC Entrance / Steilacoom Blvd.	SB	3.4	85	0.68	2.4	60	0.53	
87th Ave. / Steilacoom Blvd.	EB L	4.1	105	0.78	7.0	175	0.80	200
	EB T	9.6	240	0.51	12.0	300	0.60	685
	EB TR	9.6	240	0.51	12.3	310	0.60	685
	SB L	8.9	225	0.73	2.9	75	0.61	125
	SB TR	2.0	50	0.22	2.1	55	0.22	550
	SB R	5.4	135	0.63	4.6	115	0.51	250

1. queue expressed as vehicles per lane
2. queue lengths are converted to fee with approximately 25 feet per vehicle and are rounded to the nearest multiple of "5"

The 95th-percentile queues are noticeable, but the intersection and driveway spacing on Steilacoom Blvd SW are more than sufficient to support the computed queues.

- The westbound left turn queue on Steilacoom Blvd. SW approaching Farwest Dr. SW is computed to exceed the 200-foot storage pocket in both the AM and PM peak hours, by up to 360 feet. The peak hour westbound left turn V/C ratios are greater than 0.90 suggesting that the left turn movement is nearing capacity. Overall, the westbound approach queues, overall, do not extend into the adjacent Chapel Game Dr. intersection.
- The southbound queue at Chapel Gate Dr. approaching Sentinel Dr. SW is computed to be up to 70 feet.
- The southbound queue at Circle Dr. approaching Steilacoom Blvd. SW is computed to be 90 feet. The Circle Dr. and internal Front St. intersection is located approximately 25 feet north of the signalized intersection. Peak hour queues are forecast to continue to extend through the internal intersection from Steilacoom Blvd. SW.
- The southbound queue at CSTC Entrance approaching Sentinel Dr. SW is computed to be up to 85 feet.
- The eastbound left turn queue on Steilacoom Blvd. SW approaching 87th Ave. SW is computed to fit within the 200-foot storage pocket in both the AM and PM peak hours.
- The southbound left turn queue on 87th Ave. SW approaching Steilacoom Blvd. SW is computed to exceed the 125-foot storage pocket in the AM peak hour, by 100 feet or four vehicle lengths.

Traffic Circulation

The on-campus circulation is not forecast to substantially change in the future with the proposed No Action.

Safety

The crash frequency is forecast to increase proportional to the future traffic volumes.

Non-Motorized Conditions and Transit Conditions

The on-campus circulation and the non-motorized and transit conditions are not forecast to substantially change between now and 2030 with the No Action conditions.

Recommendations

The following outlines recommendations for the future No Action condition.

- Circulation. Improve the campus's internal roadway circulation by increasing the spacing between internal roadways and intersections and driveways.
- Access. Improve access to the campus by enhancing traffic flow to and from Steilacoom Blvd. SW via:
  - Install a traffic control signal at Chapel Gate Dr., with the intent of concentrating more traffic to this access and reducing traffic impacts on Sentinel Dr. The FHWA recommends that a traffic control signal meet certain "warrants", which are discussed later in this document.
  - Shift CSTC Entrance east and signalize the driveway, to increase the spacing between the CSTC Entrance and 87th Ave. SW and with the intent of concentrating more traffic to this access and reducing traffic impacts on 87th Ave. SW. The FHWA recommends that a traffic control signal meet certain "warrants", which are discussed later in this document.
  - Widen Steilacoom Blvd. SW to provide left turn pockets and acceleration lanes to improve left turn maneuvers to and from the campus. Left turn lanes would enhance site access by providing a "pocket" off of the mainline for vehicles to queue in before making a left turn to the campus. Acceleration lanes, in the form of a center turn lane, would allow staged left turn maneuvers (left turn out of campus to turn lane to merge with opposing traffic volume). Widening requires right-of-way acquisition.
  - An alternative to widening, is to reduce the number of lanes on Steilacoom Blvd. SW, this is often referred to as a "road diet". The lane reduction would create a three-lane cross-section with wide shoulders and bicycle lanes and a center turn lane. The FHWA recommends a feasibility study for a road diet of four- to three-lane roadway where the ADT is greater than 20,000 vehicles.
  - As alternative to traffic signals, install a single-lane (or multilane) roundabout. Unlike a signal, roundabouts have less of an impact on travel times since they are not creating designated stops for the mainline traffic flow. Roundabouts also do not have adopted "warrant" criteria.
  - Remove the existing signal at Circle Drive and Steilacoom Blvd SW, and repurposing the intersection to be right-in and right-out only restricted. This will decentralize access at Circle Dr. and refocus traffic to the Chapel Gate Dr. and CSTC Entrance driveways.
  - Close or add gates (restrictions) to existing main campus access off Sentinel Dr. and Golf Course Rd. West St. could be gated and restricted for service vehicles only. Kids First Pl. could also be gated, for fire and emergency vehicle access to the site only. Also, vehicle access to campus' other secondary entrances off Golf Course Rd. could be restricted. By restricting or eliminating these access, the campus traffic would be forced to access the site off Steilacoom Blvd SW, which would mitigate neighborhood concerns with campus traffic impacting the high school and residents.
- Support. DSHS should provide their support for non-motorized and turn lane improvements on Steilacoom Blvd. SW, planned by both the Town of Steilacoom and City of Lakewood.
- Parking. Consolidate, mark, pave and manage parking areas to reduce parking sprawl on campus. Designate areas for staff based on the location and function of employees

Trip Generation, Distribution and Assignment

This section describes the trip generation and PM peak hour trip distribution and travel assignment forecasts for the proposed Master Plan, or "Action" condition. The following analysis is consistent with the trip generation methodology from the traffic concurrency request and concurrency findings output.

Trip Generation

Trips generated by build-out of the Master Plan were forecast from the existing campus' driveway volumes. Trip rates were computed based on the number of vehicle trips generated per bed. Table 11 summarizes the trip forecast for the Proposed Action.

Table 11: Proposed Action Trip Generation Forecast

	"No Action" # of Beds[1,2]	"No Action" Trips	% (In/Out)	Rate (Trips/Bed)	"Action" # of Beds[1]	"Action" Trips	Trip Difference
AM Generator (6:30-7:30 AM)	907	828	66/34	0.91	799	727	(101)
AM Peak Hour (7:00-8:00 AM)	907	677	67/33	0.75	799	599	(78)
PM Generator (2:15-3:15 PM)	907	764	41/59	0.84	799	671	(93)
PM Peak Hour (4:00-5:00 PM)	907	366	16/84	0.40	799	320	(46)
Daily Trips	907	6,046	48/52	6.67	799	5,329	(717)

1. See Table 1
2. Excludes Oakridge Group Home, which is not proposing to change from its current 16 bed capacity.

Overall, the Proposed Action reduces the number of patient beds on the campus; and thus, is forecast to generate less trips compared to the current campus (No Action).

Campus Area Breakdown

Overall, the Proposed Action reduces the patient capacity of the main campus. Services in the existing civil and forensic care would be consolidated from 860 patient beds (No Action) to 336 patient beds (Proposed Action). Future conditions also include a new forensic hospital for 350 patients, expansion of the CSTC from 47 beds (No Action) to 65 beds (Proposed Action), and addition of new community hospital with 48 patient beds.

Tables 12 and 13 summarize the AM and PM peak hour trips generated by the major campus accesses.

Table 12: AM Peak Hour Trips Generation by Campus Area

Campus Area	Existing Campus			Proposed Action		
	In	Out	Total	In	Out	Total
Sentinel Drive Driveway(s)	85	14	99	70	15	85
Steilacoom Blvd West Driveway (Chapel Gate)	117	16	133	109	15	124
Steilacoom Blvd Central Driveway (Circle Drive)	124	134	258	95	106	201
Steilacoom Blvd Driveway East (CSTC)	118	56	174	117	61	178
87th Ave SW at Golf Course Road	11	2	13	10	1	11
Total	455	222	677	401	198	599

Table 13: PM Peak Hour Trips Generation by Campus Area

Campus Area	Existing Campus			Proposed Action		
	In	Out	Total	In	Out	Total
Sentinel Dr. Driveway(s)	3	20	23	3	20	23
Steilacoom Blvd. West Driveway (Chapel Gate Dr.)	9	70	79	15	60	75
Steilacoom Blvd. Central Driveway (Circle Dr.)	18	157	175	17	125	142
Steilacoom Blvd. East Driveway (CSTC)	11	50	61	16	59	75
87th Ave. SW at Golf Course Rd.	19	9	28	0	5	5
Total	60	306	366	51	269	320

Peak Hour Trip Assignment

Campus generated trips were distributed based on the traffic volumes at the campus driveways and on Steilacoom Blvd. SW and 87th Ave. SW.

This analysis assumes the future campus will generate similar peak hour trip patterns compared to existing conditions. With the Proposed Action:

- South St. driveway off Sentinel Dr. SW is vacated;
- CSTC Entrance is relocated about 800 feet to the west of its current location to be roughly midblock on Steilacoom Blvd. SW between Circle Dr. and 87th Ave. SW; and
- use of the gated access to the gravel lot off Golf Course Rd. is restricted with traffic redistributed to Steilacoom Blvd. SW.

Figure 10 illustrates the AM and PM peak hour trips of the existing campus (No Action).

Figure 11 illustrates the net new AM and PM peak hour trips with the Proposed Action.

With the Proposed Action, the overall campus the volumes in the study area reduced. Certain driveways are projected to see increases in traffic based on the locations of new buildings and certain driveways are projected to see decreases in traffic based on buildings being removed and activities being consolidated on the campus.

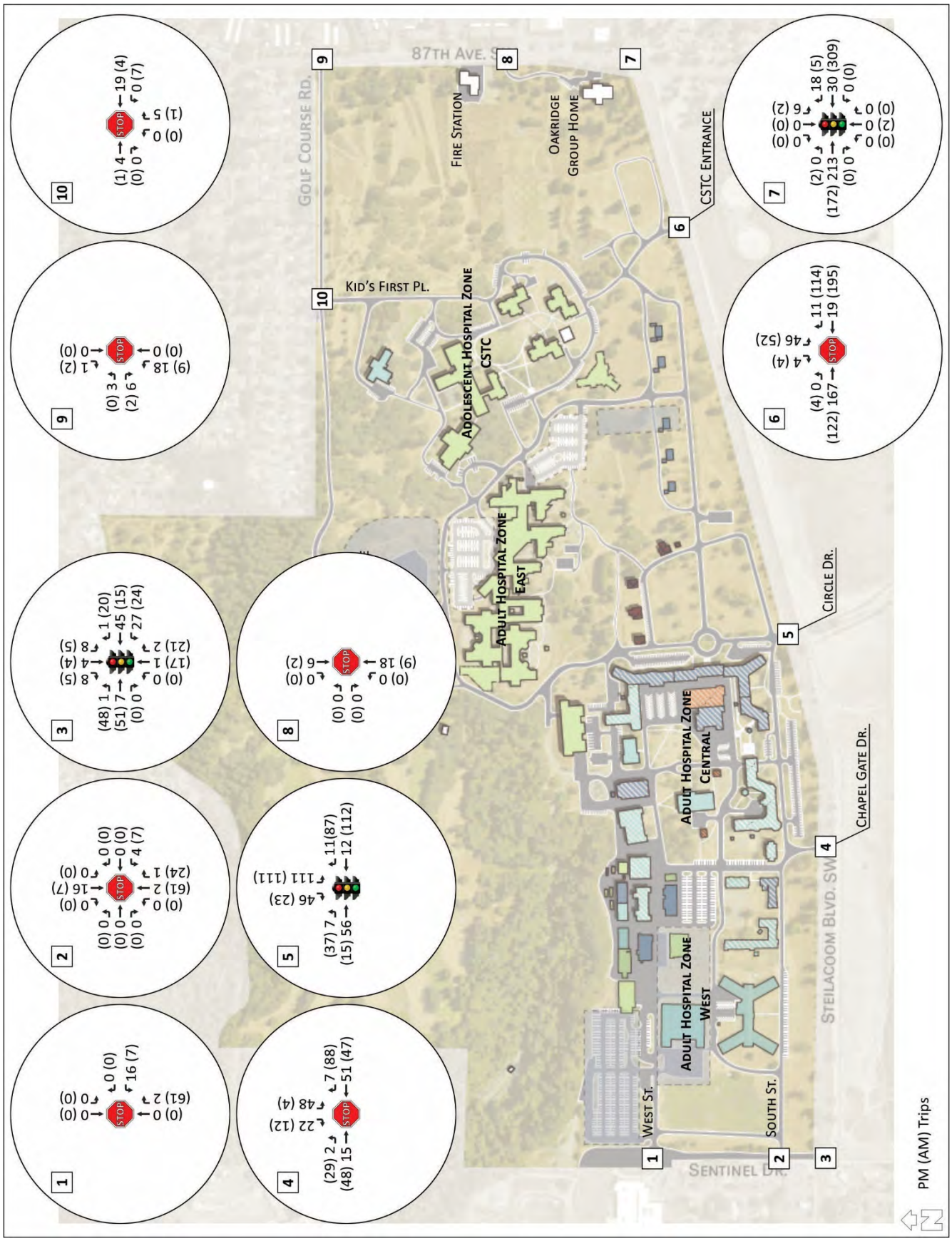


Figure 10: Existing Campus AM and PM Peak Hour Campus Trips

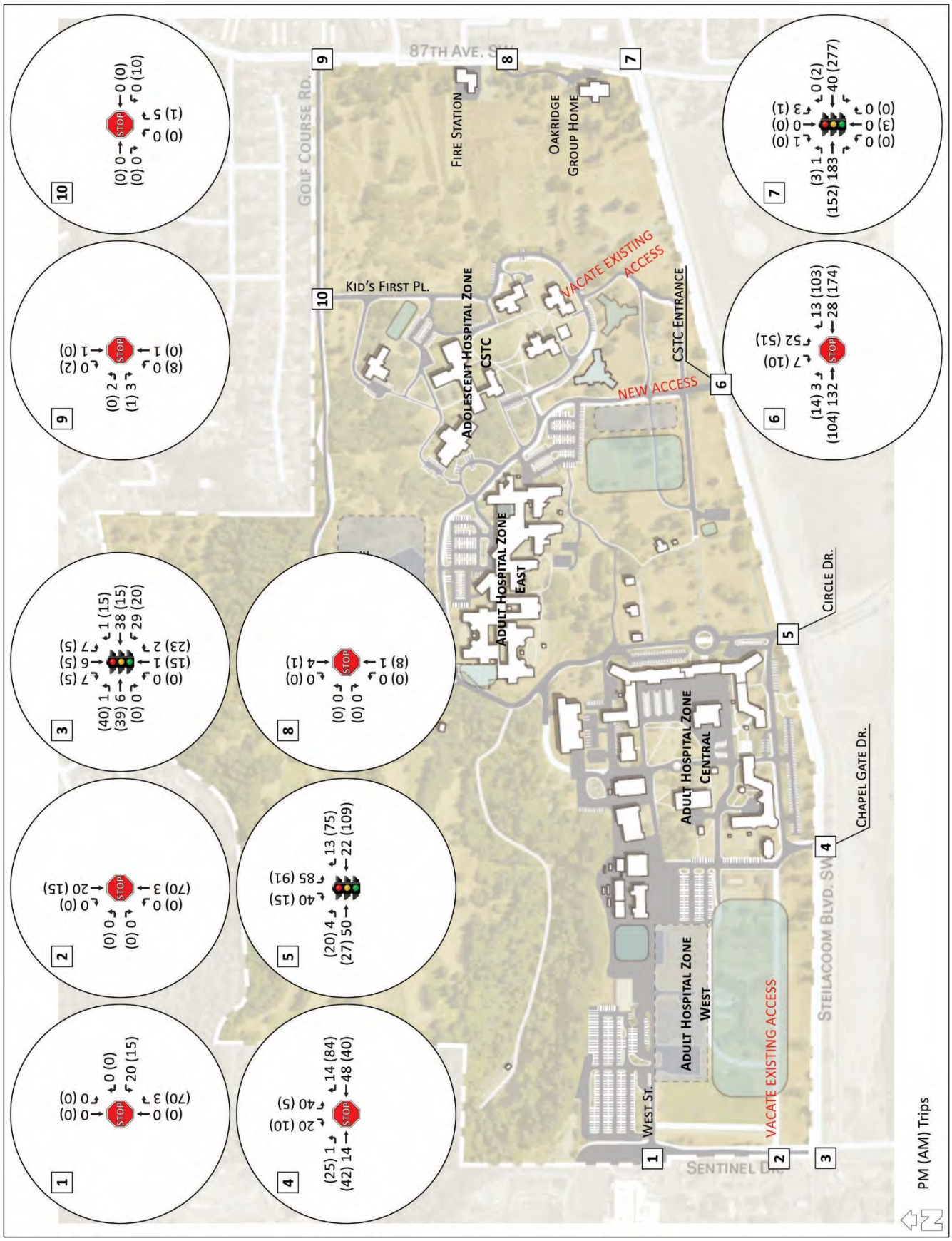


Figure 11: Net New AM and PM Peak Hour Campus Trips

Proposed Action

This section summarizes the future traffic conditions with built-out of the Proposed Action.

With the Proposed Action, the existing CSTC Entrance is proposed to be relocated to the east on Steilacoom Blvd. SW at roughly midway between the existing Circle Dr. intersection and 87th Ave. SW. Additionally, the existing South St. driveway off Sentinel Dr. SW would be closed.

Traffic Volumes

Future AM and PM peak hour traffic volumes with the Proposed Action were forecast by adding the net new trips generated with the proposal to the future No Action volumes. The future AM and PM peak hour traffic volumes with the Proposed Action are illustrated in Figure 12.

Level of Service

Intersection Level of Service

Table 8 summarizes the future no action study intersection LOS.

Future with-Project study intersection level-of-service is summarized in Table 14.

Table 14: Proposed Action AM and PM Peak Hour Intersection Level-of-Service

Intersection	Control	AM Peak Hour				PM Peak Hour			
		No Action		Proposed Action		No Action		Proposed Action	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Sentinel Dr. / West St.	WB Stop	C	19.1	C	20.0	B	11.3	B	11.3
Sentinel Dr. / South St.	WB Stop	C	18.8	Closed		B	10.8	Closed	
Farwest Dr. / Steilacoom Blvd.	Signal	D	36.9	D	36.0	D	41.5	D	41.7
Chapel Gate Dr. / Steilacoom Blvd.	SB Stop	C	18.3	C	19.9	F	60.1	F	51.1
Circle Dr. / Steilacoom Blvd.	Signal	A	5.3	A	5.1	B	14.4	B	14.5
CSTC Entrance / Steilacoom Blvd.	SB Stop	F	100	F	94.1	F	74.8	F	83.6
87th Ave. / Steilacoom Blvd.	Signal	B	19.3	B	19.3	C	21.8	C	21.8
87th Ave. / Oakridge Group Home	EB Stop	B	11.8	B	11.7	B	10.4	B	10.4
87th Ave. / Golf Course Rd.	EB Stop	B	11.7	B	11.7	B	11.3	B	11.1
Kids First Pl. / Golf Course Rd.	NB Stop	A	8.4	A	8.3	A	8.5	A	8.4

The study intersections are forecast to operate at LOS D or better and satisfy the City of Lakewood's level-of-service threshold, except the Chapel Gate Drive and CSTC Entrance driveways on Steilacoom Blvd SW.

- In the AM peak hour, the Chapel Gate Dr. stop-controlled approach to Steilacoom Blvd. SW is calculated to operate at LOS C (No Action) and LOS C (Proposed Action). In the PM peak hour, the approach is calculated to operate at LOS F (No Action) and LOS F (Proposed Action).
- In the AM peak hour, the CSTC Entrance stop-controlled approach to Steilacoom Blvd. SW is calculated to operate at LOS F (No Action) and LOS F (Proposed Action). In the PM peak hour, the approach is calculated to operate at LOS F (No Action) and LOS F (Proposed Action).

Consolidation of services on the campus, even with the expansion results in reducing the number of trips generated and vehicle delays at the West Street, South Street, Chapel Gate Drive and Circle Drive driveways.

Build-out of the proposed WSH East Zone and expansion of services in the CSTC Zone increase the number of trips generated and vehicle delays at the CSTC Entrance and Kids First Place driveways.

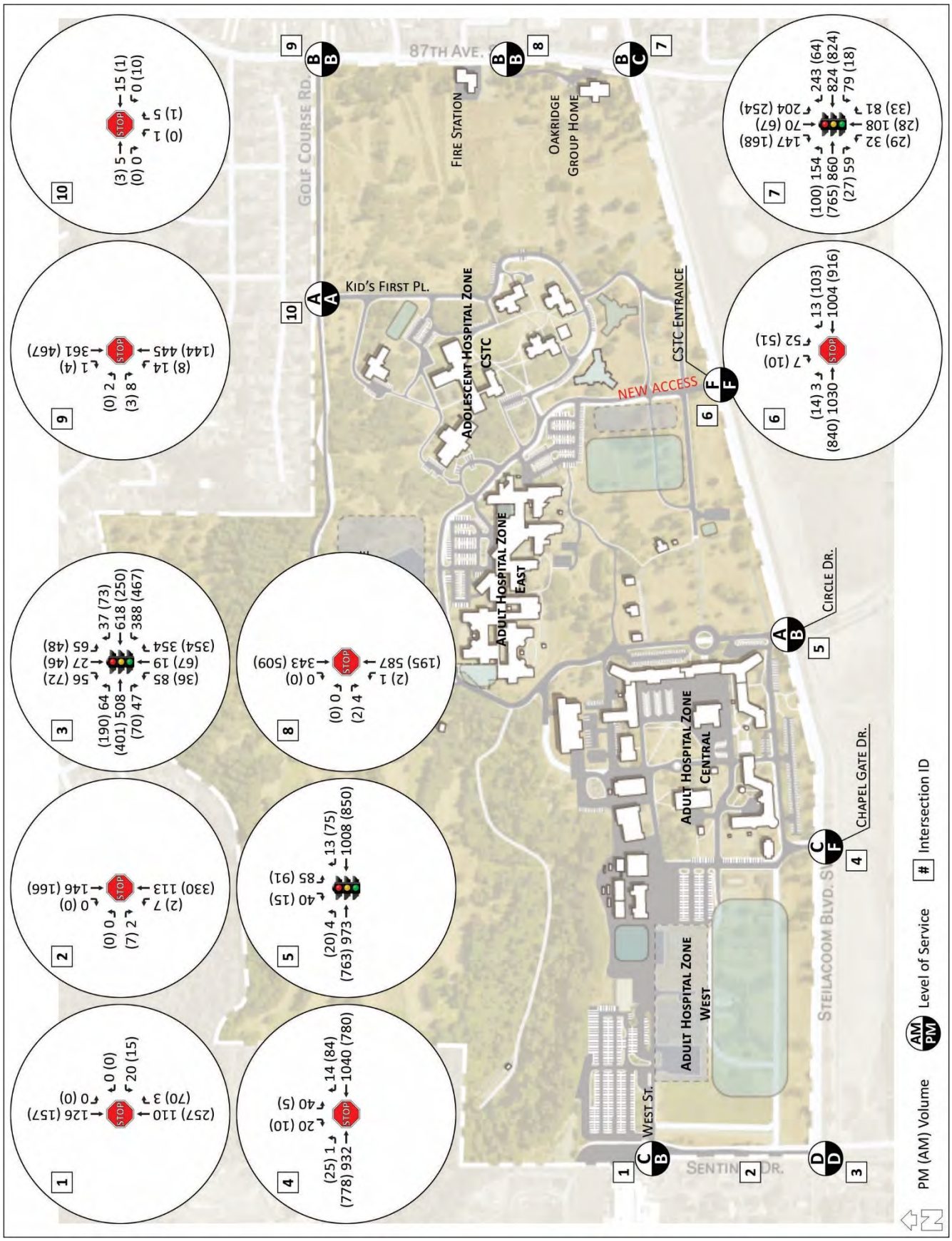


Figure 12: Future Proposed Action AM and PM Peak Hour Traffic Volumes

Arterial Level-of-Service

Table 15 summarizes the future Proposed Action peak hour arterial level-of-service on Steilacoom Blvd SW. The future arterial volumes on Steilacoom Blvd SW in the vicinity of the campus satisfies the volume-to-capacity threshold from the City of Lakewood.

Table 15: Proposed Action Arterial Level-of-Service on Steilacoom Blvd SW

Direction	Capacity[1]	No Action V/C	Action Vol.[2]	Action V/C
Eastbound	1,825	0.65	1,145	0.63
Westbound	1,825	0.63	1,150	0.63

1. City of Lakewood Comprehensive Plan Final EIS – June 2000
2. Maximum PM peak hour volume in one direction

With the Proposed Action, the volumes on Steilacoom Blvd SW and corresponding volume-to-capacity ratios are less than in the No Action conditions.

Vehicle Queuing (Stacking)

Vehicle queues were computed using the HCM 2010 95th-percentile queue equations to evaluate future vehicle queue impacts around the campus. Table 16 summarizes the queue output.

Table 16: Proposed Action Steilacoom Blvd SW Queues

Intersection	Mvmt.	AM Peak Hour			PM Peak Hour			Storage (feet)
		Q-V/L[1]	Q-feet[2]	V/C	Q-V/L[1]	Q-feet[2]	V/C	
Farwest Dr. / Steilacoom Blvd.	WB L	21.7	545	0.94	13.0	325	0.98	200
	WB T	7.6	190	0.29	14.4	360	0.54	1,380
	WB TR	7.7	195	0.29	14.7	370	0.54	1,380
	SB L	2.8	70	0.69	3.9	100	0.50	125
	SB TR	7.5	190	0.68	5.1	130	0.69	140
Chapel Gate Dr. / Steilacoom Blvd.	SB	0.2	5	0.06	2.0	50	0.45	
Circle Dr. / Steilacoom Blvd.	EB LT	4.3	110	0.41	11.5	290	0.63	1,000
	EB T	3.9	100	0.46	10.7	270	0.67	1,000
	WB T	5.0	125	0.51	11.5	290	0.67	1,250
	WB TR	5.1	130	0.51	11.9	300	0.67	1,250
	SB LT	1.8	45	0.42	2.6	65	0.19	25
CSTC Entrance / Steilacoom Blvd.	SB	3.5	90	0.68	3.0	75	0.61	
87th Ave. / Steilacoom Blvd.	EB L	4.2	105	0.78	7.1	180	0.80	200
	EB T	9.4	235	0.50	11.7	295	0.58	1,550
	EB TR	9.7	240	0.50	11.9	300	0.58	1,550
	SB L	8.9	225	0.73	2.6	65	0.60	125
	SB TR	2.0	50	0.22	2.1	55	0.22	550
	SB R	5.4	135	0.63	4.7	120	0.52	250

3. queue expressed as vehicles per lane
4. queue lengths are converted to fee with approximately 25 feet per vehicle and are rounded to the nearest multiple of "5"

The 95th-percentile queues are noticeable, but the intersection and driveway spacing on Steilacoom Blvd SW are more than sufficient to support the computed queues.

- The westbound left turn queue on Steilacoom Blvd. SW approaching Farwest Dr. SW is computed to exceed the 200-foot storage pocket in both the AM and PM peak hours, by up to 345 feet. Compared to the No Action condition, the Proposed Action queues are similar. With the Proposed Action, the peak hour westbound left turn V/C ratios are greater than 0.90 suggesting that the left turn movement is

nearing capacity. Overall, the westbound approach queues, overall, do not extend into the adjacent Chapel Game Dr. intersection.

- The southbound queue at Chapel Gate Dr. approaching Sentinel Dr. SW is computed to be up to 50 feet.
- The southbound queue at Circle Dr. approaching Steilacoom Blvd. SW is computed to be 65 feet. The Circle Dr. and internal Front St. intersection is located approximately 25 feet north of the signalized intersection. Peak hour queues are forecast to continue to extend through the internal intersection from Steilacoom Blvd. SW.
- The southbound queue at CSTC Entrance approaching Sentinel Dr. SW is computed to be up to 90 feet.
- The eastbound left turn queue on Steilacoom Blvd. SW approaching 87th Ave. SW is computed to fit within the 200-foot storage pocket in both the AM and PM peak hours.
- The southbound left turn queue on 87th Ave. SW approaching Steilacoom Blvd. SW is computed to exceed the 125-foot storage pocket in the AM peak hour, by 100 feet or four vehicle lengths.

Traffic Circulation

- Figure 13 shows the shows the major traffic circulation routes with the Proposed Action. Changes include deemphasizing use of Circle Dr. and Golf Course Rd, closure of the South St. driveway off Sentinel Dr. SW and enhancing use of the Chapel Gate Dr. and relocated CSTC Entrance driveways.
- Figure 14 shows the patient admissions and discharge route to and from the WSH campus with the Proposed Action. Changes include ingress and egress proposed from the relocated CSTC Entrance to deemphasize use of the Circle Dr.
- It is not yet clear whether the on-campus shuttle service will change or continue with the Proposed Action; and therefore, no new routing is being proposed.
- Figure 15 shows the primary service vehicle routes to the WSH campus with the Proposed Action. The major service vehicle routes are intended to shift to the periphery of the campus via Sentinel Dr. SW.

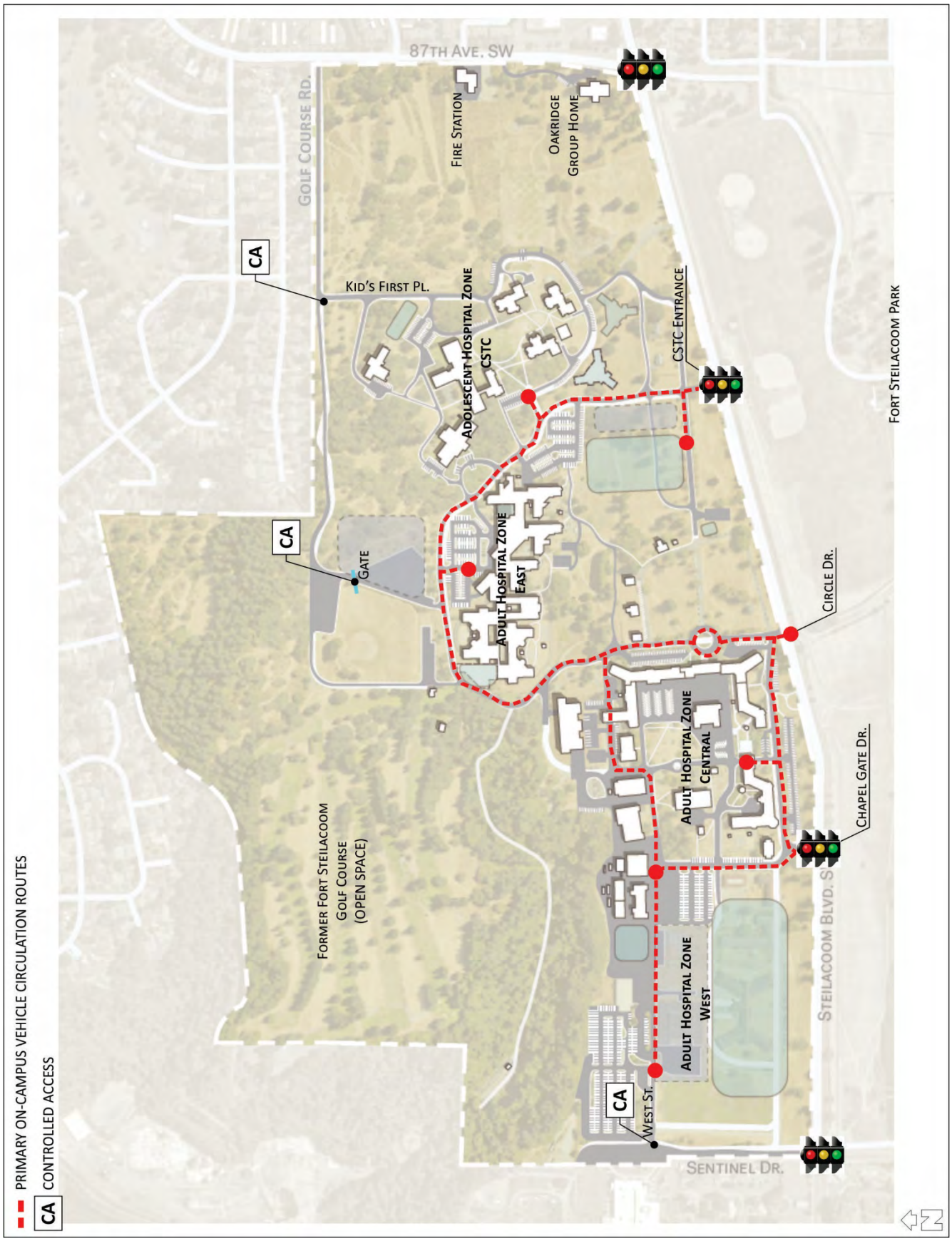


Figure 13: Proposed Action On-Campus Primary Vehicle Circulation Routes

Figure 14: Proposed Action Patient Admissions and Discharge Route

Figure 15: Proposed Action WSH Primary Service Vehicle Routes

Safety

The overall future crash frequency is anticipated to be proportional to the forecasted changes in the traffic volumes and patterns around the site.

Review of the 2013-2017 crash history identified no reported crashes on 87th Ave. SW at Golf Course Rd. or on Sentinel Dr. SW at West St. or South St. At the main campus accesses off Steilacoom Blvd. SW, there were no trends or crash incidents to suggest any significant safety issue(s).

With the Proposed Action, crash incidents at the three campus driveways off Steilacoom Blvd. SW. on were reviewed in further detail to provide recommendations for enhancing access to the campus off Steilacoom Blvd SW. Reported incidents at the main campus accesses on Steilacoom Blvd. SW include:

Chapel Gate Drive
- 2 lefts-out of Chapel Gate
- 1 rear-end on Steilacoom
- 1 vehicle strikes deer on Steilacoom Blvd SW

Circle Drive
- 1 left-in to Circle Drive
- 2 left-out of Circle Drive
- 4 rear-ends on Steilacoom
- 1 right-in strikes tree at Circle Drive

CSTC Entrance
- 1 left-out of CSTC Entrance

Most of the left-turn collisions appear to involve service or delivery vehicles, classified in the collision reports as "*pickup, panel truck, or vannette under 10,000 lb*" maneuvers into or out of the driveways.

To reduce the campus' traffic impacts on 87th Ave. SW and Sentinel Dr., DSHS is proposing to enhance access to the main campus off Steilacoom Blvd. SW. Enhancement-improvements options to consider include:

1A. Widen the Steilacoom Blvd. SW to accommodate left-turn pockets for vehicles making left-turns into the campus. Turn pockets, allow left turning vehicles to queue separate from the major eastbound traffic flow while drivers wait for a gap in the opposing traffic to turn into the campus. The left turn pockets would reduce the rear-end crash potential on Steilacoom Blvd. SW.

1B. Add a center lane to Steilacoom Blvd. SW. This may include a center turn lane with medians. A center lane allows vehicles turning left from the site to enter the center lane and accelerate to merge into the eastbound traffic flow. This movement option can reduce delays and queue impacts onsite and it is generally safer for the driveway only have to discern one direction of traffic at a time.

2. Signalize the Chapel Gate Dr. and CSTC Entrance. Signalizing the driveways creates more direct access to the campus and allows for improved exiting traffic flows. By signalizing the driveways, the existing Circle Dr. signal could be removed, and the driveway could further be restricted to right-turns in and right-turns out only. Signal warrants are discussed in more detail later in this report.

It was understood that there were potential historical impacts along Steilacoom Blvd. SW that may limit the ability to widening the roadway. If viable, a widening the roadway with a center lane (Option 1B) allows for both left turn pockets and acceleration lanes.

The signals option (Option 2) will stop traffic on Steilacoom Blvd. SW combined with left turn pockets (Option 1A), would further enhance access to the campus. A drawback of the additional traffic signals is that they will increase the travel time on Steilacoom Blvd. SW.

Non-Motorized and Transit Conditions

On-campus pedestrian facilities will be upgraded to support campus activities.

As noted above the City of Lakewood and Town of Steilacoom are planning non-motorized improvements on Steilacoom Blvd. SW. The City of Lakewood's scope and timing for constructions of improvements on Steilacoom Blvd. SW including curb, gutter, sidewalk, sharrows, turn lanes, street lighting, drainage and overlay is undefined.

The Proposed Action is not forecast to change or adversely impact the current transit network.

Recommendations

The recommendations based on the Proposed Action are similar to those for the No Action.

- Circulation. Improve the campus's internal circulation by increasing the spacing between internal roadways and intersections and driveways.
- Access. Improve access to the campus by enhancing traffic flow to and from Steilacoom Blvd. SW via:
  - Install traffic control signals at Chapel Gate Dr. and at CSTC Entrance, with the intent to concentrate more traffic to these campus accesses and reduce traffic impacts on Sentinel Dr., 87th Ave. SW and Golf Course Rd. Traffic control signal installation requires certain "warrants" to be satisfied and these are discussed later in this document.
  - Widen Steilacoom Blvd. SW to provide left turn pockets and acceleration lanes to improve left turn maneuvers to and from the campus. Left turn lanes would enhance site access by providing a "pocket" off of the mainline for vehicles to queue in before making a left turn to the campus. Acceleration lanes, in the form of a center turn lane, would allow staged left turn maneuvers (left turn out of campus to turn lane to merge with opposing traffic volume). Widening requires right-of-way acquisition.
  - Remove the existing signal at Circle Drive and Steilacoom Blvd SW, and repurposing the intersection to be right-in and right-out only restricted. This will decentralize access at Circle Dr. and refocus traffic to the Chapel Gate Dr. and CSTC Entrance driveways.
  - An alternative to a traffic signal is a roundabout. Roundabouts do not create fixed stops and do not have adopted "warrant" criteria. Roundabouts do involve additional right-of-way.
  - Close or add gates (restrictions) to existing main campus access off Sentinel Dr. and Golf Course Rd. West St. could be gated and restricted for service vehicles only. Kids First Pl. could also be gated, for fire and emergency vehicle access to the site only. Also, vehicle access to campus' other secondary entrances off Golf Course Rd. could be restricted. By restricting or eliminating these access, the campus traffic would be forced to access the site off Steilacoom Blvd SW, which would mitigate neighborhood concerns with campus traffic impacting the high school and residents.
  - The Proposed Action includes new buildings nearer to the Chapel Gate Dr. and CSTC Entrance where enhanced accessibility would allow support improvements to driveway traffic control off Steilacoom Blvd SW.
- Support. DSHS should provide their support for non-motorized and turn lane improvements on Steilacoom Blvd. SW, planned by both the Town of Steilacoom and City of Lakewood. The Proposed Action to support improvements by the Town of Steilacoom and City of Lakewood.
- Parking. Consolidate, mark, pave and manage parking areas to reduce parking sprawl on campus. Designate areas for staff based on the location and function of employees. The Proposed Action is consolidating parking and parking designations will be addressed with building-out of the site.

Signal Warrants

The MUTCD, published by the FHWA, includes the national guidance for supporting the installation of traffic control signals. The MUTCD outlines criteria to support the installation of a new traffic signal.

This following evaluates traffic volume conditions based on MUTCD Warrant 1, Eight-Hour Vehicular Volume, Warrant 2, Four-Hour Vehicular Volume, and Warrant 3, Peak Hour, as applied to the Chapel Gate Dr., Circle Dr. and CSTC Entrance driveways. The warrants were developed using the daily traffic volume data.

This analysis assumes that the volumes generated to/from the Circle Dr. intersection with Steilacoom Blvd. SW are reduced and that the driveway is restricted to right-in/right-out movements only, consistent with the recommendations in the previous section. Reducing the traffic impacts at Circle Dr., shifts more traffic to the Chapel Gate Dr. and CSTC Entrance driveways. The peak hour volume shift is illustrated in Figure 16.

Warrant 1, Eight-Hour Vehicular Volume

The eight-hour vehicular volume warrant criteria and analysis is provided in the charts included in Tables 17-19. The analysis incorporates conditions assuming the 85th-percentile vehicle speeds on Steilacoom Blvd. SW are above 40 mph. The analysis shows that with the forecasted conditions the warrant criteria are not met for eight consecutive hours of a typical day.

Warrant 2, Four-Hour Vehicular Volume

The four-hour vehicular volumes are evaluated Figure 18. The analysis incorporates conditions assuming the 85th-percentile vehicle speeds on Steilacoom Blvd. SW are above 40 mph. The analysis shows that with the forecasted conditions the four-hour warrant criteria are met at the Chapel Gate Dr. campus driveway, using the 70% volume conditions.

The warrant criteria are met for only three consecutive hours at the CSTC Entrance campus driveway.

Warrant 3, Peak Hour

The vehicular volume portion of the peak hour warrant is evaluated in Figure 19. The analysis incorporates conditions assuming the 85th-percentile vehicle speeds on Steilacoom Blvd. SW are above 40 mph. The analysis shows that with the forecasted conditions the peak hour volume portion of the warrant is satisfied at both the Chapel Gate Dr. and the CSTC Entrance campus driveways using the 100% volume conditions.

The peak hour warrant conditions are unique and also require analysis for excessive delays. The delay criteria of the warrant will not be satisfied based on the forecasted traffic conditions.

Warrant Conclusions

Warrant 2, the four-hour vehicular volumes warrant is nearly satisfied for the future conditions. Additional campus access restrictions to further limit use of Golf Course Rd. and Sentinel Dr. SW to access to the campus could allow the traffic conditions to support the warrant criteria.

The four-lane cross-section on Steilacoom Blvd. SW could support the signalized access controls to increase safety for left turning vehicles along this section of the roadway. Additionally, while the pedestrian volumes were low, the addition of signalized access, would allow additional controlled crossings of Steilacoom Blvd. SW to Fort Steilacoom Park to promote the park's usage.

A LOS of service analysis with traffic control signals at Chapel Gate Dr. and CSCT Entrance driveways is provided as Table 20.

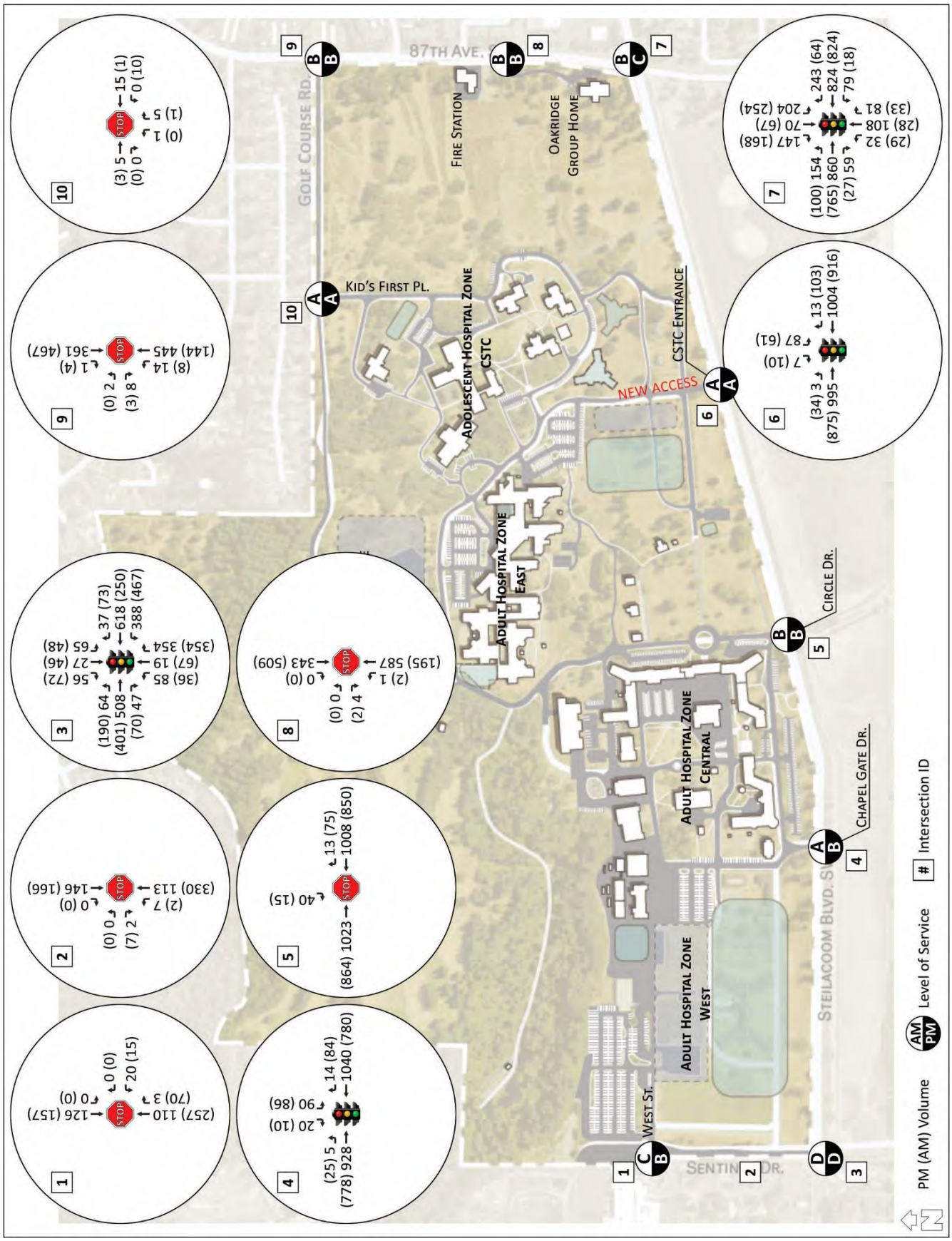


Figure 16: 2030 Proposed Action – Volume Reduction at Circle Dr.

Table 17: 2030 Proposed Action Warrant 1 – Chapel Gate Dr.

	Condition A			Condition A			Condition A			Condition A		
	MINOR	MAJOR	Met	MINOR	MAJOR	Met	MINOR	MAJOR	Met	MINOR	MAJOR	Met
	100%	100%	Y/N?	80%	80%	Y/N?	70%	70%	Y/N?	56%	56%	Y/N?
	150	600		120	480		105	420		84	336	
12 AM	0%	16%	N	0%	20%	N	0%	23%	N	0%	29%	N
1 AM	0%	8%	N	0%	10%	N	0%	12%	N	0%	15%	N
2 AM	0%	7%	N	0%	8%	N	0%	9%	N	0%	12%	N
3 AM	0%	11%	N	0%	13%	N	0%	15%	N	0%	19%	N
4 AM	4%	21%	N	5%	26%	N	6%	29%	N	8%	37%	N
5 AM	6%	83%	N	7%	103%	N	8%	118%	N	10%	148%	N
6 AM	30%	167%	N	38%	209%	N	43%	239%	N	54%	298%	N
7 AM	23%	265%	N	29%	331%	N	33%	379%	N	41%	473%	N
8 AM	14%	212%	N	18%	265%	N	20%	303%	N	26%	379%	N
9 AM	26%	200%	N	32%	250%	N	37%	286%	N	46%	358%	N
10 AM	20%	180%	N	25%	225%	N	29%	257%	N	36%	322%	N
11 AM	34%	202%	N	43%	253%	N	49%	289%	N	61%	362%	N
12 PM	50%	217%	N	63%	271%	N	72%	310%	N	90%	387%	N
1 PM	46%	209%	N	57%	261%	N	66%	298%	N	82%	373%	N
2 PM	70%	264%	N	88%	330%	N	100%	377%	Y	125%	472%	Y
3 PM	136%	266%	Y	170%	332%	Y	195%	379%	Y	243%	474%	Y
4 PM	100%	287%	Y	125%	359%	Y	143%	410%	Y	179%	513%	Y
5 PM	42%	294%	N	52%	367%	N	59%	420%	N	74%	525%	N
6 PM	19%	218%	N	23%	272%	N	27%	311%	N	33%	388%	N
7 PM	17%	184%	N	22%	230%	N	25%	262%	N	31%	328%	N
8 PM	9%	152%	N	11%	190%	N	12%	217%	N	15%	272%	N
9 PM	10%	109%	N	13%	136%	N	14%	156%	N	18%	195%	N
10 PM	33%	79%	N	41%	99%	N	47%	113%	N	59%	142%	N
11 PM	30%	40%	N	38%	50%	N	43%	57%	N	54%	71%	N
	Condition B			Condition B			Condition B			Condition B		
	MINOR	MAJOR	Met	MINOR	MAJOR	Met	MINOR	MAJOR	Met	MINOR	MAJOR	Met
	100%	100%	Y/N?	80%	80%	Y/N?	70%	70%	Y/N?	56%	56%	Y/N?
	75	900		60	720		53	630		42	504	
12 AM	0%	11%	N	0%	14%	N	0%	16%	N	0%	19%	N
1 AM	0%	6%	N	0%	7%	N	0%	8%	N	0%	10%	N
2 AM	0%	4%	N	0%	5%	N	0%	6%	N	0%	8%	N
3 AM	0%	7%	N	0%	9%	N	0%	10%	N	0%	13%	N
4 AM	9%	14%	N	11%	17%	N	12%	20%	N	15%	25%	N
5 AM	11%	55%	N	14%	69%	N	16%	79%	N	20%	99%	N
6 AM	60%	111%	N	75%	139%	N	85%	159%	N	108%	199%	Y
7 AM	46%	177%	N	57%	221%	N	65%	253%	N	82%	316%	N
8 AM	29%	141%	N	36%	177%	N	41%	202%	N	51%	252%	N
9 AM	52%	134%	N	65%	167%	N	73%	191%	N	92%	238%	N
10 AM	40%	120%	N	50%	150%	N	57%	172%	N	72%	215%	N
11 AM	69%	135%	N	86%	169%	N	97%	193%	N	123%	241%	Y
12 PM	100%	145%	Y	125%	181%	Y	142%	207%	Y	179%	258%	Y
1 PM	92%	139%	N	115%	174%	Y	130%	199%	Y	164%	249%	Y
2 PM	140%	176%	Y	176%	220%	Y	199%	252%	Y	251%	315%	Y
3 PM	272%	177%	Y	340%	221%	Y	385%	253%	Y	486%	316%	Y
4 PM	201%	192%	Y	251%	239%	Y	284%	274%	Y	358%	342%	Y
5 PM	83%	196%	N	104%	245%	Y	118%	280%	Y	148%	350%	Y
6 PM	37%	145%	N	47%	181%	N	53%	207%	N	67%	259%	N
7 PM	34%	122%	N	43%	153%	N	49%	175%	N	61%	219%	N
8 PM	17%	101%	N	22%	127%	N	24%	145%	N	31%	181%	N
9 PM	20%	73%	N	25%	91%	N	28%	104%	N	36%	130%	N
10 PM	66%	53%	N	82%	66%	N	93%	76%	N	118%	95%	N
11 PM	60%	26%	N	75%	33%	N	85%	38%	N	108%	47%	N

Assumes Circle Dr. volumes are reduced, and driveway is restricted to rights-in and rights-out

Condition A (100%) criteria satisfied if met for 8-hours of an average day -or-
Condition B (100%) criteria satisfied if met for 8-hours of an average day -or-
Conditions A & B (80%) criteria satisfied if met for 8-hours of an average day

WARRANT MET: NO

Condition A (70%) criteria satisfied if met for 8-hours of an average day -or-
Condition B (70%) criteria satisfied if met for 8-hours of an average day -or-
Conditions A & B (56%) criteria satisfied if met for 8-hours of an average day
* 85th percentile speed on the Steilacoom Blvd. SW exceeds 40 mph
WARRANT MET: NO

Table 18: 2030 Proposed Action Warrant 1 – Circle Dr.

	Condition A			Condition A			Condition A			Condition A		
	MINOR	MAJOR	Met	MINOR	MAJOR	Met	MINOR	MAJOR	Met	MINOR	MAJOR	Met
	100%	100%	Y/N?	80%	80%	Y/N?	70%	70%	Y/N?	56%	56%	Y/N?
	150	600		120	480		105	420		84	336	
12 AM	1%	17%	N	2%	22%	N	2%	25%	N	3%	31%	N
1 AM	0%	9%	N	1%	11%	N	1%	12%	N	1%	15%	N
2 AM	1%	7%	N	2%	9%	N	2%	10%	N	3%	12%	N
3 AM	2%	12%	N	3%	15%	N	3%	18%	N	4%	22%	N
4 AM	1%	23%	N	2%	28%	N	2%	33%	N	2%	41%	N
5 AM	6%	89%	N	7%	112%	N	8%	128%	N	10%	160%	N
6 AM	16%	192%	N	20%	241%	N	23%	275%	N	29%	344%	N
7 AM	17%	285%	N	21%	357%	N	24%	408%	N	30%	510%	N
8 AM	5%	222%	N	6%	278%	N	7%	317%	N	9%	396%	N
9 AM	5%	206%	N	7%	258%	N	8%	295%	N	10%	368%	N
10 AM	5%	187%	N	6%	234%	N	7%	267%	N	9%	334%	N
11 AM	9%	213%	N	11%	266%	N	12%	304%	N	15%	381%	N
12 PM	12%	232%	N	15%	289%	N	17%	331%	N	21%	413%	N
1 PM	10%	219%	N	13%	274%	N	15%	313%	N	19%	391%	N
2 PM	19%	288%	N	24%	360%	N	27%	412%	N	34%	515%	N
3 PM	28%	283%	N	35%	353%	N	40%	404%	N	50%	505%	N
4 PM	19%	299%	N	24%	373%	N	27%	427%	N	34%	533%	N
5 PM	8%	300%	N	10%	375%	N	12%	428%	N	15%	535%	N
6 PM	9%	224%	N	11%	280%	N	12%	320%	N	15%	400%	N
7 PM	2%	185%	N	3%	232%	N	3%	265%	N	4%	331%	N
8 PM	3%	155%	N	3%	193%	N	4%	221%	N	5%	276%	N
9 PM	2%	112%	N	3%	140%	N	3%	160%	N	4%	200%	N
10 PM	12%	97%	N	15%	121%	N	17%	138%	N	21%	172%	N
11 PM	12%	47%	N	15%	58%	N	18%	67%	N	22%	83%	N
	Condition B			Condition B			Condition B			Condition B		
	MINOR	MAJOR	Met	MINOR	MAJOR	Met	MINOR	MAJOR	Met	MINOR	MAJOR	Met
	100%	100%	Y/N?	80%	80%	Y/N?	70%	70%	Y/N?	56%	56%	Y/N?
	105	420		84	336		53	630		42	504	
12 AM	3%	12%	N	4%	15%	N	4%	17%	N	5%	21%	N
1 AM	1%	6%	N	1%	7%	N	1%	8%	N	1%	10%	N
2 AM	3%	5%	N	4%	6%	N	4%	7%	N	5%	8%	N
3 AM	5%	8%	N	6%	10%	N	6%	12%	N	8%	15%	N
4 AM	2%	15%	N	3%	19%	N	3%	22%	N	4%	27%	N
5 AM	12%	60%	N	15%	75%	N	17%	85%	N	21%	106%	N
6 AM	33%	128%	N	41%	160%	N	46%	183%	N	58%	229%	N
7 AM	33%	190%	N	42%	238%	N	47%	272%	N	60%	340%	N
8 AM	10%	148%	N	12%	185%	N	14%	211%	N	18%	264%	N
9 AM	11%	137%	N	14%	172%	N	15%	196%	N	20%	245%	N
10 AM	10%	125%	N	13%	156%	N	14%	178%	N	18%	223%	N
11 AM	17%	142%	N	22%	178%	N	25%	203%	N	31%	254%	N
12 PM	23%	154%	N	29%	193%	N	33%	220%	N	41%	276%	N
1 PM	21%	146%	N	26%	182%	N	29%	209%	N	37%	261%	N
2 PM	38%	192%	N	48%	240%	N	54%	275%	N	68%	343%	N
3 PM	57%	188%	N	71%	236%	N	80%	269%	N	101%	337%	Y
4 PM	38%	199%	N	48%	249%	N	54%	284%	N	69%	356%	N
5 PM	16%	200%	N	20%	250%	N	23%	286%	N	29%	357%	N
6 PM	17%	149%	N	21%	187%	N	24%	213%	N	30%	267%	N
7 PM	4%	123%	N	5%	154%	N	6%	176%	N	8%	220%	N
8 PM	5%	103%	N	7%	129%	N	8%	147%	N	10%	184%	N
9 PM	5%	75%	N	6%	93%	N	6%	107%	N	8%	133%	N
10 PM	24%	64%	N	30%	80%	N	34%	92%	N	43%	115%	N
11 PM	25%	31%	N	31%	39%	N	35%	44%	N	44%	55%	N

Assumes Circle Dr. volumes are reduced, and driveway is restricted to rights-in and rights-out

Condition A (100%) criteria satisfied if met for 8-hours of an average day -or-
Condition B (100%) criteria satisfied if met for 8-hours of an average day -or-
Conditions A & B (80%) criteria satisfied if met for 8-hours of an average day

WARRANT MET: NO

Condition A (70%) criteria satisfied if met for 8-hours of an average day -or-
Condition B (70%) criteria satisfied if met for 8-hours of an average day -or-
Conditions A & B (56%) criteria satisfied if met for 8-hours of an average day
* 85th percentile speed on the Steilacoom Blvd. SW exceeds 40 mph
WARRANT MET: NO

Table 19: 2030 Proposed Action Warrant 1 – CSTS Entrance

	Condition A			Condition A			Condition B			Condition B		
	MINOR	MAJOR	Met	MINOR	MAJOR	Met	MINOR	MAJOR	Met	MINOR	MAJOR	Met
	100%	100%	Y/N?	80%	80%	Y/N?	100%	100%	Y/N?	80%	80%	Y/N?
	150	600		120	480		75	900		60	720	
12 AM	0%	19%	N	0%	23%	N	0%	27%	N	0%	33%	N
1 AM	0%	9%	N	0%	11%	N	0%	12%	N	0%	16%	N
2 AM	0%	7%	N	0%	9%	N	0%	10%	N	0%	13%	N
3 AM	0%	14%	N	0%	17%	N	0%	20%	N	0%	25%	N
4 AM	0%	25%	N	0%	31%	N	0%	36%	N	0%	44%	N
5 AM	5%	96%	N	6%	120%	N	7%	137%	N	9%	172%	N
6 AM	21%	218%	N	26%	272%	N	30%	311%	N	37%	389%	N
7 AM	47%	306%	N	58%	382%	N	66%	437%	N	83%	546%	N
8 AM	20%	232%	N	25%	290%	N	28%	332%	N	35%	414%	N
9 AM	22%	212%	N	27%	265%	N	31%	303%	N	39%	379%	N
10 AM	21%	194%	N	26%	242%	N	30%	277%	N	37%	346%	N
11 AM	35%	224%	N	44%	280%	N	50%	320%	N	63%	399%	N
12 PM	43%	246%	N	54%	308%	N	62%	351%	N	78%	439%	N
1 PM	24%	229%	N	30%	286%	N	34%	327%	N	42%	409%	N
2 PM	79%	312%	N	98%	390%	N	112%	446%	Y	140%	558%	Y
3 PM	103%	300%	Y	129%	375%	Y	148%	428%	Y	185%	536%	Y
4 PM	54%	310%	N	67%	387%	N	77%	443%	N	96%	554%	N
5 PM	31%	306%	N	39%	382%	N	44%	437%	N	55%	546%	N
6 PM	26%	231%	N	32%	288%	N	37%	330%	N	46%	412%	N
7 PM	18%	187%	N	22%	233%	N	25%	267%	N	31%	333%	N
8 PM	16%	157%	N	19%	196%	N	22%	224%	N	28%	280%	N
9 PM	7%	115%	N	9%	144%	N	10%	164%	N	13%	206%	N
10 PM	63%	114%	N	79%	142%	N	90%	162%	N	113%	203%	Y
11 PM	51%	54%	N	63%	67%	N	72%	77%	N	90%	96%	N

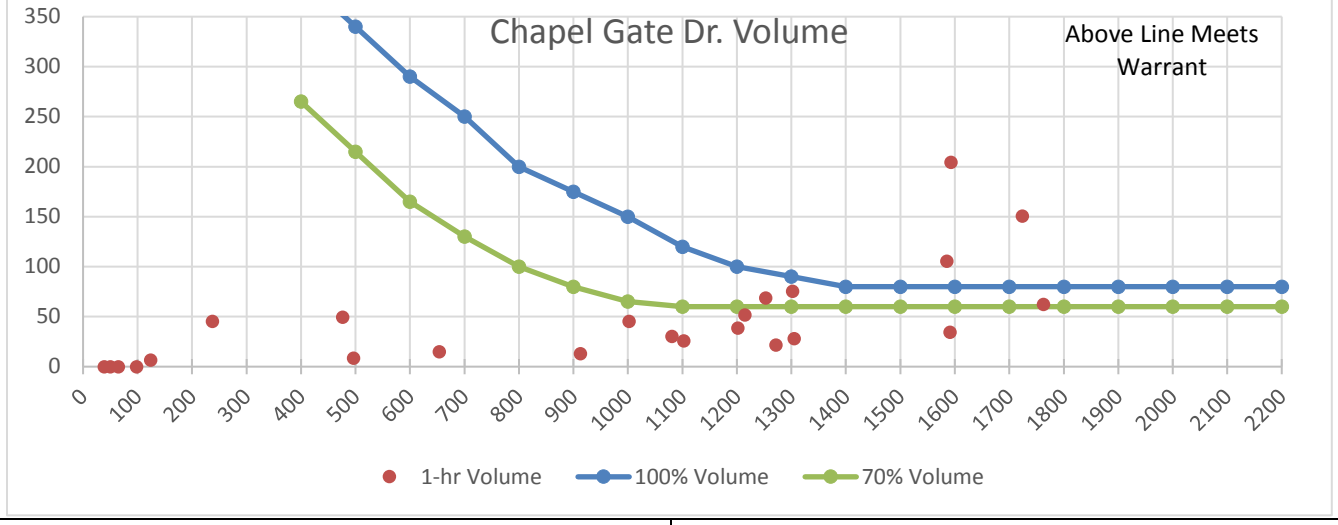
	Condition A			Condition A			Condition B			Condition B		
	MINOR	MAJOR	Met	MINOR	MAJOR	Met	MINOR	MAJOR	Met	MINOR	MAJOR	Met
	70%	70%	Y/N?	56%	56%	Y/N?	70%	70%	Y/N?	56%	56%	Y/N?
	105	420		84	336		53	630		42	504	
12 AM	0%	12%	N	0%	15%	N	0%	18%	N	0%	22%	N
1 AM	0%	6%	N	0%	7%	N	0%	8%	N	0%	10%	N
2 AM	0%	5%	N	0%	6%	N	0%	7%	N	0%	9%	N
3 AM	0%	9%	N	0%	11%	N	0%	13%	N	0%	16%	N
4 AM	0%	17%	N	0%	21%	N	0%	24%	N	0%	30%	N
5 AM	5%	64%	N	6%	80%	N	7%	92%	N	9%	114%	N
6 AM	21%	145%	N	26%	182%	N	30%	208%	N	37%	259%	N
7 AM	47%	204%	N	58%	255%	N	66%	291%	N	83%	364%	N
8 AM	20%	155%	N	25%	193%	N	28%	221%	N	35%	276%	N
9 AM	22%	141%	N	27%	177%	N	31%	202%	N	39%	253%	N
10 AM	21%	129%	N	26%	162%	N	30%	185%	N	37%	231%	N
11 AM	35%	149%	N	44%	186%	N	50%	213%	N	63%	266%	N
12 PM	43%	164%	N	54%	205%	N	62%	234%	N	78%	293%	N
1 PM	24%	153%	N	30%	191%	N	34%	218%	N	42%	273%	N
2 PM	79%	208%	N	98%	260%	N	112%	298%	Y	140%	372%	Y
3 PM	103%	200%	Y	129%	250%	Y	148%	286%	Y	185%	357%	Y
4 PM	54%	207%	N	67%	258%	N	77%	295%	N	96%	369%	N
5 PM	31%	204%	N	39%	255%	N	44%	291%	N	55%	364%	N
6 PM	26%	154%	N	32%	192%	N	37%	220%	N	46%	275%	N
7 PM	18%	124%	N	22%	156%	N	25%	178%	N	31%	222%	N
8 PM	16%	105%	N	19%	131%	N	22%	149%	N	28%	187%	N
9 PM	7%	77%	N	9%	96%	N	10%	110%	N	13%	137%	N
10 PM	63%	76%	N	79%	95%	N	90%	108%	N	113%	135%	Y
11 PM	51%	36%	N	63%	45%	N	72%	51%	N	90%	64%	N

Assumes Circle Dr. volumes are reduced, and driveway is restricted to rights-in and rights-out

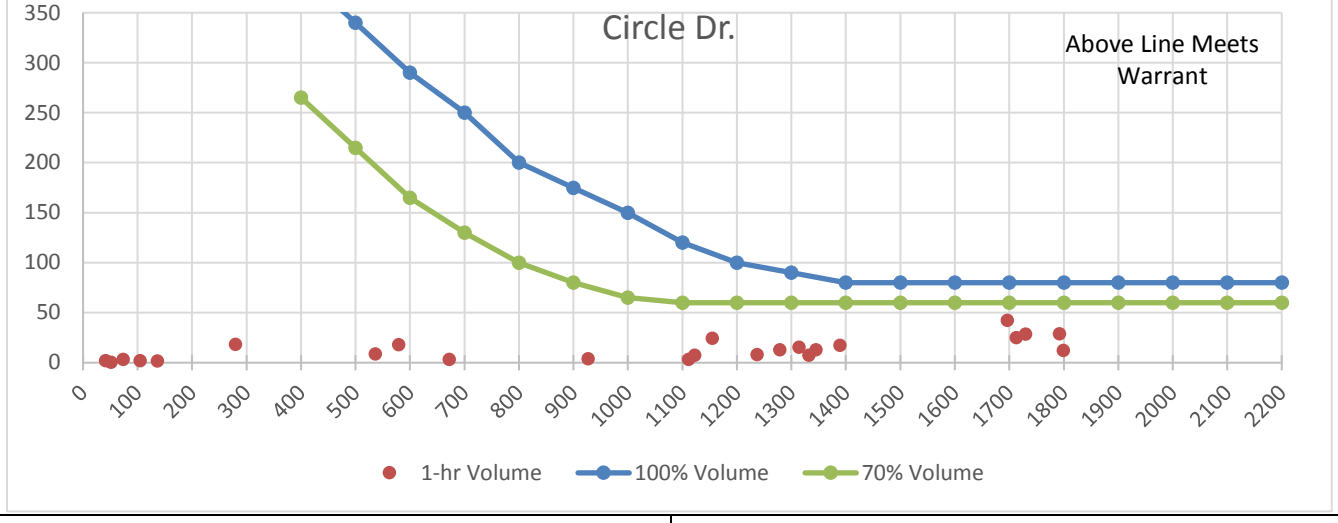
Condition A (100%) criteria satisfied if met for 8-hours of an average day -or-
Condition B (100%) criteria satisfied if met for 8-hours of an average day -or-
Conditions A & B (80%) criteria satisfied if met for 8-hours of an average day

WARRANT MET: NO

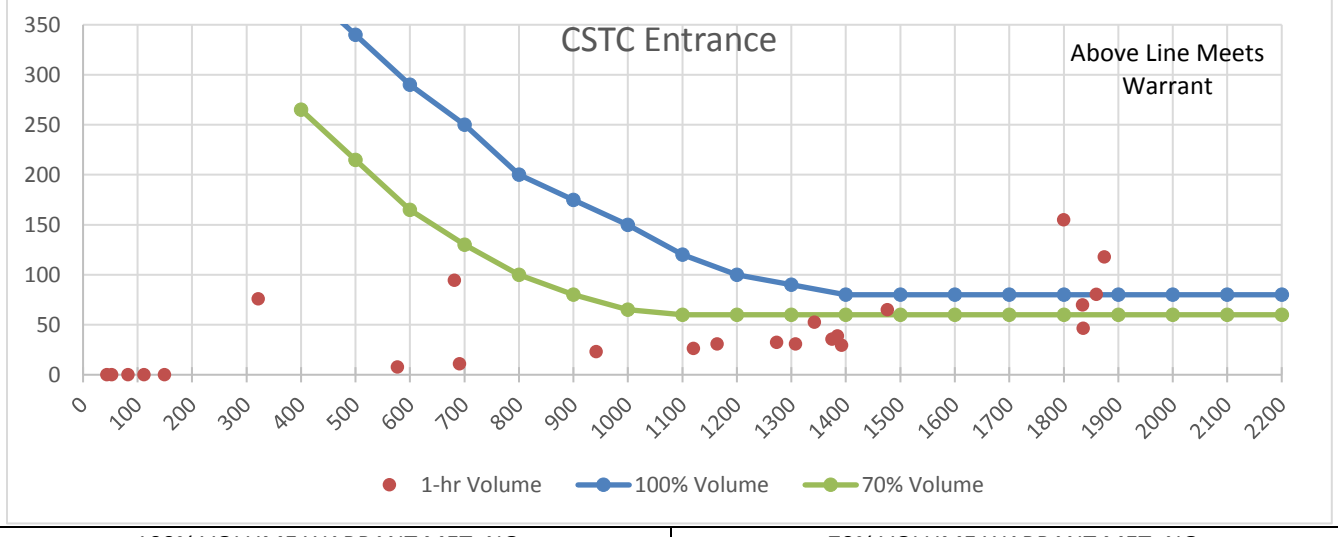
Condition A (70%) criteria satisfied if met for 8-hours of an average day -or-
Condition B (70%) criteria satisfied if met for 8-hours of an average day -or-
Conditions A & B (56%) criteria satisfied if met for 8-hours of an average day
* 85th percentile speed on the Steilacoom Blvd. SW exceeds 40 mph
WARRANT MET: NO



100% VOLUME WARRANT MET: NO	70% VOLUME WARRANT MET: YES

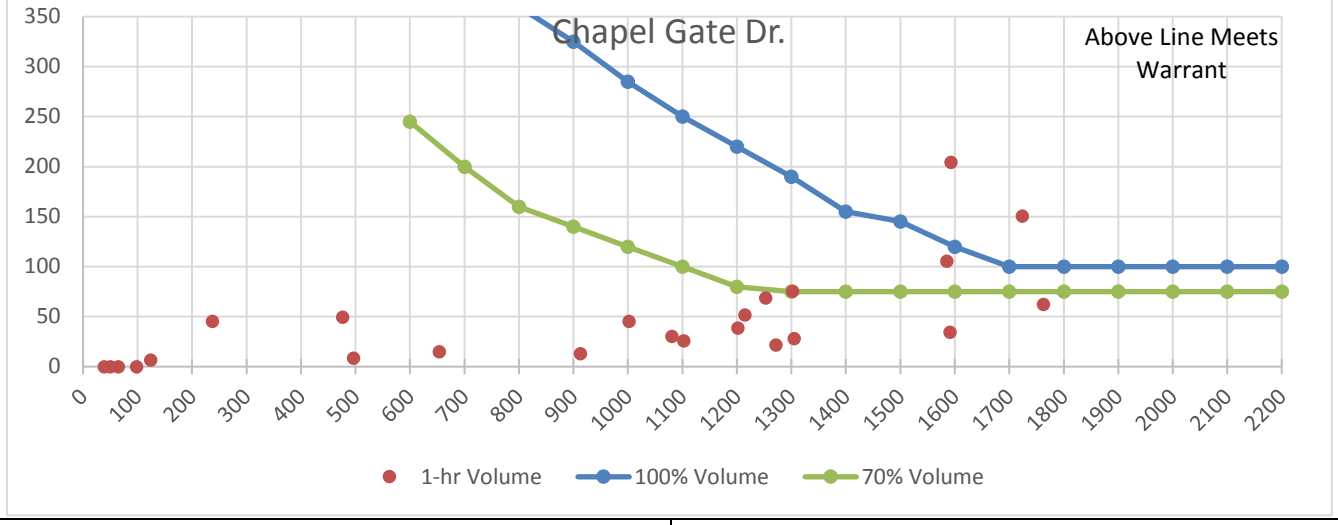


100% VOLUME WARRANT MET: NO	70% VOLUME WARRANT MET: NO

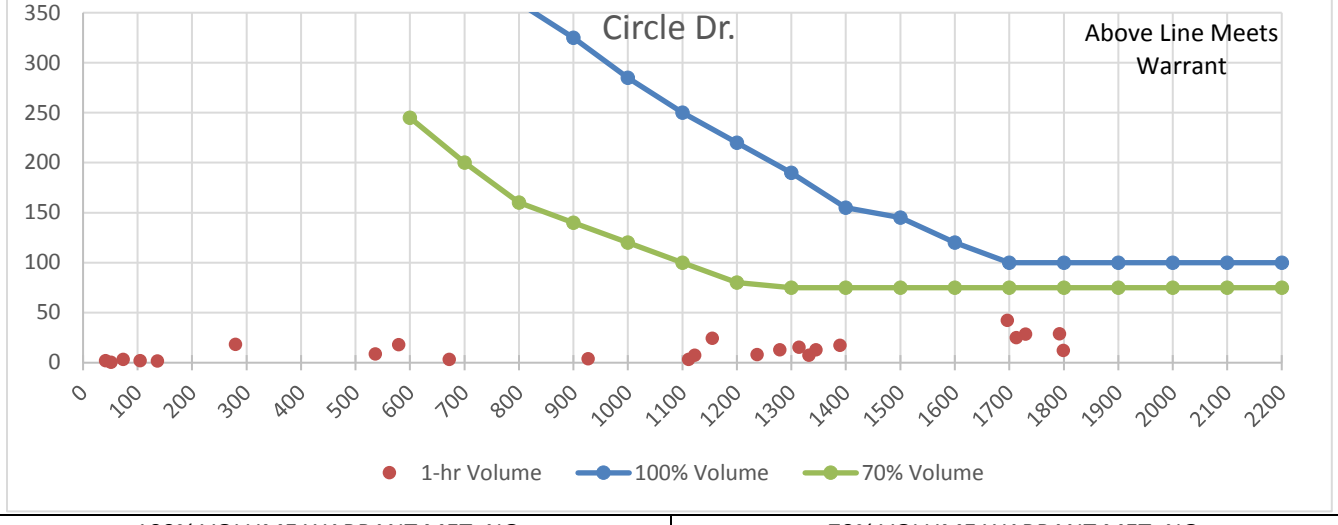


100% VOLUME WARRANT MET: NO	70% VOLUME WARRANT MET: NO

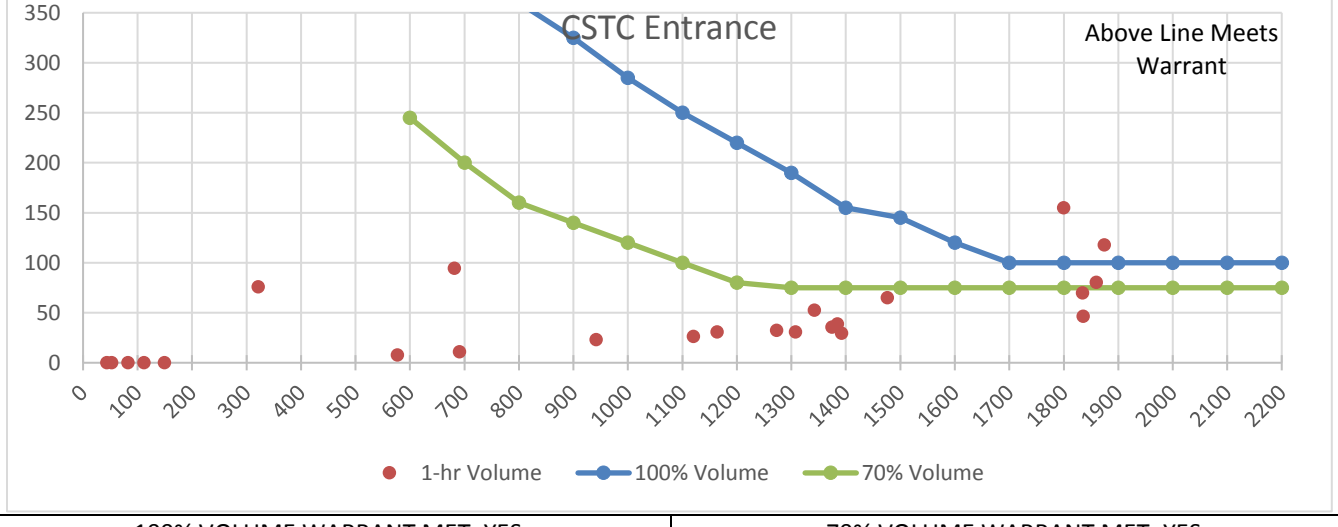
Figure 17: Four-Hour Vehicular Volume Warrant Analysis



100% VOLUME WARRANT MET: YES	70% VOLUME WARRANT MET: YES



100% VOLUME WARRANT MET: NO	70% VOLUME WARRANT MET: NO



100% VOLUME WARRANT MET: YES	70% VOLUME WARRANT MET: YES

Figure 18: Peak Hour Volume Warrant Analysis

Table 20: Proposed Action AM and PM Peak Hour Intersection Level-of-Service with Access Changes

Intersection	Control	AM Peak Hour				PM Peak Hour			
		Proposed Action		Access Change		Proposed Action		Access Change	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Sentinel Dr. / West St.	WB Stop	C	20.0	C	20.0	B	11.3	B	11.3
Sentinel Dr. / South St.	WB Stop	Closed		Closed		Closed		Closed	
Farwest Dr. / Steilacoom Blvd.	Signal	D	36.0	D	36.0	D	41.7	D	40.1
Chapel Gate Dr. / Steilacoom Blvd.	Signal	C	19.9	A	4.9	F	51.1	B	11.0
Circle Dr. / Steilacoom Blvd.	SB Stop	A	5.1	B	12.3	B	14.5	B	13.0
CSTC Entrance / Steilacoom Blvd.	Signal	F	94.1	A	4.7	F	83.6	A	4.8
87th Ave. / Steilacoom Blvd.	Signal	B	19.3	B	19.3	C	21.8	C	21.8
87th Ave. / Oakridge Group Home	EB Stop	B	11.7	B	11.7	B	10.4	B	10.4
87th Ave. / Golf Course Rd.	EB Stop	B	11.7	B	11.7	B	11.1	B	11.1
Kids First Pl. / Golf Course Rd.	NB Stop	A	8.3	A	8.3	A	8.4	A	8.4

With removal of the traffic signal at Circle Dr., conversion of the Circle Dr. driveway to right-in/right-out movements only, shift in traffic volumes to the Chapel Gate Dr. and CSTC Entrance driveways, and installation of traffic signals at the Chapel Gate Dr. and CSTC Entrance driveways, the study intersection LOS improve and all meet the City of Lakewood's LOS thresholds.

Appendix

TRAFFIC COUNT CONSULTANTS, INC.

Team@tc2inc.com
(253) 770-1407

LAKEWOOD, WASHINGTON
WEST ST E/O
SENTINEL DR
LOC# 01 V TSI19016TM

Site Code: 01

Date Start: 28-May-19
Date End: 30-May-19

Start	27-May-19		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
12:00 AM	*	*	0	1	1	3	1	1	*	*	*	*	*	*	1	2
01:00	*	*	0	0	2	2	0	0	*	*	*	*	*	*	1	1
02:00	*	*	0	0	2	0	0	0	*	*	*	*	*	*	1	0
03:00	*	*	0	0	0	0	1	1	*	*	*	*	*	*	0	0
04:00	*	*	1	0	1	0	1	0	*	*	*	*	*	*	1	0
05:00	*	*	17	0	19	0	19	1	*	*	*	*	*	*	18	0
06:00	*	*	22	1	26	3	25	1	*	*	*	*	*	*	24	2
07:00	*	*	**42**	11	**55**	**15**	**56**	**16**	*	*	*	*	*	*	**51**	**14**
08:00	*	*	19	3	28	8	24	8	*	*	*	*	*	*	24	6
09:00	*	*	17	2	14	10	10	6	*	*	*	*	*	*	14	6
10:00	*	*	13	9	7	5	11	7	*	*	*	*	*	*	10	7
11:00	*	*	10	**13**	9	12	9	8	*	*	*	*	*	*	9	11
12:00 PM	*	*	16	13	**30**	11	15	9	*	*	*	*	*	*	**20**	11
01:00	*	*	13	6	22	14	21	8	*	*	*	*	*	*	19	9
02:00	*	*	**18**	13	21	9	**22**	10	*	*	*	*	*	*	20	11
03:00	*	*	8	28	7	24	9	23	*	*	*	*	*	*	8	25
04:00	*	*	6	**36**	9	**33**	4	**30**	*	*	*	*	*	*	6	**33**
05:00	*	*	0	6	1	7	6	16	*	*	*	*	*	*	2	10
06:00	*	*	2	4	3	5	3	4	*	*	*	*	*	*	3	4
07:00	*	*	2	4	4	1	6	13	*	*	*	*	*	*	4	6
08:00	*	*	2	1	3	1	2	8	*	*	*	*	*	*	2	3
09:00	*	*	0	1	3	3	4	7	*	*	*	*	*	*	2	4
10:00	*	*	5	2	7	5	2	3	*	*	*	*	*	*	5	3
11:00	*	*	3	2	1	3	3	5	*	*	*	*	*	*	2	3
Lane	0	0	216	156	275	174	254	185	0	0	0	0	0	0	247	171
Day	0		372		449		439		0		0		0		418	
AM Peak	-	-	07:00	11:00	07:00	07:00	07:00	07:00	-	-	-	-	-	-	07:00	07:00
Vol.	-	-	42	13	55	15	56	16	-	-	-	-	-	-	51	14
PM Peak	-	-	14:00	16:00	12:00	16:00	14:00	16:00	-	-	-	-	-	-	12:00	16:00
Vol.	-	-	18	36	30	33	22	30	-	-	-	-	-	-	20	33

Comb. Total	0	372	449	439	0	0	0	418

ADT ADT 420 AADT 420

TRAFFIC COUNT CONSULTANTS, INC.

Team@tc2inc.com
(253) 770-1407

LAKEWOOD, WASHINGTON
SOUTH ST E/O
SENTINEL DR
LOC# 02 V TSI19016TM

Site Code: 02

Date Start: 28-May-19
Date End: 30-May-19

Start	27-May-19		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN
12:00 AM	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
01:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
02:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
03:00	*	*	0	0	0	2	0	0	*	*	*	*	*	*	0	1
04:00	*	*	0	0	0	0	1	0	*	*	*	*	*	*	0	0
05:00	*	*	3	2	7	6	3	6	*	*	*	*	*	*	4	5
06:00	*	*	**11**	**44**	10	**20**	11	**24**	*	*	*	*	*	*	11	**29**
07:00	*	*	10	10	**14**	20	**12**	18	*	*	*	*	*	*	**12**	16
08:00	*	*	6	14	8	20	1	16	*	*	*	*	*	*	5	17
09:00	*	*	11	28	11	10	10	14	*	*	*	*	*	*	11	17
10:00	*	*	5	6	4	6	9	22	*	*	*	*	*	*	6	11
11:00	*	*	8	4	10	10	10	8	*	*	*	*	*	*	9	7
12:00 PM	*	*	10	6	12	0	7	**4**	*	*	*	*	*	*	10	3
01:00	*	*	10	8	9	8	8	4	*	*	*	*	*	*	9	7
02:00	*	*	**15**	**14**	11	**12**	**19**	4	*	*	*	*	*	*	**15**	**10**
03:00	*	*	15	2	**15**	4	15	0	*	*	*	*	*	*	15	2
04:00	*	*	6	0	13	2	9	2	*	*	*	*	*	*	9	1
05:00	*	*	2	8	5	8	2	2	*	*	*	*	*	*	3	6
06:00	*	*	2	0	1	0	1	0	*	*	*	*	*	*	1	0
07:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
08:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
09:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
10:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
11:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
Lane	0	0	114	146	130	128	118	124	0	0	0	0	0	0	120	132
Day	0		260		258		242		0		0		0		252	
AM Peak	-	-	06:00	06:00	07:00	06:00	07:00	06:00	-	-	-	-	-	-	07:00	06:00
Vol.	-	-	11	44	14	20	12	24	-	-	-	-	-	-	12	29
PM Peak	-	-	14:00	14:00	15:00	14:00	14:00	12:00	-	-	-	-	-	-	14:00	14:00
Vol.	-	-	15	14	15	12	19	4	-	-	-	-	-	-	15	10

Comb. Total	0	260	258	242	0	0	0	252

ADT ADT 253 AADT 253

TRAFFIC COUNT CONSULTANTS, INC.

Team@tc2inc.com
(253) 770-1407

LAKEWOOD, WASHINGTON
CHAPEL GATE DR N/O
STEILACOOM BLVD
LOC# 03N V TSI19016TM

Site Code: 03N

Date Start: 28-May-19
Date End: 30-May-19

Start	27-May-19		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
12:00 AM	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
01:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
02:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
03:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
04:00	*	*	3	0	4	1	5	3	*	*	*	*	*	*	4	1
05:00	*	*	18	5	32	5	26	4	*	*	*	*	*	*	25	5
06:00	*	*	**115**	20	**117**	27	120	21	*	*	*	*	*	*	**117**	23
07:00	*	*	97	16	104	21	**121**	16	*	*	*	*	*	*	107	18
08:00	*	*	44	13	45	12	40	10	*	*	*	*	*	*	43	12
09:00	*	*	30	20	31	12	33	18	*	*	*	*	*	*	31	17
10:00	*	*	20	18	21	17	18	14	*	*	*	*	*	*	20	16
11:00	*	*	15	**28**	20	**30**	21	**24**	*	*	*	*	*	*	19	**27**
12:00 PM	*	*	**36**	30	34	32	31	35	*	*	*	*	*	*	34	32
01:00	*	*	29	27	23	50	23	32	*	*	*	*	*	*	25	36
02:00	*	*	31	63	**48**	49	**44**	49	*	*	*	*	*	*	**41**	54
03:00	*	*	12	**85**	12	**90**	16	**95**	*	*	*	*	*	*	13	**90**
04:00	*	*	4	76	8	61	6	70	*	*	*	*	*	*	6	69
05:00	*	*	3	25	4	32	8	29	*	*	*	*	*	*	5	29
06:00	*	*	9	19	5	18	3	13	*	*	*	*	*	*	6	17
07:00	*	*	0	8	2	12	9	12	*	*	*	*	*	*	4	11
08:00	*	*	2	2	8	6	1	6	*	*	*	*	*	*	4	5
09:00	*	*	3	4	4	2	5	7	*	*	*	*	*	*	4	4
10:00	*	*	17	30	14	31	23	23	*	*	*	*	*	*	18	28
11:00	*	*	0	25	3	17	2	21	*	*	*	*	*	*	2	21
Lane	0	0	488	514	539	525	555	502	0	0	0	0	0	0	528	515
Day	0		1002		1064		1057		0		0		0		1043	
AM Peak	-	-	06:00	11:00	06:00	11:00	07:00	11:00	-	-	-	-	-	-	06:00	11:00
Vol.	-	-	115	28	117	30	121	24	-	-	-	-	-	-	117	27
PM Peak	-	-	12:00	15:00	14:00	15:00	14:00	15:00	-	-	-	-	-	-	14:00	15:00
Vol.	-	-	36	85	48	90	44	95	-	-	-	-	-	-	41	90

Comb. Total	0	1002	1064	1057	0	0	0	1043

ADT ADT 1,041 AADT 1,041

TRAFFIC COUNT CONSULTANTS, INC.

Team@tc2inc.com
(253) 770-1407

LAKEWOOD, WASHINGTON
CIRCLE DR N/O
STEILACOOM BLVD
LOC# 04 V TSI19016TM

Site Code: 04

Date Start: 28-May-19
Date End: 30-May-19

Start	27-May-19		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
12:00 AM	*	*	3	9	5	18	3	11	*	*	*	*	*	*	4	13
01:00	*	*	2	7	2	14	1	3	*	*	*	*	*	*	2	8
02:00	*	*	3	8	3	10	2	11	*	*	*	*	*	*	3	10
03:00	*	*	4	14	7	14	5	17	*	*	*	*	*	*	5	15
04:00	*	*	12	10	11	11	14	9	*	*	*	*	*	*	12	10
05:00	*	*	47	34	56	53	71	44	*	*	*	*	*	*	58	44
06:00	*	*	**180**	**124**	**181**	108	**174**	122	*	*	*	*	*	*	**178**	**118**
07:00	*	*	113	107	125	**111**	121	**125**	*	*	*	*	*	*	120	114
08:00	*	*	62	41	66	35	62	37	*	*	*	*	*	*	63	38
09:00	*	*	45	41	45	28	45	41	*	*	*	*	*	*	45	37
10:00	*	*	24	31	24	40	27	38	*	*	*	*	*	*	25	36
11:00	*	*	23	59	38	75	28	65	*	*	*	*	*	*	30	66
12:00 PM	*	*	60	78	52	81	49	87	*	*	*	*	*	*	54	82
01:00	*	*	48	48	50	65	44	78	*	*	*	*	*	*	47	64
02:00	*	*	**92**	145	**95**	153	110	143	*	*	*	*	*	*	**99**	147
03:00	*	*	15	**187**	19	**206**	40	**212**	*	*	*	*	*	*	25	**202**
04:00	*	*	13	155	14	157	27	144	*	*	*	*	*	*	18	152
05:00	*	*	8	89	12	89	6	61	*	*	*	*	*	*	9	80
06:00	*	*	11	55	10	55	20	64	*	*	*	*	*	*	14	58
07:00	*	*	8	21	15	35	6	16	*	*	*	*	*	*	10	24
08:00	*	*	11	20	13	22	13	20	*	*	*	*	*	*	12	21
09:00	*	*	13	16	16	23	21	17	*	*	*	*	*	*	17	19
10:00	*	*	79	114	80	128	**116**	90	*	*	*	*	*	*	92	111
11:00	*	*	4	69	7	82	10	92	*	*	*	*	*	*	7	81
Lane	0	0	880	1482	946	1613	1015	1547	0	0	0	0	0	0	949	1550
Day	0		2362		2559		2562		0		0		0		2499	
AM Peak	-	-	06:00	06:00	06:00	07:00	06:00	07:00	-	-	-	-	-	-	06:00	06:00
Vol.	-	-	180	124	181	111	174	125	-	-	-	-	-	-	178	118
PM Peak	-	-	14:00	15:00	14:00	15:00	22:00	15:00	-	-	-	-	-	-	14:00	15:00
Vol.	-	-	92	187	95	206	116	212	-	-	-	-	-	-	99	202

Comb. Total	0	2362	2559	2562	0	0	0	2499

ADT ADT 2,494 AADT 2,494

TRAFFIC COUNT CONSULTANTS, INC.

Team@tc2inc.com
(253) 770-1407

LAKEWOOD, WASHINGTON
CSTC ENTRANCE N/O
STEILACOOM BLVD
LOC# 05N V TSI19016TM

Site Code: 05N

Date Start: 28-May-19
Date End: 30-May-19

Start	27-May-19		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
12:00 AM	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
01:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
02:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
03:00	*	*	1	1	0	0	1	0	*	*	*	*	*	*	1	0
04:00	*	*	5	0	9	1	5	0	*	*	*	*	*	*	6	0
05:00	*	*	48	1	45	4	48	5	*	*	*	*	*	*	47	3
06:00	*	*	**171**	30	**159**	22	**175**	20	*	*	*	*	*	*	**168**	24
07:00	*	*	142	**42**	135	**45**	139	**45**	*	*	*	*	*	*	139	**44**
08:00	*	*	73	19	86	14	80	19	*	*	*	*	*	*	80	17
09:00	*	*	26	13	28	19	24	21	*	*	*	*	*	*	26	18
10:00	*	*	22	21	16	9	27	20	*	*	*	*	*	*	22	17
11:00	*	*	36	41	25	38	38	34	*	*	*	*	*	*	33	38
12:00 PM	*	*	59	34	69	30	64	42	*	*	*	*	*	*	64	35
01:00	*	*	40	24	36	31	41	23	*	*	*	*	*	*	39	26
02:00	*	*	**133**	76	**126**	73	**147**	76	*	*	*	*	*	*	**135**	75
03:00	*	*	20	**97**	22	**104**	18	**100**	*	*	*	*	*	*	20	**100**
04:00	*	*	17	61	15	71	12	52	*	*	*	*	*	*	15	61
05:00	*	*	11	21	8	24	7	30	*	*	*	*	*	*	9	25
06:00	*	*	6	24	16	23	11	25	*	*	*	*	*	*	11	24
07:00	*	*	12	16	9	16	11	17	*	*	*	*	*	*	11	16
08:00	*	*	7	17	10	12	16	15	*	*	*	*	*	*	11	15
09:00	*	*	8	10	14	14	9	7	*	*	*	*	*	*	10	10
10:00	*	*	57	43	62	48	69	61	*	*	*	*	*	*	63	51
11:00	*	*	1	74	4	60	2	49	*	*	*	*	*	*	2	61
Lane	0	0	895	665	894	658	944	661	0	0	0	0	0	0	912	660
Day	0		1560		1552		1605		0		0		0		1572	
AM Peak	-	-	06:00	07:00	06:00	07:00	06:00	07:00	-	-	-	-	-	-	06:00	07:00
Vol.	-	-	171	42	159	45	175	45	-	-	-	-	-	-	168	44
PM Peak	-	-	14:00	15:00	14:00	15:00	14:00	15:00	-	-	-	-	-	-	14:00	15:00
Vol.	-	-	133	97	126	104	147	100	-	-	-	-	-	-	135	100

Comb. Total	0	1560	1552	1605	0	0	0	1572

ADT ADT 1,572 AADT 1,572

TRAFFIC COUNT CONSULTANTS, INC.

Team@tc2inc.com
(253) 770-1407

LAKEWOOD, WASHINGTON
OAKRIDGE GROUP HOME ENT W/O
87TH AVE SW
LOC# 06 V TSI19016TM

Site Code: 06

Date Start: 28-May-19
Date End: 30-May-19

Start	27-May-19		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
12:00 AM	*	*	1	1	1	1	1	1	*	*	*	*	*	*	1	1
01:00	*	*	0	2	0	1	0	1	*	*	*	*	*	*	0	1
02:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
03:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
04:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
05:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
06:00	*	*	1	0	1	0	1	0	*	*	*	*	*	*	1	0
07:00	*	*	3	3	4	3	2	2	*	*	*	*	*	*	3	3
08:00	*	*	**14**	**6**	**13**	**4**	**10**	**7**	*	*	*	*	*	*	**12**	**6**
09:00	*	*	3	2	2	2	3	0	*	*	*	*	*	*	3	1
10:00	*	*	1	0	2	3	0	3	*	*	*	*	*	*	1	2
11:00	*	*	1	0	3	2	3	5	*	*	*	*	*	*	2	2
12:00 PM	*	*	**5**	5	2	**10**	2	**5**	*	*	*	*	*	*	**3**	**7**
01:00	*	*	2	1	**6**	2	2	0	*	*	*	*	*	*	3	1
02:00	*	*	1	1	2	2	1	1	*	*	*	*	*	*	1	1
03:00	*	*	3	4	1	8	1	2	*	*	*	*	*	*	2	5
04:00	*	*	1	**6**	0	4	1	4	*	*	*	*	*	*	1	5
05:00	*	*	3	3	0	2	**3**	3	*	*	*	*	*	*	2	3
06:00	*	*	1	2	1	4	0	1	*	*	*	*	*	*	1	2
07:00	*	*	0	0	0	0	1	1	*	*	*	*	*	*	0	0
08:00	*	*	1	1	2	1	3	2	*	*	*	*	*	*	2	1
09:00	*	*	1	1	1	0	1	1	*	*	*	*	*	*	1	1
10:00	*	*	0	0	0	1	0	1	*	*	*	*	*	*	0	1
11:00	*	*	1	0	2	0	2	1	*	*	*	*	*	*	2	0
Lane	0	0	43	38	43	50	37	41	0	0	0	0	0	0	41	43
Day	0		81		93		78		0		0		0		84	
AM Peak	-	-	08:00	08:00	08:00	08:00	08:00	08:00	-	-	-	-	-	-	08:00	08:00
Vol.	-	-	14	6	13	4	10	7	-	-	-	-	-	-	12	6
PM Peak	-	-	12:00	16:00	13:00	12:00	17:00	12:00	-	-	-	-	-	-	12:00	12:00
Vol.	-	-	5	6	6	10	3	5	-	-	-	-	-	-	3	7

Comb. Total	0	81	93	78	0	0	0	84

ADT ADT 84 AADT 84

TRAFFIC COUNT CONSULTANTS, INC.

Team@tc2inc.com
(253) 770-1407

LAKEWOOD, WASHINGTON
GOLF COURSE RD SW W/O
87TH AVE SW
LOC# 07 V TSI19016TM

Site Code: 07

Date Start: 28-May-19
Date End: 30-May-19

Start Time	27-May-19 IN	27-May-19 OUT	Tue IN	Tue OUT	Wed IN	Wed OUT	Thu IN	Thu OUT	Fri IN	Fri OUT	Sat IN	Sat OUT	Sun IN	Sun OUT	Week Average IN	Week Average OUT
12:00 AM	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
01:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
02:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
03:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
04:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
05:00	*	*	3	2	1	1	0	0	*	*	*	*	*	*	1	1
06:00	*	*	3	0	4	3	3	1	*	*	*	*	*	*	3	1
07:00	*	*	7	8	10	4	11	4	*	*	*	*	*	*	9	5
08:00	*	*	18	5	8	3	10	1	*	*	*	*	*	*	12	3
09:00	*	*	8	3	12	12	11	9	*	*	*	*	*	*	10	8
10:00	*	*	**21**	**15**	**18**	11	7	**16**	*	*	*	*	*	*	**15**	**14**
11:00	*	*	12	15	11	**14**	**12**	13	*	*	*	*	*	*	12	14
12:00 PM	*	*	13	29	**18**	15	15	8	*	*	*	*	*	*	15	17
01:00	*	*	11	13	11	18	20	10	*	*	*	*	*	*	14	14
02:00	*	*	10	14	14	23	12	25	*	*	*	*	*	*	12	21
03:00	*	*	12	**31**	16	**34**	18	**49**	*	*	*	*	*	*	15	**38**
04:00	*	*	**16**	24	16	21	27	19	*	*	*	*	*	*	**20**	21
05:00	*	*	10	14	10	19	**37**	15	*	*	*	*	*	*	19	16
06:00	*	*	12	15	12	13	14	17	*	*	*	*	*	*	13	15
07:00	*	*	10	7	6	17	3	17	*	*	*	*	*	*	6	14
08:00	*	*	1	13	8	10	8	36	*	*	*	*	*	*	6	20
09:00	*	*	0	7	2	8	2	10	*	*	*	*	*	*	1	8
10:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
11:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
Lane	0	0	167	215	177	226	210	250	0	0	0	0	0	0	183	230
Day	0		382		403		460		0		0		0		413	
AM Peak	-	-	10:00	10:00	10:00	11:00	11:00	10:00	-	-	-	-	-	-	10:00	10:00
Vol.	-	-	21	15	18	14	12	16	-	-	-	-	-	-	15	14
PM Peak	-	-	16:00	15:00	12:00	15:00	17:00	15:00	-	-	-	-	-	-	16:00	15:00
Vol.	-	-	16	31	18	34	37	49	-	-	-	-	-	-	20	38

Comb. Total	0	382	403	460	0	0	0	413

ADT ADT 415 AADT 415

TRAFFIC COUNT CONSULTANTS, INC.

Team@tc2inc.com
(253) 770-1407

LAKEWOOD, WASHINGTON
KIDS FIRST PL S/O
GOLF COURSE RD
LOC# 08 V TSI19016TM

Site Code: 08

Date Start: 28-May-19
Date End: 30-May-19

Start	27-May-19		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
12:00 AM	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
01:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
02:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
03:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
04:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
05:00	*	*	0	1	0	0	0	1	*	*	*	*	*	*	0	1
06:00	*	*	2	2	3	3	1	0	*	*	*	*	*	*	2	2
07:00	*	*	4	4	**4**	2	**6**	2	*	*	*	*	*	*	**5**	3
08:00	*	*	**5**	4	4	0	4	1	*	*	*	*	*	*	4	2
09:00	*	*	4	3	4	8	3	**7**	*	*	*	*	*	*	4	6
10:00	*	*	1	**7**	3	4	3	7	*	*	*	*	*	*	2	6
11:00	*	*	2	4	4	**10**	4	7	*	*	*	*	*	*	3	**7**
12:00 PM	*	*	**3**	10	**5**	7	**6**	6	*	*	*	*	*	*	**5**	8
01:00	*	*	3	6	2	6	4	3	*	*	*	*	*	*	3	5
02:00	*	*	1	6	4	13	2	16	*	*	*	*	*	*	2	12
03:00	*	*	0	**27**	2	**24**	0	**39**	*	*	*	*	*	*	1	**30**
04:00	*	*	2	11	2	13	2	8	*	*	*	*	*	*	2	11
05:00	*	*	1	3	1	4	3	5	*	*	*	*	*	*	2	4
06:00	*	*	1	1	0	0	1	0	*	*	*	*	*	*	1	0
07:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
08:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
09:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
10:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
11:00	*	*	0	0	0	0	0	0	*	*	*	*	*	*	0	0
Lane	0	0	29	89	38	94	39	102	0	0	0	0	0	0	36	97
Day	0		118		132		141		0		0		0		133	
AM Peak	-	-	08:00	10:00	07:00	11:00	07:00	09:00	-	-	-	-	-	-	07:00	11:00
Vol.	-	-	5	7	4	10	6	7	-	-	-	-	-	-	5	7
PM Peak	-	-	12:00	15:00	12:00	15:00	12:00	15:00	-	-	-	-	-	-	12:00	15:00
Vol.	-	-	3	27	5	24	6	39	-	-	-	-	-	-	5	30

Comb. Total	0	118	132	141	0	0	0	133

ADT ADT 130 AADT 130

TRAFFIC COUNT CONSULTANTS, INC.

Team@tc2inc.com
(253) 770-1407

LAKEWOOD, WASHINGTON
STEILACOOM BLVD SW W/O
CHAPEL GATE DR
LOC# 03W V TSI19016TM

Site Code: 03W

Date Start: 28-May-19
Date End: 30-May-19

Start Time	Mon 27-May-19	Tue 28-May-19	Wed 29-May-19	Thu 30-May-19	Fri 31-May-19	Average Day	Sat 01-Jun-19	Sun 02-Jun-19	Week Average
12:00 AM	*	37	45	36	*	39	*	*	39
01:00	*	21	9	15	*	15	*	*	15
02:00	*	16	14	16	*	15	*	*	15
03:00	*	30	24	32	*	29	*	*	29
04:00	*	77	79	67	*	74	*	*	74
05:00	*	179	192	206	*	192	*	*	192
06:00	*	412	429	444	*	428	*	*	428
07:00	*	**651**	**707**	**679**	*	**679**	*	*	**679**
08:00	*	538	590	543	*	557	*	*	557
09:00	*	539	597	571	*	569	*	*	569
10:00	*	568	522	501	*	530	*	*	530
11:00	*	602	604	576	*	594	*	*	594
12:00 PM	*	618	583	611	*	604	*	*	604
01:00	*	578	629	608	*	605	*	*	605
02:00	*	695	**741**	**738**	*	**725**	*	*	**725**
03:00	*	651	690	658	*	666	*	*	666
04:00	*	643	671	724	*	679	*	*	679
05:00	*	**696**	727	729	*	717	*	*	717
06:00	*	520	505	519	*	515	*	*	515
07:00	*	396	395	468	*	420	*	*	420
08:00	*	338	417	377	*	377	*	*	377
09:00	*	203	213	272	*	229	*	*	229
10:00	*	131	147	171	*	150	*	*	150
11:00	*	64	84	75	*	74	*	*	74
Day Total	0	9203	9614	9636	0	9482	0	0	9482
% Avg. WkDay	0.0%	97.1%	101.4%	101.6%	0.0%				
% Avg. Week	0.0%	97.1%	101.4%	101.6%	0.0%	100.0%	0.0%	0.0%	
AM Peak	-	07:00	07:00	07:00	-	07:00	-	-	07:00
Vol.	-	651	707	679	-	679	-	-	679
PM Peak	-	17:00	14:00	14:00	-	14:00	-	-	14:00
Vol.	-	696	741	738	-	725	-	-	725
Grand Total	0	9203	9614	9636	0	9482	0	0	9482

ADT ADT 9,484 AADT 9,484

TRAFFIC COUNT CONSULTANTS, INC.

Team@tc2inc.com
(253) 770-1407

LAKEWOOD, WASHINGTON
STEILACOOM BLVD SW E/O
CHAPEL GATE DR
LOC# 03E V TSI19016TM

Site Code: 03E

Date Start: 28-May-19
Date End: 30-May-19

Start Time	Mon 27-May-19	Tue 28-May-19	Wed 29-May-19	Thu 30-May-19	Fri 31-May-19	Average Day	Sat 01-Jun-19	Sun 02-Jun-19	Week Average
12:00 AM	*	45	49	52	*	49	*	*	49
01:00	*	25	30	30	*	28	*	*	28
02:00	*	19	23	19	*	20	*	*	20
03:00	*	26	28	26	*	27	*	*	27
04:00	*	40	47	44	*	44	*	*	44
05:00	*	201	228	239	*	223	*	*	223
06:00	*	412	429	454	*	432	*	*	432
07:00	*	**741**	**736**	**747**	*	**741**	*	*	**741**
08:00	*	585	597	597	*	593	*	*	593
09:00	*	488	533	506	*	509	*	*	509
10:00	*	508	481	468	*	486	*	*	486
11:00	*	529	496	513	*	513	*	*	513
12:00 PM	*	574	616	556	*	582	*	*	582
01:00	*	552	629	515	*	565	*	*	565
02:00	*	645	666	683	*	665	*	*	665
03:00	*	711	720	770	*	734	*	*	734
04:00	*	**767**	822	821	*	803	*	*	803
05:00	*	763	**830**	**851**	*	**815**	*	*	**815**
06:00	*	708	636	651	*	665	*	*	665
07:00	*	471	526	520	*	506	*	*	506
08:00	*	408	424	441	*	424	*	*	424
09:00	*	281	290	314	*	295	*	*	295
10:00	*	164	181	256	*	200	*	*	200
11:00	*	117	150	138	*	135	*	*	135
Day Total	0	9780	10167	10211	0	10054	0	0	10054
% Avg. WkDay	0.0%	97.3%	101.1%	101.6%	0.0%				
% Avg. Week	0.0%	97.3%	101.1%	101.6%	0.0%	100.0%	0.0%	0.0%	
AM Peak	-	07:00	07:00	07:00	-	07:00	-	-	07:00
Vol.	-	741	736	747	-	741	-	-	741
PM Peak	-	16:00	17:00	17:00	-	17:00	-	-	17:00
Vol.	-	767	830	851	-	815	-	-	815
Grand Total	0	9780	10167	10211	0	10054	0	0	10054

ADT ADT 10,053 AADT 10,053

TRAFFIC COUNT CONSULTANTS, INC.

Team@tc2inc.com
(253) 770-1407

LAKEWOOD, WASHINGTON
STEILACOOM BLVD SW W/O
CSTC ENTRANCE
LOC# 05W V TSI19016TM

Site Code: 05W

Date Start: 28-May-19
Date End: 30-May-19

Start Time	Mon 27-May-19	Tue 28-May-19	Wed 29-May-19	Thu 30-May-19	Fri 31-May-19	Average Day	Sat 01-Jun-19	Sun 02-Jun-19	Week Average
12:00 AM	*	39	55	43	*	46	*	*	46
01:00	*	24	16	15	*	18	*	*	18
02:00	*	22	19	22	*	21	*	*	21
03:00	*	31	25	38	*	31	*	*	31
04:00	*	72	75	66	*	71	*	*	71
05:00	*	161	168	173	*	167	*	*	167
06:00	*	370	367	389	*	375	*	*	375
07:00	*	669	**738**	**702**	*	**703**	*	*	**703**
08:00	*	515	552	535	*	534	*	*	534
09:00	*	557	589	579	*	575	*	*	575
10:00	*	577	551	536	*	555	*	*	555
11:00	*	**676**	669	640	*	662	*	*	662
12:00 PM	*	673	644	686	*	668	*	*	668
01:00	*	611	695	650	*	652	*	*	652
02:00	*	791	829	825	*	815	*	*	815
03:00	*	**865**	**926**	889	*	**893**	*	*	**893**
04:00	*	834	866	**890**	*	863	*	*	863
05:00	*	789	812	803	*	801	*	*	801
06:00	*	564	567	577	*	569	*	*	569
07:00	*	412	411	476	*	433	*	*	433
08:00	*	355	440	396	*	397	*	*	397
09:00	*	196	207	279	*	227	*	*	227
10:00	*	173	207	223	*	201	*	*	201
11:00	*	151	176	174	*	167	*	*	167
Day Total	0	10127	10604	10606	0	10444	0	0	10444
% Avg. WkDay	0.0%	97.0%	101.5%	101.6%	0.0%				
% Avg. Week	0.0%	97.0%	101.5%	101.6%	0.0%	100.0%	0.0%	0.0%	
AM Peak	-	11:00	07:00	07:00	-	07:00	-	-	07:00
Vol.	-	676	738	702	-	703	-	-	703
PM Peak	-	15:00	15:00	16:00	-	15:00	-	-	15:00
Vol.	-	865	926	890	-	893	-	-	893
Grand Total	0	10127	10604	10606	0	10444	0	0	10444

ADT ADT 10,446 AADT 10,446

TRAFFIC COUNT CONSULTANTS, INC.

Team@tc2inc.com
(253) 770-1407

LAKEWOOD, WASHINGTON
STEILACOOM BLVD SW E/O
CSTC ENTRANCE
LOC# 05E V TSI19016TM

Site Code: 05E

Date Start: 28-May-19
Date End: 30-May-19

Start Time	Mon 27-May-19	Tue 28-May-19	Wed 29-May-19	Thu 30-May-19	Fri 31-May-19	Average Day	Sat 01-Jun-19	Sun 02-Jun-19	Week Average
12:00 AM	*	51	57	57	*	55	*	*	55
01:00	*	28	39	32	*	33	*	*	33
02:00	*	25	26	17	*	23	*	*	23
03:00	*	31	34	36	*	34	*	*	34
04:00	*	62	77	68	*	69	*	*	69
05:00	*	294	325	344	*	321	*	*	321
06:00	*	729	725	783	*	746	*	*	746
07:00	*	**936**	**954**	**942**	*	**944**	*	*	**944**
08:00	*	680	705	713	*	699	*	*	699
09:00	*	548	592	562	*	567	*	*	567
10:00	*	535	510	507	*	517	*	*	517
11:00	*	580	531	563	*	558	*	*	558
12:00 PM	*	675	708	637	*	673	*	*	673
01:00	*	609	687	582	*	626	*	*	626
02:00	*	**815**	**836**	**855**	*	**835**	*	*	**835**
03:00	*	666	676	724	*	689	*	*	689
04:00	*	740	802	777	*	773	*	*	773
05:00	*	762	828	842	*	811	*	*	811
06:00	*	717	642	664	*	674	*	*	674
07:00	*	486	545	528	*	520	*	*	520
08:00	*	411	446	448	*	435	*	*	435
09:00	*	301	312	340	*	318	*	*	318
10:00	*	294	317	388	*	333	*	*	333
11:00	*	96	130	114	*	113	*	*	113
Day Total	0	11071	11504	11523	0	11366	0	0	11366
% Avg. WkDay	0.0%	97.4%	101.2%	101.4%	0.0%				
% Avg. Week	0.0%	97.4%	101.2%	101.4%	0.0%	100.0%	0.0%	0.0%	
AM Peak	-	07:00	07:00	07:00	-	07:00	-	-	07:00
Vol.	-	936	954	942	-	944	-	-	944
PM Peak	-	14:00	14:00	14:00	-	14:00	-	-	14:00
Vol.	-	815	836	855	-	835	-	-	835
Grand Total	0	11071	11504	11523	0	11366	0	0	11366

ADT ADT 11,366 AADT 11,366

Prepared for: **Transportation Solutions, Inc.**

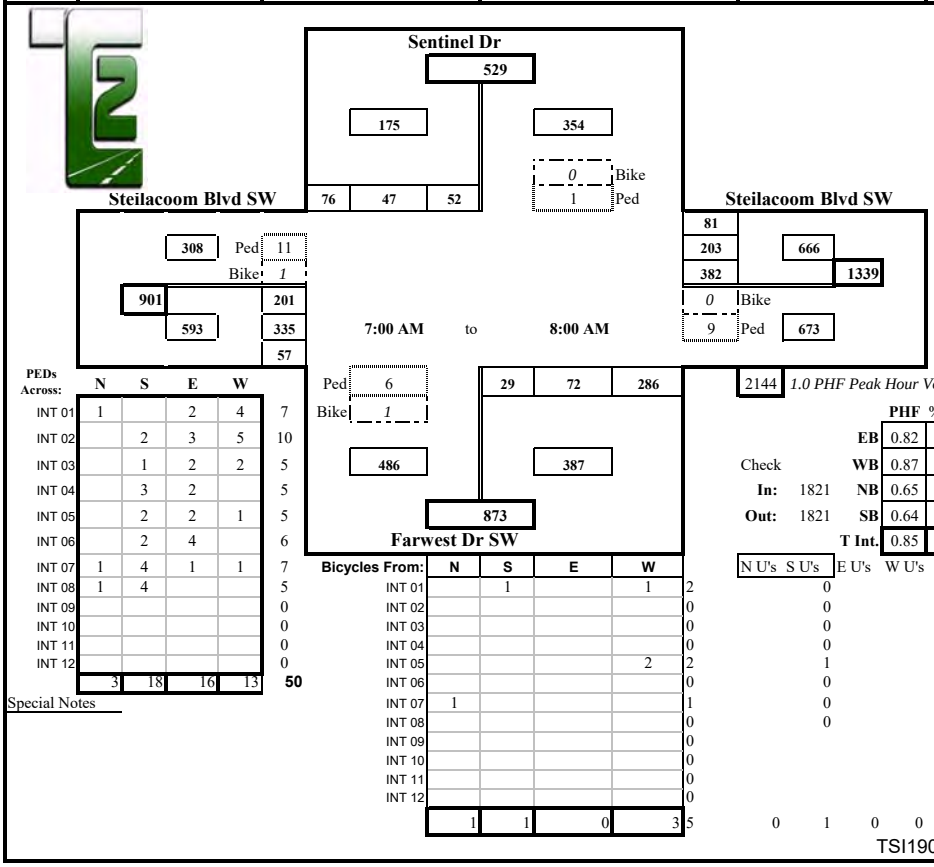
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Sentinel Dr/Farwest Dr SW & Steilacoom Blvd SW
Location: Lakewood, Washington
Date of Count: Thurs 5/30/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) Sentinel Dr				From South on (NB) Farwest Dr SW				From East on (WB) Steilacoom Blvd SW				From West on (EB) Steilacoom Blvd SW				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	2	8	7	17	2	9	10	67	5	104	69	19	9	52	76	14	452
7:30 A	8	23	17	28	4	9	42	99	3	82	41	36	4	84	62	13	536
7:45 A	4	18	19	28	2	6	18	61	5	80	44	13	1	53	115	13	468
8:00 A	2	3	4	3	0	5	2	59	3	116	49	13	1	12	82	17	365
8:15 A	2	3	1	2	3	11	5	46	4	67	33	4	5	12	100	20	304
8:30 A	2	3	4	4	2	9	3	53	1	66	51	4	1	11	77	22	307
8:45 A	1	6	8	9	3	4	4	33	5	80	62	3	2	8	74	15	306
9:00 A	0	7	3	4	1	9	4	60	1	104	76	3	1	5	84	19	378
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	21	71	63	95	17	62	88	478	27	699	425	95	24	237	670	133	3116
Peak Hour:	7:00 AM to 8:00 AM																
Total	16	52	47	76	8	29	72	286	16	382	203	81	15	201	335	57	1821
Approach	175				387				666				593				1821
%HV	9.1%				2.1%				2.4%				2.5%				3.0%
PHF	0.64				0.65				0.87				0.82				0.85



PEDs Across:	N	S	E	W	
INT 01	1		2	4	7
INT 02		2	3	5	10
INT 03		1	2	2	5
INT 04		3	2		5
INT 05		2	2	1	5
INT 06		2	4		6
INT 07	1	4	1	1	7
INT 08	1	4			5
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	3	18	16	13	50

Special Notes

Bicycles From:	N	S	E	W	
INT 01		1		1	2
INT 02					0
INT 03					0
INT 04					0
INT 05				2	2
INT 06					0
INT 07	1				1
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	1	1	0	3	5

2144 *1.0 PHF Peak Hour Volume*

		PHF	%HV
		EB	0.82	2.5%
Check		WB	0.87	2.4%
In:	1821	NB	0.65	2.1%
Out:	1821	SB	0.64	9.1%
		T Int.	0.85	3.0%

N U's	S U's	E U's	W U's
0	1	0	0

TSI19016TM_01a

Prepared for: **Transportation Solutions, Inc.**

Traffic Count Consultants, Inc.

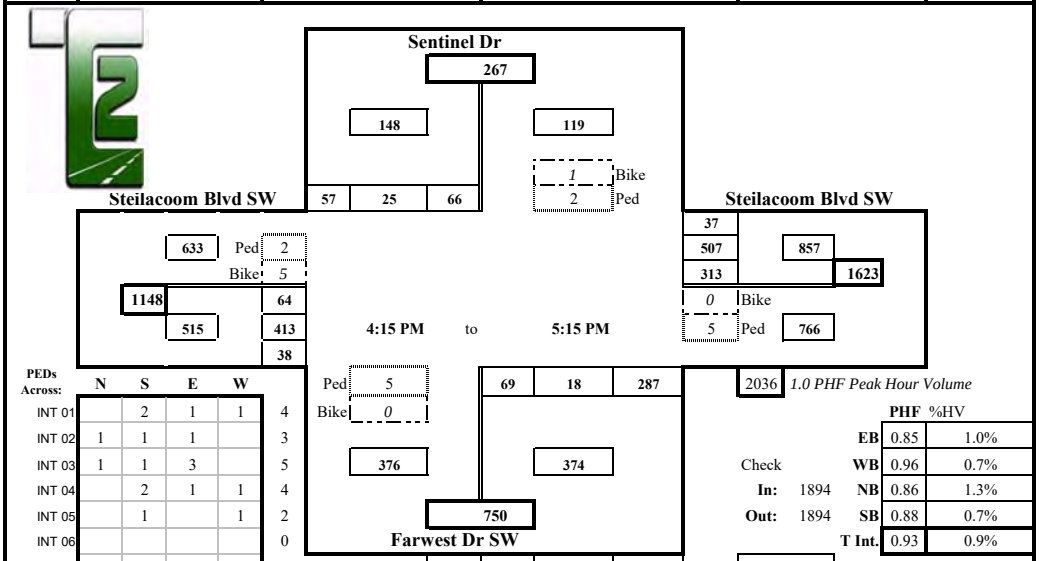
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Sentinel Dr/Farwest Dr SW & Steilacoom Blvd SW **Date of Count:** Thurs 5/30/2019

Location: Lakewood, Washington **Checked By:** Jess

Time Interval	From North on (SB) Sentinel Dr				From South on (NB) Farwest Dr SW				From East on (WB) Steilacoom Blvd SW				From West on (EB) Steilacoom Blvd SW				Interval Total
Ending at	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	11	9	20	3	15	4	63	2	71	115	6	0	2	84	13	413
4:30 P	0	12	4	14	1	16	4	69	1	84	131	8	1	1	81	14	438
4:45 P	0	22	4	10	2	15	2	73	1	73	132	9	1	7	102	9	458
5:00 P	0	16	10	16	0	24	8	54	1	75	122	12	2	21	123	8	489
5:15 P	1	16	7	17	2	14	4	91	3	81	122	8	1	35	107	7	509
5:30 P	0	19	1	12	0	13	4	52	0	75	126	9	1	7	100	10	428
5:45 P	0	8	0	9	2	17	5	56	1	83	129	17	1	22	96	12	454
6:00 P	1	9	5	6	1	13	6	68	1	84	114	21	0	55	108	5	494
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	2	113	40	104	11	127	37	526	10	626	991	90	7	150	801	78	3683
Peak Hour: 4:15 PM to 5:15 PM																	
Total	1	66	25	57	5	69	18	287	6	313	507	37	5	64	413	38	1894
Approach	148				374				857				515				1894
%HV	0.7%				1.3%				0.7%				1.0%				0.9%
PHF	0.88				0.86				0.96				0.85				0.93



2036 *1.0 PHF Peak Hour Volume*

	PHF	%HV
EB	0.85	1.0%
WB	0.96	0.7%
NB	0.86	1.3%
SB	0.88	0.7%
T Int.	0.93	0.9%

Check In: 1894 Out: 1894

PEDs Across:

	N	S	E	W	
INT 01		2	1	1	4
INT 02	1	1	1		3
INT 03	1	1	3		5
INT 04		2	1	1	4
INT 05		1		1	2
INT 06					0
INT 07		3	1	2	6
INT 08		1		3	4
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	2	11	7	8	28

Bicycles From:

	N	S	E	W	
INT 01					0
INT 02					0
INT 03				2	2
INT 04	1			2	3
INT 05				1	1
INT 06		1	3	1	5
INT 07					0
INT 08	2		4	2	8
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	3	1	7	8	19

Special Notes

TSI19016TM_01p

Prepared for: **Transportation Solutions, Inc.**

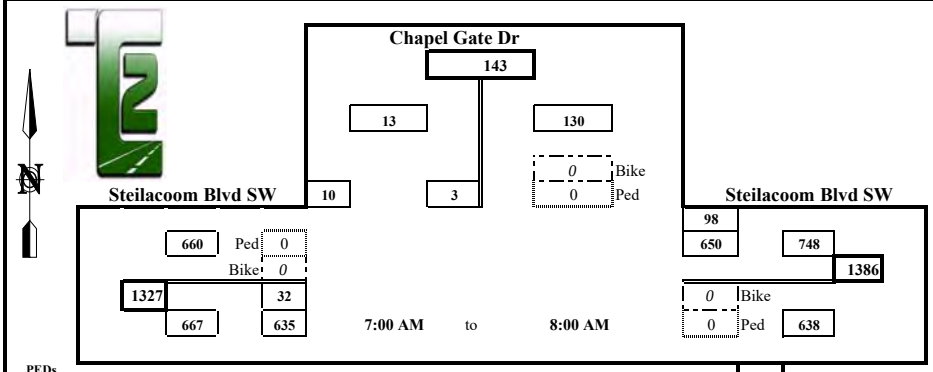
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Chapel Gate Dr & Steilacoom Blvd SW
Location: Lakewood, Washington
Date of Count: Thurs 5/30/2019
Checked By: Jess

Time Interval	From North on (SB) Chapel Gate Dr				From South on (NB) 0				From East on (WB) Steilacoom Blvd SW				From West on (EB) Steilacoom Blvd SW				Interval Total
Ending at	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	0	0	5	0	0	0	0	5	0	184	18	2	8	137	0	352
7:30 A	0	2	0	1	0	0	0	0	4	0	164	33	5	10	171	0	381
7:45 A	0	1	0	2	0	0	0	0	4	0	128	26	4	10	183	0	350
8:00 A	1	0	0	2	0	0	0	0	4	0	174	21	1	4	144	0	345
8:15 A	1	3	0	1	0	0	0	0	3	0	106	11	5	4	143	0	268
8:30 A	1	4	0	0	0	0	0	0	1	0	125	5	3	3	131	0	268
8:45 A	0	2	0	0	0	0	0	0	5	0	140	8	2	5	110	0	265
9:00 A	0	1	0	0	0	0	0	0	2	0	184	7	0	2	154	0	348
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	3	13	0	11	0	0	0	0	28	0	1205	129	22	46	1173	0	2577
Peak Hour: 7:00 AM to 8:00 AM																	
Total	1	3	0	10	0	0	0	0	17	0	650	98	12	32	635	0	1428
Approach	13				0				748				667				1428
%HV	7.7%				n/a				2.3%				1.8%				2.1%
PHF	0.65				n/a				0.93				0.86				0.94



1524 *1.0 PHF Peak Hour Volume*

	PHF	%HV
EB	0.86	1.8%
WB	0.93	2.3%
NB	n/a	n/a
SB	0.65	7.7%
T Int.	0.94	2.1%

Check In: 1428 Out: 1428

PEDs Across:

	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO PEDS				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	**0**

Bicycles From:

	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO BIKES				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

Conditions:

Special Notes

TSI19016TM_02a

Prepared for: **Transportation Solutions, Inc.**

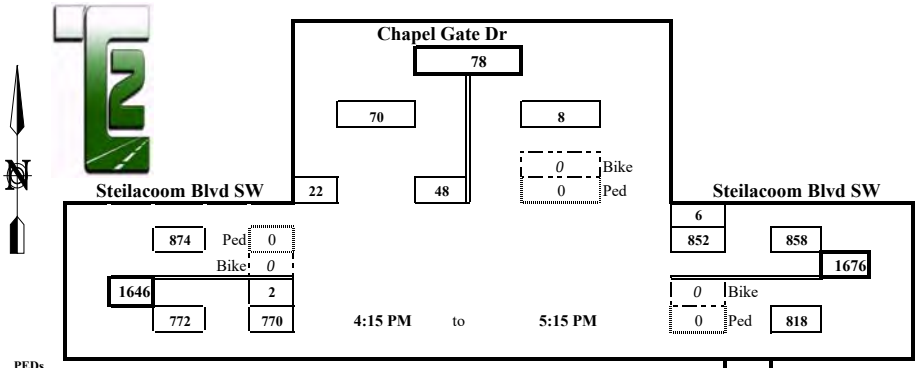
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Chapel Gate Dr & Steilacoom Blvd SW
Location: Lakewood, Washington
Date of Count: Thurs 5/30/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) Chapel Gate Dr				From South on (NB) 0				From East on (WB) Steilacoom Blvd SW				From West on (EB) Steilacoom Blvd SW				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	22	0	2	0	0	0	0	2	0	188	2	2	0	156	0	370
4:30 P	0	19	0	5	0	0	0	0	1	0	228	1	2	0	162	0	415
4:45 P	0	14	0	10	0	0	0	0	1	0	206	0	2	0	208	0	438
5:00 P	0	6	0	3	0	0	0	0	1	0	200	0	2	1	194	0	404
5:15 P	0	9	0	4	0	0	0	0	3	0	218	5	1	1	206	0	443
5:30 P	0	6	0	2	0	0	0	0	0	0	196	0	1	1	178	0	383
5:45 P	0	6	0	3	0	0	0	0	1	0	239	0	2	0	161	0	409
6:00 P	0	0	0	2	0	0	0	0	1	0	206	1	0	0	178	0	387
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	82	0	31	0	0	0	0	10	0	1681	9	12	3	1443	0	3249
Peak Hour: 4:15 PM to 5:15 PM																	
Total	0	48	0	22	0	0	0	0	6	0	852	6	7	2	770	0	1700
Approach	70				0				858				772				1700
%HV	n/a				n/a				0.7%				0.9%				0.8%
PHF	0.73				n/a				0.94				0.93				0.96



PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO PEDS				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

Special Notes

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO BIKES				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

1772 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.93	0.9%
Check	WB	0.94	0.7%
In: 1700	NB	n/a	n/a
Out: 1700	SB	0.73	n/a
	T Int.	0.96	0.8%

Conditions:

Prepared for: **Transportation Solutions, Inc.**

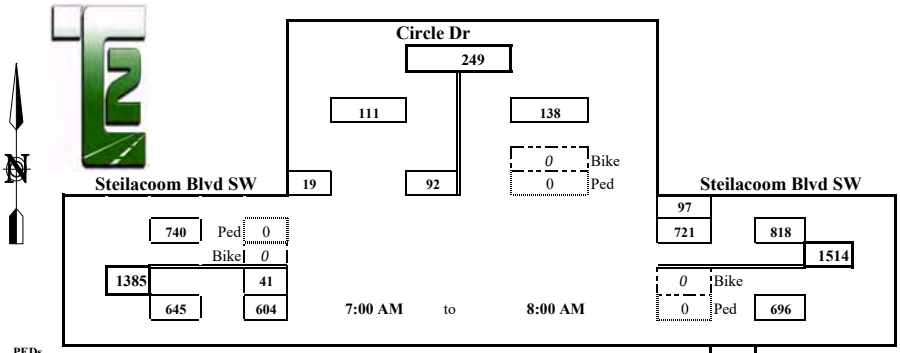
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Circle Dr & Steilacoom Blvd SW
Location: Lakewood, Washington
Date of Count: Thurs 5/30/2019
Checked By: Jess

Time Interval	From North on (SB) Circle Dr				From South on (NB) 0				From East on (WB) Steilacoom Blvd SW				From West on (EB) Steilacoom Blvd SW				Interval Total
Ending at	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	70	0	15	0	0	0	0	5	0	183	28	2	7	134	0	437
7:30 A	0	9	0	2	0	0	0	0	4	0	204	24	4	8	167	0	414
7:45 A	0	8	0	2	0	0	0	0	4	0	141	27	5	13	174	0	365
8:00 A	0	5	0	0	0	0	0	0	6	0	193	18	1	13	129	0	358
8:15 A	0	5	0	0	0	0	0	0	3	0	119	10	5	8	133	0	275
8:30 A	0	4	0	0	0	0	0	0	1	0	129	17	3	12	127	0	289
8:45 A	0	6	0	2	0	0	0	0	5	0	145	8	2	4	100	0	265
9:00 A	0	5	0	1	0	0	0	0	2	0	190	12	0	9	148	0	365
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	112	0	22	0	0	0	0	30	0	1304	144	22	74	1112	0	2768
Peak Hour: 7:00 AM to 8:00 AM																	
Total	0	92	0	19	0	0	0	0	19	0	721	97	12	41	604	0	1574
Approach	111				0				818				645				1574
%HV	n/a				n/a				2.3%				1.9%				2.0%
PHF	0.33				n/a				0.90				0.86				0.90



1748 *1.0 PHF Peak Hour Volume*

	PHF	%HV
EB	0.86	1.9%
WB	0.90	2.3%
NB	n/a	n/a
SB	0.33	n/a
T Int.	0.90	2.0%

Check In: 1574 Out: 1574

Conditions:

PEDs Across:

	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO PEDS				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	**0**

Bicycles From:

	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06		1			1
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	1	0	0	1

Special Notes

TSI19016TM_03a

Prepared for: **Transportation Solutions, Inc.**

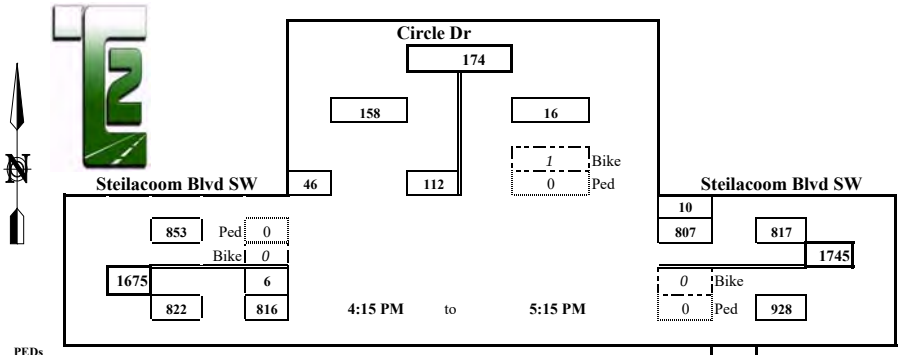
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Circle Dr & Steilacoom Blvd SW
Location: Lakewood, Washington
Date of Count: Thurs 5/30/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) Circle Dr				From South on (NB) 0				From East on (WB) Steilacoom Blvd SW				From West on (EB) Steilacoom Blvd SW				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	34	0	11	0	0	0	0	2	0	180	5	1	2	178	0	410
4:30 P	0	32	0	15	0	0	0	0	1	0	216	5	2	0	185	0	453
4:45 P	0	38	0	17	0	0	0	0	1	0	190	3	2	3	220	0	471
5:00 P	0	16	0	8	0	0	0	0	1	0	184	2	2	2	196	0	408
5:15 P	0	26	0	6	0	0	0	0	3	0	217	0	1	1	215	0	465
5:30 P	0	14	0	3	0	0	0	0	0	0	207	2	1	1	182	0	409
5:45 P	0	6	0	4	0	0	0	0	1	0	225	1	2	0	162	0	398
6:00 P	0	12	0	4	0	0	0	0	1	0	201	1	0	0	180	0	398
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	178	0	68	0	0	0	0	10	0	1620	19	11	9	1518	0	3412
Peak Hour: 4:15 PM to 5:15 PM																	
Total	0	112	0	46	0	0	0	0	6	0	807	10	7	6	816	0	1797
Approach	158				0				817				822				1797
%HV	n/a				n/a				0.7%				0.9%				0.7%
PHF	0.72				n/a				0.92				0.92				0.95



1884 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.92	0.9%
Check	WB	0.92	0.7%
In: 1797	NB	n/a	n/a
Out: 1797	SB	0.72	n/a
	T Int.	0.95	0.7%

Conditions:

PEDs Across:

	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO PEDS				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	**0**

Bicycles From:

	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05	1				1
INT 06					0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	1	0	0	0	1

Special Notes

TSI19016TM_03p

Prepared for: **Transportation Solutions, Inc.**

Traffic Count Consultants, Inc.

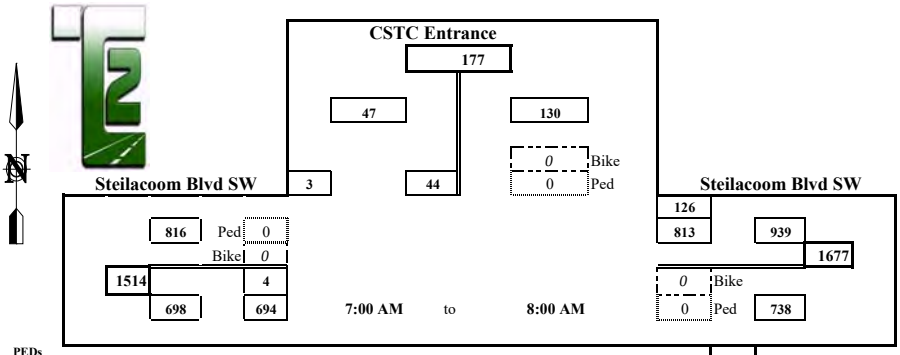
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: CSTC Entrance & Steilacoom Blvd SW **Date of Count:** Thurs 5/30/2019

Location: Lakewood, Washington **Checked By:** Jess

Time Interval	From North on (SB) CSTC Entrance				From South on (NB) 0				From East on (WB) Steilacoom Blvd SW				From West on (EB) Steilacoom Blvd SW				Interval Total
Ending at	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	33	0	2	0	0	0	0	4	0	211	28	4	1	207	0	482
7:30 A	0	6	0	1	0	0	0	0	4	0	241	27	3	0	169	0	444
7:45 A	0	4	0	0	0	0	0	0	4	0	161	31	5	3	176	0	375
8:00 A	0	1	0	0	0	0	0	0	4	0	200	40	2	0	142	0	383
8:15 A	0	4	0	0	0	0	0	0	3	0	131	34	5	0	136	0	305
8:30 A	0	4	0	0	0	0	0	0	2	0	149	25	3	1	134	0	313
8:45 A	0	2	0	0	0	0	0	0	5	0	167	16	2	0	109	0	294
9:00 A	1	3	0	0	0	0	0	0	2	0	192	8	0	1	143	0	347
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	1	57	0	3	0	0	0	0	28	0	1452	209	24	6	1216	0	2943
Peak Hour: 7:00 AM to 8:00 AM																	
Total	0	44	0	3	0	0	0	0	16	0	813	126	14	4	694	0	1684
Approach		47				0				939				698			1684
%HV		n/a				n/a				1.7%				2.0%			1.8%
PHF		0.34				n/a				0.88				0.84			0.87



PEDs Across:

	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO PEDS				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	**0**

Special Notes

Bicycles From:

	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO BIKES				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

1928 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.84	2.0%
Check	WB	0.88	1.7%
In: 1684	NB	n/a	n/a
Out: 1684	SB	0.34	n/a
	T Int.	0.87	1.8%

N U's	S U's	E U's	W U's
			0
			0
			0
			0
			0
			0
			0
			1
0	0	0	1

Prepared for: **Transportation Solutions, Inc.**

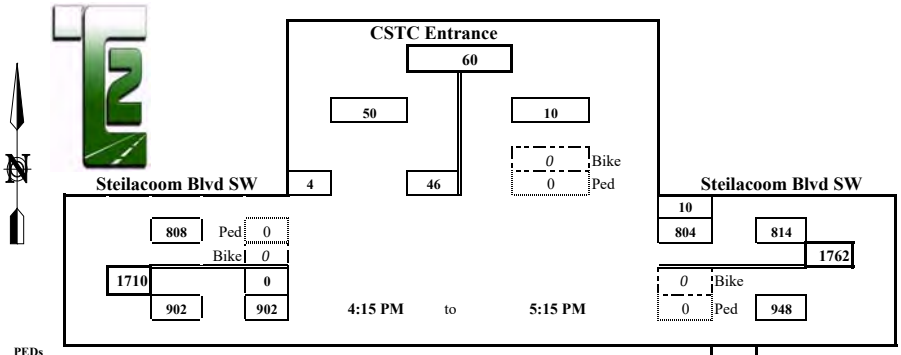
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: CSTC Entrance & Steilacoom Blvd SW
Location: Lakewood, Washington
Date of Count: Thurs 5/30/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) CSTC Entrance				From South on (NB) 0				From East on (WB) Steilacoom Blvd SW				From West on (EB) Steilacoom Blvd SW				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	14	0	1	0	0	0	0	2	0	193	5	1	0	218	0	431
4:30 P	0	11	0	2	0	0	0	0	1	0	211	4	2	0	207	0	435
4:45 P	0	18	0	1	0	0	0	0	1	0	186	1	1	0	247	0	453
5:00 P	0	7	0	0	0	0	0	0	1	0	185	2	3	0	215	0	409
5:15 P	0	10	0	1	0	0	0	0	3	0	222	3	1	0	233	0	469
5:30 P	0	7	0	0	0	0	0	0	1	0	204	0	1	0	199	0	410
5:45 P	0	11	0	0	0	0	0	0	0	0	219	3	2	0	172	0	405
6:00 P	0	4	0	1	0	0	0	0	1	0	199	1	0	0	194	0	399
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	82	0	6	0	0	0	0	10	0	1619	19	11	0	1685	0	3411
Peak Hour: 4:15 PM to 5:15 PM																	
Total	0	46	0	4	0	0	0	0	6	0	804	10	7	0	902	0	1766
Approach	50				0				814				902				1766
%HV	n/a				n/a				0.7%				0.8%				0.7%
PHF	0.66				n/a				0.90				0.91				0.94



PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO PEDS				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	**0**

Special Notes

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO BIKES				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

1876 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.91	0.8%
Check	WB	0.90	0.7%
In: 1766	NB	n/a	n/a
Out: 1766	SB	0.66	n/a
	T Int.	0.94	0.7%

N U's	S U's	E U's	W U's
		1	0
		0	1
		0	0
		0	0
		0	0
		0	0
		0	0
		0	0
0	0	1	1

TSI19016TM_04p

Prepared for: **Transportation Solutions, Inc.**

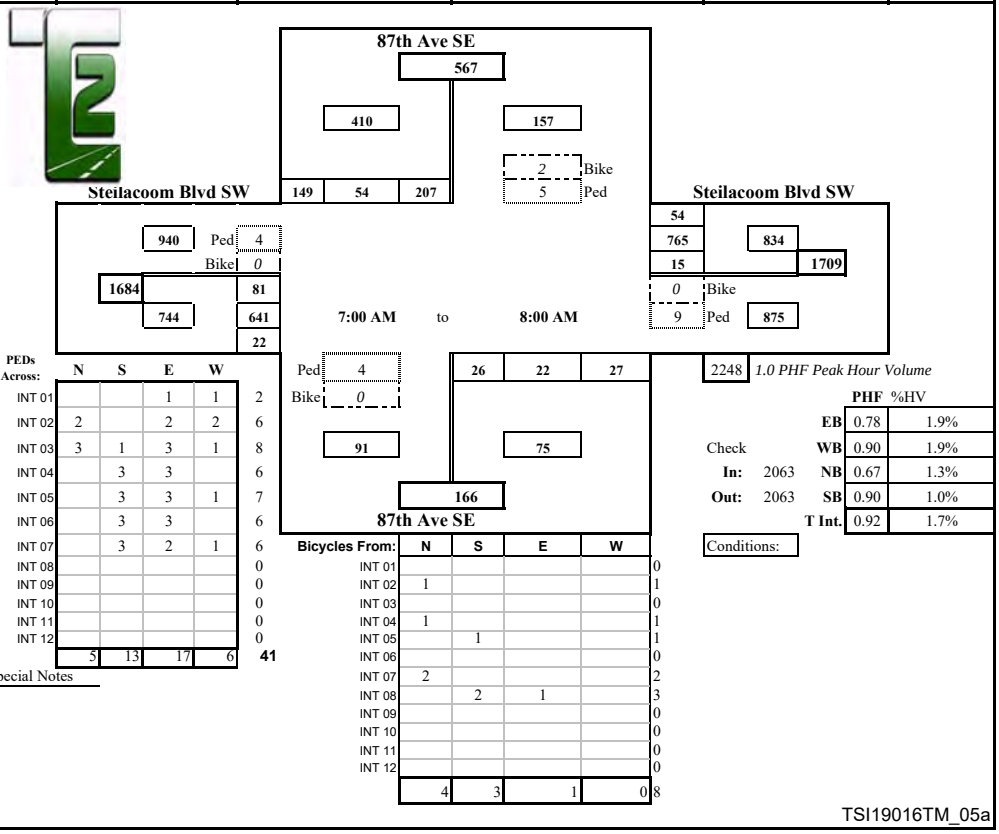
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 87th Ave SE & Steilacoom Blvd SW
Location: Lakewood, Washington
Date of Count: Thurs 5/30/2019
Checked By: Jess

Time Interval	From North on (SB) 87th Ave SE				From South on (NB) 87th Ave SE				From East on (WB) Steilacoom Blvd SW				From West on (EB) Steilacoom Blvd SW				Interval Total
Ending at	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	52	22	40	0	8	2	4	5	2	187	5	4	27	207	6	562
7:30 A	3	54	13	40	0	3	2	4	3	5	211	16	3	22	147	6	523
7:45 A	0	52	12	32	1	11	7	10	5	3	172	15	5	15	162	9	500
8:00 A	1	49	7	37	0	4	11	9	3	5	195	18	2	17	125	1	478
8:15 A	1	43	8	22	1	6	10	7	8	8	140	29	5	20	118	1	412
8:30 A	3	57	5	35	2	3	12	6	2	11	152	22	5	24	111	6	444
8:45 A	2	65	23	36	0	0	3	5	6	14	141	21	2	12	93	4	417
9:00 A	0	37	8	34	0	4	4	10	2	11	157	28	1	17	132	0	442
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	10	409	98	276	4	39	51	55	34	59	1355	154	27	154	1095	33	3778
Peak Hour:	7:00 AM to 8:00 AM																
Total	4	207	54	149	1	26	22	27	16	15	765	54	14	81	641	22	2063
Approach	410				75				834				744				2063
%HV	1.0%				1.3%				1.9%				1.9%				1.7%
PHF	0.90				0.67				0.90				0.78				0.92



PEDs Across:	N	S	E	W	
INT 01			1	1	2
INT 02	2		2	2	6
INT 03	3	1	3	1	8
INT 04		3	3		6
INT 05		3	3	1	7
INT 06		3	3		6
INT 07		3	2	1	6
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	5	13	17	6	41

Bicycles From:	N	S	E	W	
INT 01					0
INT 02	1				1
INT 03					0
INT 04	1				1
INT 05		1			1
INT 06					0
INT 07	2				2
INT 08		2	1		3
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	4	3	1	0	8

2248 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.78	1.9%
Check	WB	0.90	1.9%
In: 2063	NB	0.67	1.3%
Out: 2063	SB	0.90	1.0%
	T Int.	0.92	1.7%

Conditions:

Special Notes

TSI19016TM_05a

Prepared for: **Transportation Solutions, Inc.**

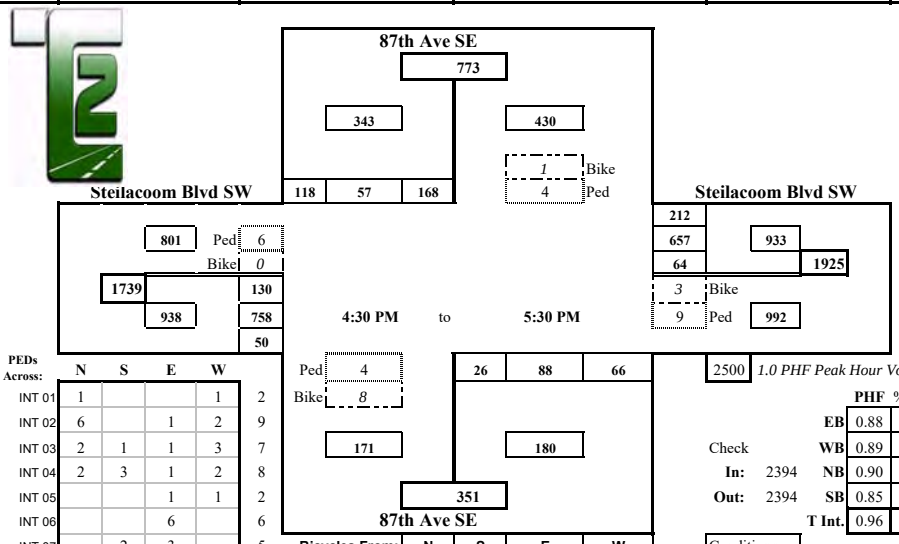
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 87th Ave SE & Steilacoom Blvd SW
Location: Lakewood, Washington
Date of Count: Thurs 5/30/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) 87th Ave SE				From South on (NB) 87th Ave SE				From East on (WB) Steilacoom Blvd SW				From West on (EB) Steilacoom Blvd SW				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	2	36	20	31	2	5	16	17	0	17	162	57	2	22	200	8	591
4:30 P	1	51	7	27	0	2	11	6	1	9	187	56	2	32	182	6	576
4:45 P	1	40	15	28	0	9	23	11	2	16	150	47	0	34	218	13	604
5:00 P	0	38	12	37	0	4	21	15	2	14	146	48	4	28	181	13	557
5:15 P	1	32	13	27	0	10	20	17	1	15	186	60	1	34	199	12	625
5:30 P	0	58	17	26	0	3	24	23	1	19	175	57	3	34	160	12	608
5:45 P	0	42	16	23	0	9	15	14	0	14	190	60	2	34	138	11	566
6:00 P	0	47	11	30	0	15	21	24	1	24	155	47	0	40	150	8	572
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	5	344	111	229	2	57	151	127	8	128	1351	432	14	258	1428	83	4699
Peak Hour: 4:30 PM to 5:30 PM																	
Total	2	168	57	118	0	26	88	66	6	64	657	212	8	130	758	50	2394
Approach	343				180				933				938				2394
%HV	0.6%				n/a				0.6%				0.9%				0.7%
PHF	0.85				0.90				0.89				0.88				0.96



2500 *1.0 PHF Peak Hour Volume*

	PHF	%HV
EB	0.88	0.9%
WB	0.89	0.6%
NB	0.90	n/a
SB	0.85	0.6%
T Int.	0.96	0.7%

Check In: 2394 Out: 2394

Conditions:

PEDs Across:

	N	S	E	W	
INT 01	1			1	2
INT 02	6		1	2	9
INT 03	2	1	1	3	7
INT 04	2	3	1	2	8
INT 05			1	1	2
INT 06			6		6
INT 07		2	3		5
INT 08	4		5	1	10
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	15	6	18	10	**49**

Bicycles From:

	N	S	E	W	
INT 01					0
INT 02				1	1
INT 03			1		1
INT 04		1			1
INT 05		5	1		6
INT 06	1	2	1		4
INT 07	2	2	2		6
INT 08			2		2
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	3	10	7	1	21

Special Notes

Prepared for: **Transportation Solutions, Inc.**

Traffic Count Consultants, Inc.

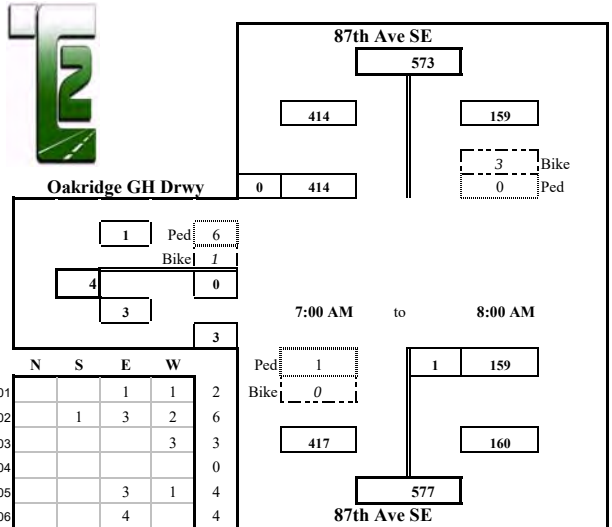
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 87th Ave SE & Oakridge Group Home Drwy **Date of Count:** Thurs 5/30/2019

Location: Lakewood, Washington **Checked By:** Jess

Time Interval	From North on (SB) 87th Ave SE				From South on (NB) 87th Ave SE				From East on (WB) 0				From West on (EB) Oakridge GH Drwy				Interval Total
Ending at	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	0	120	0	2	0	32	0	0	0	0	0	0	0	0	2	154
7:30 A	2	0	106	0	4	1	40	0	0	0	0	0	0	0	0	0	147
7:45 A	0	0	96	0	1	0	41	0	0	0	0	0	0	0	0	0	137
8:00 A	1	0	92	0	0	0	46	0	0	0	0	0	0	0	0	1	139
8:15 A	1	0	59	0	3	1	54	0	0	0	0	0	0	0	0	0	114
8:30 A	0	0	66	0	1	1	46	0	0	0	0	0	0	0	0	1	114
8:45 A	2	0	86	0	1	2	29	0	0	0	0	0	0	0	0	2	119
9:00 A	0	0	44	1	0	3	24	0	0	0	0	0	0	0	0	2	74
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	6	0	669	1	12	8	312	0	0	0	0	0	0	0	0	8	998
Peak Hour: 7:00 AM to 8:00 AM																	
Total	3	0	414	0	7	1	159	0	0	0	0	0	0	0	0	3	577
Approach			414				160				0				3		577
%HV			0.7%				4.4%				n/a				n/a		1.7%
PHF			0.86				0.87				n/a				0.38		0.94



PEDs Across:	N	S	E	W	
INT 01			1	1	2
INT 02		1	3	2	6
INT 03				3	3
INT 04					0
INT 05			3	1	4
INT 06			4		4
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	1	11	7	19

Bicycles From:	N	S	E	W	
INT 01	1				1
INT 02				1	1
INT 03	1				1
INT 04	1				1
INT 05		1			1
INT 06					0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	3	1	0	1	5

Special Notes

616 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.38	n/a
Check	WB	n/a	n/a
In: 577	NB	0.87	4.4%
Out: 577	SB	0.86	0.7%
	T Int.	0.94	1.7%

Conditions:

TSI19016TM_06a

Prepared for: **Transportation Solutions, Inc.**

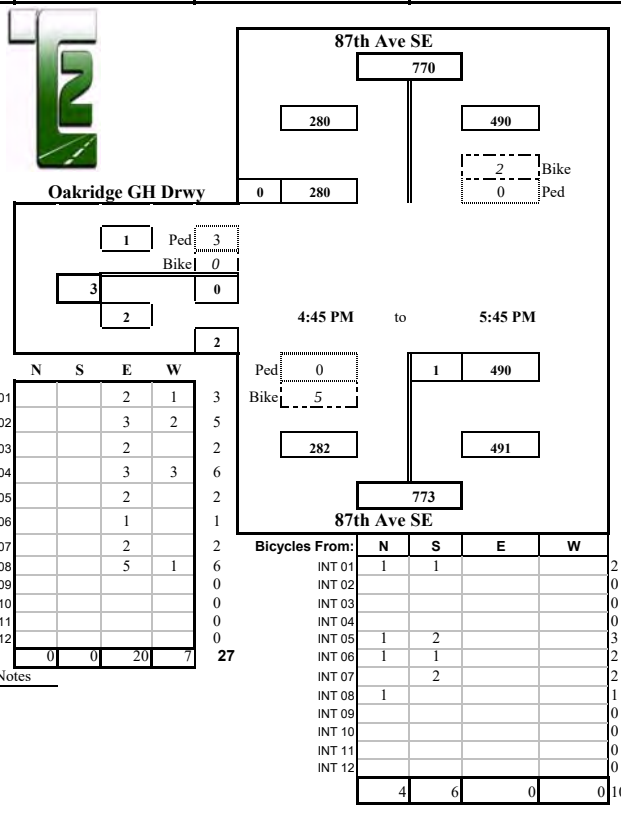
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 87th Ave SE & Oakridge Group Home Drwy
Location: Lakewood, Washington
Date of Count: Thurs 5/30/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) 87th Ave SE				From South on (NB) 87th Ave SE				From East on (WB) 0				From West on (EB) Oakridge GH Drwy				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	2	0	82	0	1	2	92	0	0	0	0	0	0	0	0	1	177
4:30 P	1	0	56	0	0	0	110	0	0	0	0	0	0	0	0	1	167
4:45 P	1	0	71	0	0	0	102	0	0	0	0	0	0	0	0	2	175
5:00 P	0	0	71	0	1	0	116	0	0	0	0	0	0	0	0	0	187
5:15 P	1	0	51	0	0	0	135	0	0	0	0	0	0	0	0	1	187
5:30 P	0	0	83	0	0	0	127	0	0	0	0	0	0	0	0	1	211
5:45 P	0	0	75	0	0	1	112	0	0	0	0	0	0	0	0	0	188
6:00 P	0	0	79	0	0	2	106	0	0	0	0	0	0	0	0	0	187
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	5	0	568	0	2	5	900	0	0	0	0	0	0	0	0	6	1479
Peak Hour: 4:45 PM to 5:45 PM																	
Total	1	0	280	0	1	1	490	0	0	0	0	0	0	0	0	2	773
Approach			280				491				0				2		773
%HV			0.4%				0.2%				n/a				n/a		0.3%
PHF			0.84				0.91				n/a				0.50		0.92



PEDs Across:

	N	S	E	W	
INT 01			2	1	3
INT 02			3	2	5
INT 03			2		2
INT 04			3	3	6
INT 05			2		2
INT 06			1		1
INT 07			2		2
INT 08			5	1	6
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	20	7	**27**

Bicycles From:

	N	S	E	W	
INT 01	1	1			2
INT 02					0
INT 03					0
INT 04					0
INT 05	1	2			3
INT 06	1	1			2
INT 07		2			2
INT 08	1				1
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	4	6	0	0	10

844 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.50	n/a
Check	WB	n/a	n/a
In: 773	NB	0.91	0.2%
Out: 773	SB	0.84	0.4%
	T Int.	0.92	0.3%

Conditions:

Special Notes

TSI19016TM_06p

Prepared for: **Transportation Solutions, Inc.**

Traffic Count Consultants, Inc.

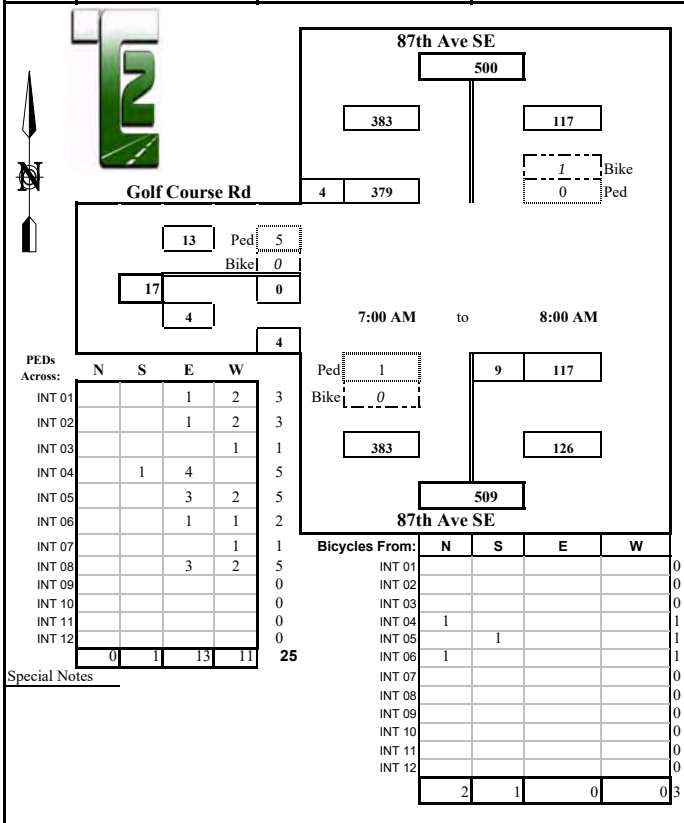
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 87th Ave SE & Golf Course Rd **Date of Count:** Thurs 5/30/2019

Location: Lakewood, Washington **Checked By:** Jess

Time Interval	From North on (SB) 87th Ave SE				From South on (NB) 87th Ave SE				From East on (WB) 0				From West on (EB) Golf Course Rd				Interval Total
Ending at	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	0	114	1	2	2	27	0	0	0	0	0	0	0	0	2	146
7:30 A	2	0	95	0	4	2	33	0	0	0	0	0	0	0	0	0	130
7:45 A	0	0	85	1	1	4	26	0	0	0	0	0	0	0	0	0	116
8:00 A	1	0	85	2	0	1	31	0	0	0	0	0	0	0	0	2	121
8:15 A	1	0	64	0	4	1	50	0	0	0	0	0	0	0	0	1	116
8:30 A	1	0	68	1	1	1	47	0	0	0	0	0	0	0	0	0	117
8:45 A	2	0	79	0	1	2	31	0	0	0	0	0	0	0	0	0	112
9:00 A	0	0	75	0	0	2	29	0	0	0	0	0	0	0	0	0	106
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	7	0	665	5	13	15	274	0	0	0	0	0	0	0	0	5	964
Peak Hour: 7:00 AM to 8:00 AM																	
Total	3	0	379	4	7	9	117	0	0	0	0	0	0	0	0	4	513
Approach	383				126				0				4				513
%HV	0.8%				5.6%				n/a				n/a				1.9%
PHF	0.83				0.90				n/a				0.50				0.88



PEDs Across:	N	S	E	W	
INT 01			1	2	3
INT 02			1	2	3
INT 03				1	1
INT 04		1	4		5
INT 05			3	2	5
INT 06			1	1	2
INT 07				1	1
INT 08			3	2	5
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	1	13	11	25

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04	1				1
INT 05		1			1
INT 06	1				1
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	2	1	0	0	3

584 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.50	n/a
Check	WB	n/a	n/a
In: 513	NB	0.90	5.6%
Out: 513	SB	0.83	0.8%
	T Int.	0.88	1.9%

Conditions:

Special Notes

TSI19016TM_07a

Prepared for: **Transportation Solutions, Inc.**

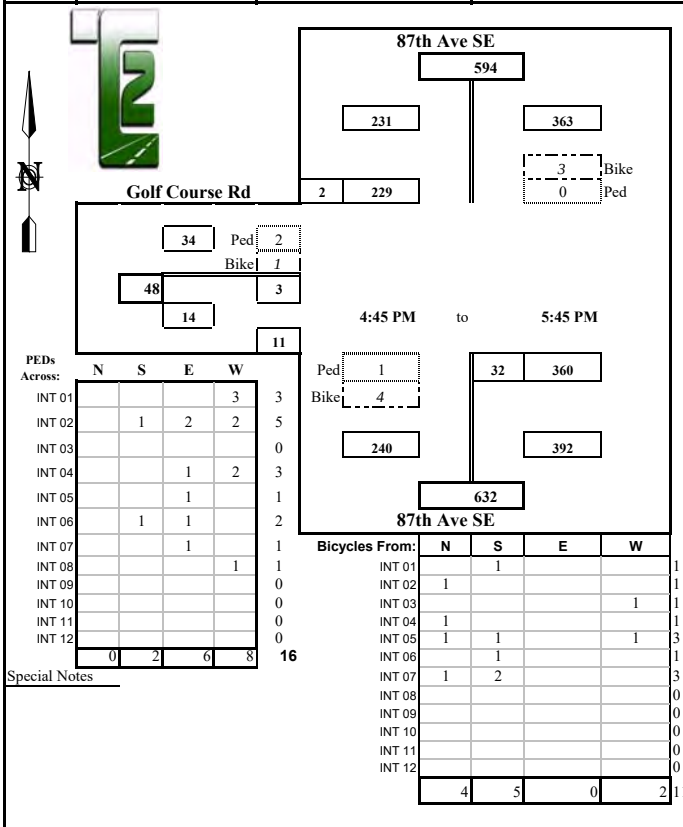
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 87th Ave SE & Golf Course Rd
Location: Lakewood, Washington
Date of Count: Thurs 5/30/2019
Checked By: Jess

Time Interval	From North on (SB) 87th Ave SE				From South on (NB) 87th Ave SE				From East on (WB) 0				From West on (EB) Golf Course Rd				Interval Total
Ending at	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	1	0	62	0	1	6	78	0	0	0	0	0	0	1	0	4	151
4:30 P	1	0	54	0	0	4	96	0	0	0	0	0	0	0	0	2	156
4:45 P	1	0	55	0	0	9	85	0	0	0	0	0	0	1	0	4	154
5:00 P	0	0	58	0	1	9	82	0	0	0	0	0	0	1	0	5	155
5:15 P	1	0	47	1	0	10	93	0	0	0	0	0	0	0	0	1	152
5:30 P	0	0	65	0	0	8	92	0	0	0	0	0	0	1	0	3	169
5:45 P	0	0	59	1	0	5	93	0	0	0	0	0	0	1	0	2	161
6:00 P	0	0	59	0	0	8	74	0	0	0	0	0	0	0	0	6	147
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	4	0	459	2	2	59	693	0	0	0	0	0	0	5	0	27	1245
Peak Hour: 4:45 PM to 5:45 PM																	
Total	1	0	229	2	1	32	360	0	0	0	0	0	0	3	0	11	637
Approach	231				392				0				14				637
%HV	0.4%				0.3%				n/a				n/a				0.3%
PHF	0.89				0.95				n/a				0.58				0.94



PEDs Across:

	N	S	E	W	
INT 01				3	3
INT 02		1	2	2	5
INT 03					0
INT 04			1	2	3
INT 05			1		1
INT 06		1	1		2
INT 07			1		1
INT 08				1	1
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	2	6	8	16

Bicycles From:

	N	S	E	W	
INT 01		1			1
INT 02	1				1
INT 03				1	1
INT 04	1				1
INT 05	1	1		1	3
INT 06		1			1
INT 07	1	2			3
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	4	5	0	2	11

676 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.58	n/a
Check	WB	n/a	n/a
In: 637	NB	0.95	0.3%
Out: 637	SB	0.89	0.4%
	T Int.	0.94	0.3%

Conditions:

Special Notes

TSI19016TM_07p

Prepared for: **Transportation Solutions, Inc.**

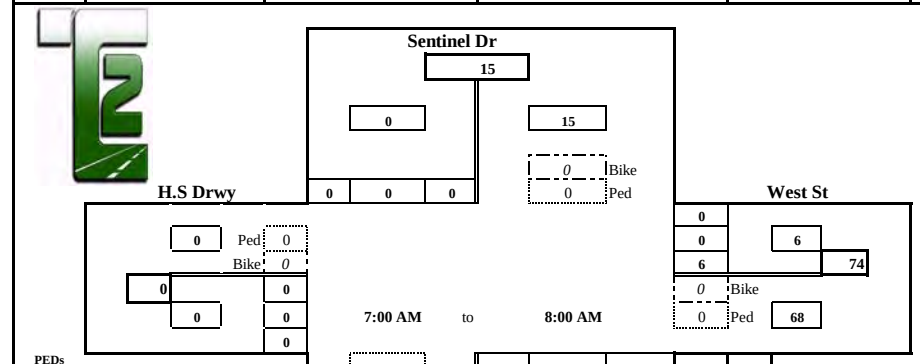
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Sentinel Dr & West St/H.S Drwy
Location: Lakewood, Washington
Date of Count: Thurs 6/20/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) Sentinel Dr				From South on (NB) Sentinel Dr				From East on (WB) West St				From West on (EB) H.S Drwy				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	0	0	0	1	0	1	12	0	1	0	0	0	0	0	0	14
7:30 A	0	0	0	0	1	0	0	9	0	1	0	0	0	0	0	0	10
7:45 A	0	0	0	0	0	0	1	21	1	2	0	0	0	0	0	0	24
8:00 A	0	0	0	0	0	0	13	26	1	2	0	0	0	0	0	0	41
8:15 A	0	0	1	0	0	0	3	1	0	1	0	0	0	0	0	1	7
8:30 A	0	0	0	0	0	0	0	5	1	4	0	0	0	0	0	0	9
8:45 A	0	0	0	0	1	0	0	2	0	1	0	0	0	0	0	0	3
9:00 A	0	0	0	0	1	0	3	4	1	1	0	0	0	0	0	0	8
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	1	0	4	0	21	80	4	13	0	0	0	0	0	1	116
Peak Hour: 7:00 AM to 8:00 AM																	
Total	0	0	0	0	2	0	15	68	2	6	0	0	0	0	0	0	89
Approach	0				83				6				0				89
%HV	n/a				2.4%				33.3%				n/a				4.5%
PHF	n/a				0.53				0.75				n/a				0.54



PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05		1			1
INT 06		1			1
INT 07					0
INT 08		3			3
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	5	0	0	5

Special Notes

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO BIKES				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

164 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	n/a	n/a
Check	WB	0.75	33.3%
In: 89	NB	0.53	2.4%
Out: 89	SB	n/a	n/a
	T Int.	0.54	4.5%

Conditions:

TSI19016TM_08a

Prepared for: **Transportation Solutions, Inc.**

Traffic Count Consultants, Inc.

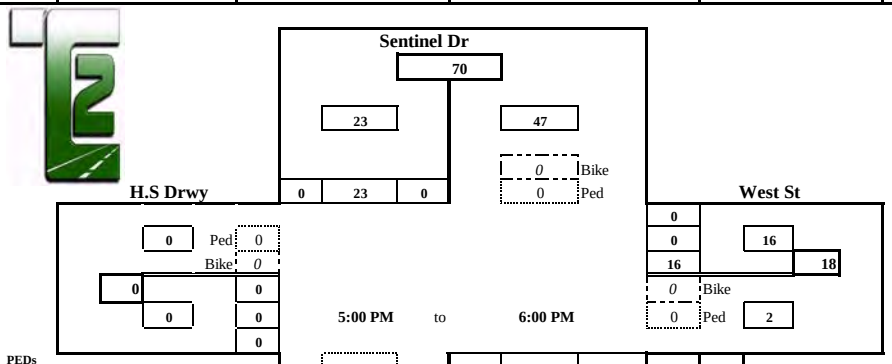
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Sentinel Dr & West St/H.S Drwy **Date of Count:** Thurs 6/20/2019

Location: Lakewood, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) Sentinel Dr				From South on (NB) Sentinel Dr				From East on (WB) West St				From West on (EB) H.S Drwy				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	0	2	0	0	0	3	1	0	16	0	0	0	0	0	0	22
4:30 P	0	0	0	0	0	0	1	0	0	16	0	0	0	0	0	0	17
4:45 P	0	0	1	0	2	0	3	4	0	17	0	0	0	0	0	0	25
5:00 P	0	0	0	0	0	0	1	2	2	4	0	0	0	0	0	0	7
5:15 P	0	0	1	0	0	0	2	1	0	7	0	0	0	0	0	0	11
5:30 P	0	0	8	0	0	0	13	0	0	3	0	0	0	0	0	0	24
5:45 P	0	0	2	0	0	0	14	0	0	2	0	0	0	0	0	0	18
6:00 P	0	0	12	0	0	0	18	1	0	4	0	0	0	0	0	0	35
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	26	0	2	0	55	9	2	69	0	0	0	0	0	0	159
Peak Hour: 5:00 PM to 6:00 PM																	
Total	0	0	23	0	0	0	47	2	0	16	0	0	0	0	0	0	88
Approach			23				49				16				0		88
%HV			n/a				n/a				n/a				n/a		0.0%
PHF			0.48				0.64				0.57				n/a		0.63



PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04			1		1
INT 05		1			1
INT 06					0
INT 07		2			2
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	3	1	0	4

Bicycles From:	N	S	E	W	
INT 01	1	1	1		3
INT 02					0
INT 03					0
INT 04		1			1
INT 05					0
INT 06					0
INT 07		1			1
INT 08		1			1
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	1	4	1	0	6

140 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	n/a	n/a
Check	WB	0.57	n/a
In: 88	NB	0.64	n/a
Out: 88	SB	0.48	n/a
	T Int.	0.63	0.0%

Conditions:

Special Notes

TSI19016TM_08p

Prepared for: **Transportation Solutions, Inc.**

Traffic Count Consultants, Inc.

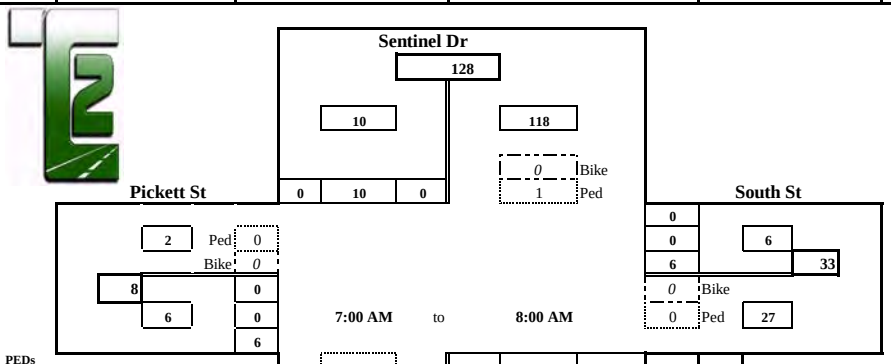
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Sentinel Dr & South St/Pickett St **Date of Count:** Thurs 6/20/2019

Location: Lakewood, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) Sentinel Dr				From South on (NB) Sentinel Dr				From East on (WB) South St				From West on (EB) Pickett St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	1	0	1	0	1	0	13	6	0	5	0	0	0	0	0	1	26
7:30 A	0	0	2	0	1	0	16	10	0	0	0	0	0	0	0	1	29
7:45 A	1	0	2	0	0	0	27	6	0	0	0	0	1	0	0	1	36
8:00 A	1	0	5	0	1	2	62	5	0	1	0	0	0	0	0	3	78
8:15 A	0	0	2	0	0	1	11	2	0	0	0	0	0	0	0	1	17
8:30 A	1	0	4	0	0	0	7	0	0	1	0	0	0	0	0	1	13
8:45 A	0	0	0	0	1	0	4	4	0	0	0	0	0	0	0	0	8
9:00 A	1	0	3	0	1	0	8	3	0	0	0	0	0	0	0	0	14
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	5	0	19	0	5	3	148	36	0	7	0	0	1	0	0	8	221
Peak Hour: 7:00 AM to 8:00 AM																	
Total	3	0	10	0	3	2	118	27	0	6	0	0	1	0	0	6	169
Approach	10				147				6				6				169
%HV	30.0%				2.0%				n/a				16.7%				4.1%
PHF	0.50				0.53				0.30				0.50				0.54



PEDs Across:	N	S	E	W	
INT 01		3			3
INT 02					0
INT 03					0
INT 04	1				1
INT 05	7	2			9
INT 06		1			1
INT 07					0
INT 08		4			4
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	8	10	0	0	18

Special Notes

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO BIKES				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

312 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.50	16.7%
Check	WB	0.30	n/a
In: 169	NB	0.53	2.0%
Out: 169	SB	0.50	30.0%
	T Int.	0.54	4.1%

Conditions:

TSI19016TM_09a

Prepared for: **Transportation Solutions, Inc.**

Traffic Count Consultants, Inc.

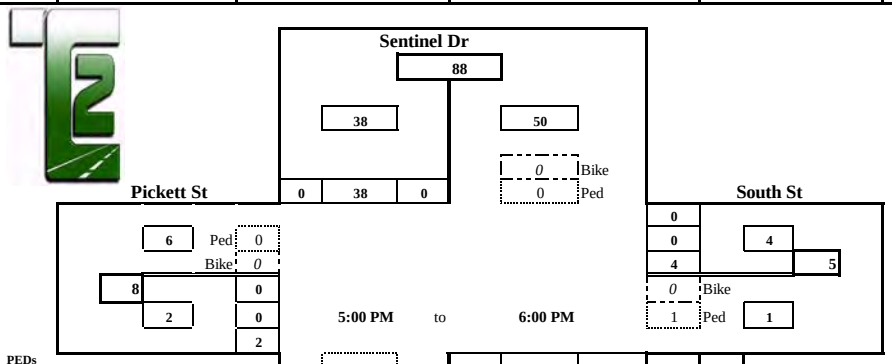
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Sentinel Dr & South St/Pickett St **Date of Count:** Thurs 6/20/2019

Location: Lakewood, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) Sentinel Dr				From South on (NB) Sentinel Dr				From East on (WB) South St				From West on (EB) Pickett St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	0	19	0	0	1	4	1	0	1	0	0	0	0	0	1	27
4:30 P	0	0	16	0	0	1	1	1	0	3	0	0	0	0	0	0	22
4:45 P	0	0	19	0	2	0	7	0	0	3	0	0	0	0	0	1	30
5:00 P	2	0	3	0	0	1	2	1	0	3	0	0	0	0	0	1	11
5:15 P	0	0	8	0	0	0	5	1	0	4	0	0	0	0	0	0	18
5:30 P	0	0	10	0	0	2	13	0	0	0	0	0	0	0	0	1	26
5:45 P	0	0	6	0	0	3	14	0	0	0	0	0	0	0	0	0	23
6:00 P	0	0	14	0	0	1	18	0	0	0	0	0	0	0	0	1	34
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	2	0	95	0	2	9	64	4	0	14	0	0	0	0	0	5	191
Peak Hour: 5:00 PM to 6:00 PM																	
Total	0	0	38	0	0	6	50	1	0	4	0	0	0	0	0	2	101
Approach			38				57				4				2		101
%HV			n/a				n/a				n/a				n/a		0.0%
PHF			0.68				0.75				0.25				0.50		0.74



PEDs Across:	N	S	E	W	
INT 01		1			1
INT 02	2		3		5
INT 03			1	2	3
INT 04	1	1		1	3
INT 05			1		1
INT 06		2			2
INT 07		2			2
INT 08		1			1
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	3	7	5	3	18

Bicycles From:	N	S	E	W	
INT 01					0
INT 02			1		1
INT 03					0
INT 04		2			2
INT 05					0
INT 06					0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	2	1	0	3

136 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.50	n/a
Check	WB	0.25	n/a
In: 101	NB	0.75	n/a
Out: 101	SB	0.68	n/a
	T Int.	0.74	0.0%

Conditions:

Special Notes

TSI19016TM_09p

Prepared for: **Transportation Solutions, Inc.**

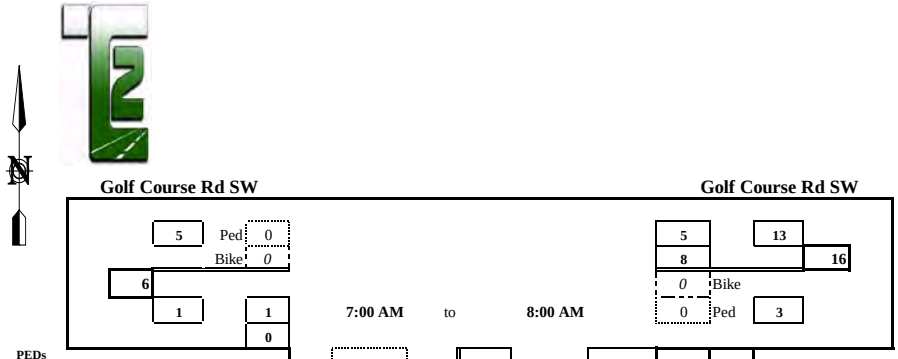
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Kids First Pl & Golf Course Rd SW
Location: Lakewood, Washington
Date of Count: Thurs 6/20/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) 0				From South on (NB) Kids First Pl				From East on (WB) Golf Course Rd SW				From West on (EB) Golf Course Rd SW				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	0	0	0	0	0	0	2	0	3	2	0	0	0	0	0	7
7:30 A	0	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	4
7:45 A	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
8:00 A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
8:15 A	0	0	0	0	0	0	0	1	0	2	1	0	0	0	1	0	5
8:30 A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:45 A	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	3
9:00 A	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	0	0	0	0	0	4	0	15	8	0	0	0	2	0	29
Peak Hour: 7:00 AM to 8:00 AM																	
Total	0	0	0	0	0	0	0	2	0	8	5	0	0	0	1	0	16
Approach	0				2				13				1				16
%HV	n/a				n/a				n/a				n/a				0.0%
PHF	n/a				0.25				0.65				0.25				0.57



PEDs Across:

	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06				1	1
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	1	1

Bicycles From:

	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO BIKES				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

28 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.25	n/a
Check	WB	0.65	n/a
In: 16	NB	0.25	n/a
Out: 16	SB	n/a	n/a
	T Int.	0.57	0.0%

Conditions:

Special Notes

Prepared for: **Transportation Solutions, Inc.**

Traffic Count Consultants, Inc.

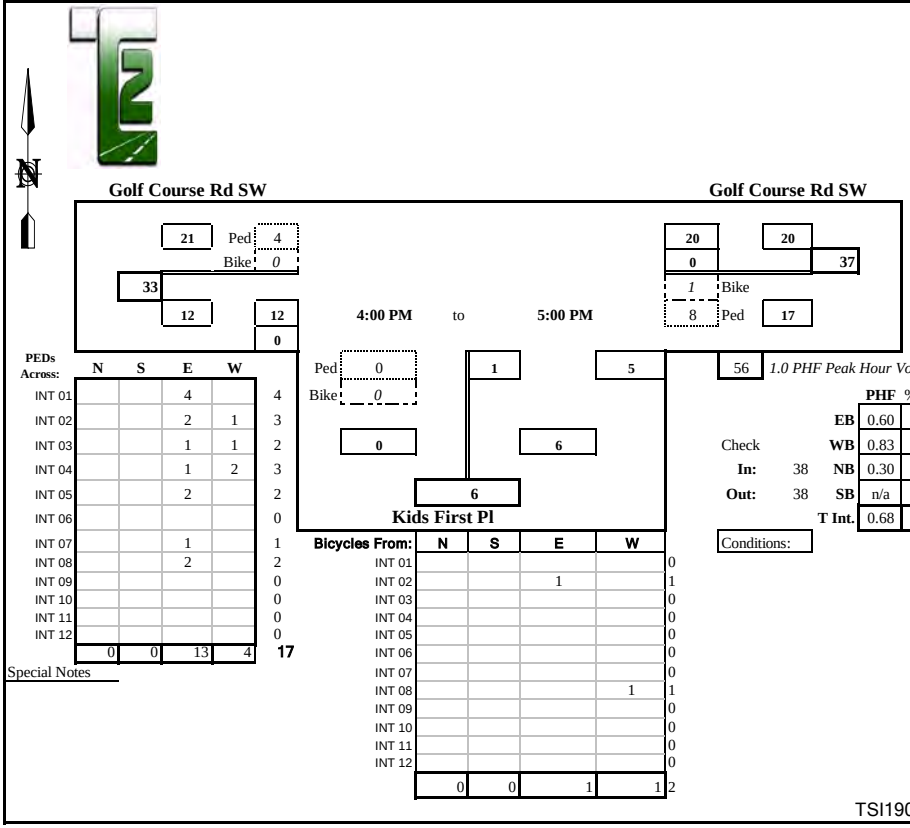
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Kids First Pl & Golf Course Rd SW **Date of Count:** Thurs 6/20/2019

Location: Lakewood, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) 0				From South on (NB) Kids First Pl				From East on (WB) Golf Course Rd SW				From West on (EB) Golf Course Rd SW				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	0	0	0	0	1	0	4	0	0	6	0	0	0	3	0	14
4:30 P	0	0	0	0	0	0	0	1	0	0	6	0	0	0	2	0	9
4:45 P	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	5
5:00 P	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	10
5:15 P	0	0	0	0	0	0	0	2	0	0	8	0	0	0	2	0	12
5:30 P	0	0	0	0	0	0	0	1	0	0	5	0	0	0	2	0	8
5:45 P	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3
6:00 P	0	0	0	0	0	0	0	0	0	0	2	0	1	0	10	0	12
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	0	0	0	1	0	8	0	0	37	0	1	0	27	0	73
	Peak Hour: 4:00 PM to 5:00 PM																
Total	0	0	0	0	0	1	0	5	0	0	20	0	0	0	12	0	38
Approach	0				6				20				12				38
%HV	n/a				n/a				n/a				n/a				0.0%
PHF	n/a				0.30				0.83				0.60				0.68



PEDs Across:

	N	S	E	W	
INT 01			4		4
INT 02			2	1	3
INT 03			1	1	2
INT 04			1	2	3
INT 05			2		2
INT 06					0
INT 07			1		1
INT 08			2		2
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	13	4	17

Bicycles From:

	N	S	E	W	
INT 01					0
INT 02			1		1
INT 03					0
INT 04					0
INT 05					0
INT 06					0
INT 07					0
INT 08				1	1
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	1	1	2

56 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.60	n/a
Check	WB	0.83	n/a
In: 38	NB	0.30	n/a
Out: 38	SB	n/a	n/a
	T Int.	0.68	0.0%

Conditions:

Special Notes

Prepared for: **Transportation Solutions, Inc.**

Traffic Count Consultants, Inc.

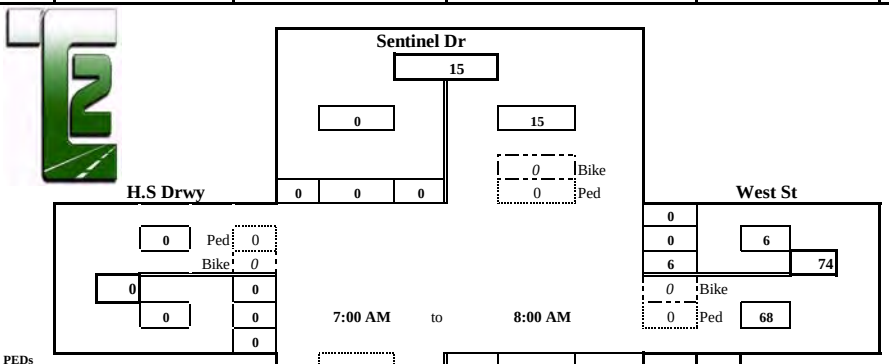
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Sentinel Dr & West St/H.S Drwy **Date of Count:** Thurs 6/20/2019

Location: Lakewood, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) Sentinel Dr				From South on (NB) Sentinel Dr				From East on (WB) West St				From West on (EB) H.S Drwy				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	0	0	0	1	0	1	12	0	1	0	0	0	0	0	0	14
7:30 A	0	0	0	0	1	0	0	9	0	1	0	0	0	0	0	0	10
7:45 A	0	0	0	0	0	0	1	21	1	2	0	0	0	0	0	0	24
8:00 A	0	0	0	0	0	0	13	26	1	2	0	0	0	0	0	0	41
8:15 A	0	0	1	0	0	0	3	1	0	1	0	0	0	0	0	1	7
8:30 A	0	0	0	0	0	0	0	5	1	4	0	0	0	0	0	0	9
8:45 A	0	0	0	0	1	0	0	2	0	1	0	0	0	0	0	0	3
9:00 A	0	0	0	0	1	0	3	4	1	1	0	0	0	0	0	0	8
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	1	0	4	0	21	80	4	13	0	0	0	0	0	1	116
Peak Hour: 7:00 AM to 8:00 AM																	
Total	0	0	0	0	2	0	15	68	2	6	0	0	0	0	0	0	89
Approach	0				83				6				0				89
%HV	n/a				2.4%				33.3%				n/a				4.5%
PHF	n/a				0.53				0.75				n/a				0.54



PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05		1			1
INT 06		1			1
INT 07					0
INT 08		3			3
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	5	0	0	5

Special Notes

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO BIKES				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

164 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	n/a	n/a
Check	WB	0.75	33.3%
In: 89	NB	0.53	2.4%
Out: 89	SB	n/a	n/a
	T Int.	0.54	4.5%

Conditions:

TSI19016TM_08a

Prepared for: **Transportation Solutions, Inc.**

Traffic Count Consultants, Inc.

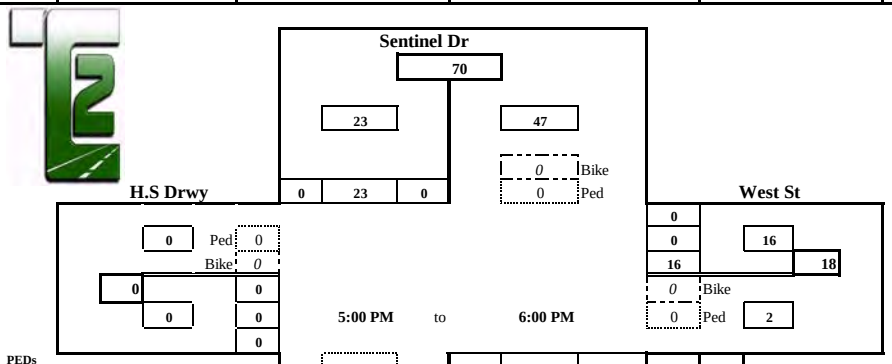
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Sentinel Dr & West St/H.S Drwy **Date of Count:** Thurs 6/20/2019

Location: Lakewood, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) Sentinel Dr				From South on (NB) Sentinel Dr				From East on (WB) West St				From West on (EB) H.S Drwy				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	0	2	0	0	0	3	1	0	16	0	0	0	0	0	0	22
4:30 P	0	0	0	0	0	0	1	0	0	16	0	0	0	0	0	0	17
4:45 P	0	0	1	0	2	0	3	4	0	17	0	0	0	0	0	0	25
5:00 P	0	0	0	0	0	0	1	2	2	4	0	0	0	0	0	0	7
5:15 P	0	0	1	0	0	0	2	1	0	7	0	0	0	0	0	0	11
5:30 P	0	0	8	0	0	0	13	0	0	3	0	0	0	0	0	0	24
5:45 P	0	0	2	0	0	0	14	0	0	2	0	0	0	0	0	0	18
6:00 P	0	0	12	0	0	0	18	1	0	4	0	0	0	0	0	0	35
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	26	0	2	0	55	9	2	69	0	0	0	0	0	0	159
Peak Hour: 5:00 PM to 6:00 PM																	
Total	0	0	23	0	0	0	47	2	0	16	0	0	0	0	0	0	88
Approach			23				49				16				0		88
%HV			n/a				n/a				n/a				n/a		0.0%
PHF			0.48				0.64				0.57				n/a		0.63



PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04			1		1
INT 05		1			1
INT 06					0
INT 07		2			2
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	3	1	0	4

Bicycles From:	N	S	E	W	
INT 01	1	1	1		3
INT 02					0
INT 03					0
INT 04		1			1
INT 05					0
INT 06					0
INT 07		1			1
INT 08		1			1
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	1	4	1	0	6

140 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	n/a	n/a
Check	WB	0.57	n/a
In: 88	NB	0.64	n/a
Out: 88	SB	0.48	n/a
	T Int.	0.63	0.0%

Conditions:

Special Notes

TSI19016TM_08p

Prepared for: **Transportation Solutions, Inc.**

Traffic Count Consultants, Inc.

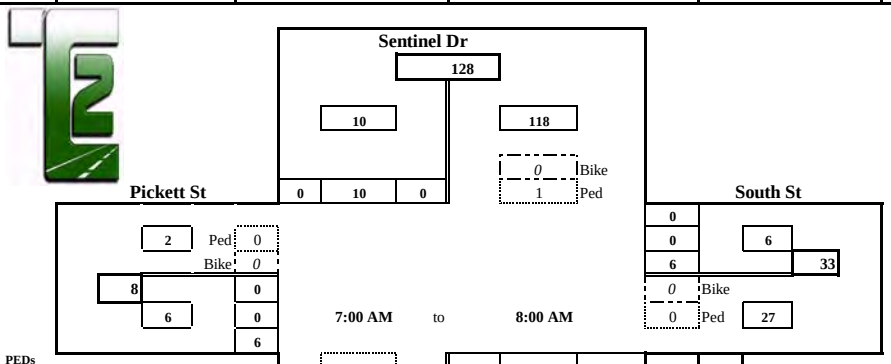
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Sentinel Dr & South St/Pickett St **Date of Count:** Thurs 6/20/2019

Location: Lakewood, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) Sentinel Dr				From South on (NB) Sentinel Dr				From East on (WB) South St				From West on (EB) Pickett St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	1	0	1	0	1	0	13	6	0	5	0	0	0	0	0	1	26
7:30 A	0	0	2	0	1	0	16	10	0	0	0	0	0	0	0	1	29
7:45 A	1	0	2	0	0	0	27	6	0	0	0	0	1	0	0	1	36
8:00 A	1	0	5	0	1	2	62	5	0	1	0	0	0	0	0	3	78
8:15 A	0	0	2	0	0	1	11	2	0	0	0	0	0	0	0	1	17
8:30 A	1	0	4	0	0	0	7	0	0	1	0	0	0	0	0	1	13
8:45 A	0	0	0	0	1	0	4	4	0	0	0	0	0	0	0	0	8
9:00 A	1	0	3	0	1	0	8	3	0	0	0	0	0	0	0	0	14
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	5	0	19	0	5	3	148	36	0	7	0	0	1	0	0	8	221
Peak Hour: 7:00 AM to 8:00 AM																	
Total	3	0	10	0	3	2	118	27	0	6	0	0	1	0	0	6	169
Approach	10				147				6				6				169
%HV	30.0%				2.0%				n/a				16.7%				4.1%
PHF	0.50				0.53				0.30				0.50				0.54



PEDs Across:	N	S	E	W	
INT 01		3			3
INT 02					0
INT 03					0
INT 04	1				1
INT 05	7	2			9
INT 06		1			1
INT 07					0
INT 08		4			4
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	8	10	0	0	18

Special Notes

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO BIKES				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

312 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.50	16.7%
Check	WB	0.30	n/a
In: 169	NB	0.53	2.0%
Out: 169	SB	0.50	30.0%
	T Int.	0.54	4.1%

Conditions:

TSI19016TM_09a

Prepared for: **Transportation Solutions, Inc.**

Traffic Count Consultants, Inc.

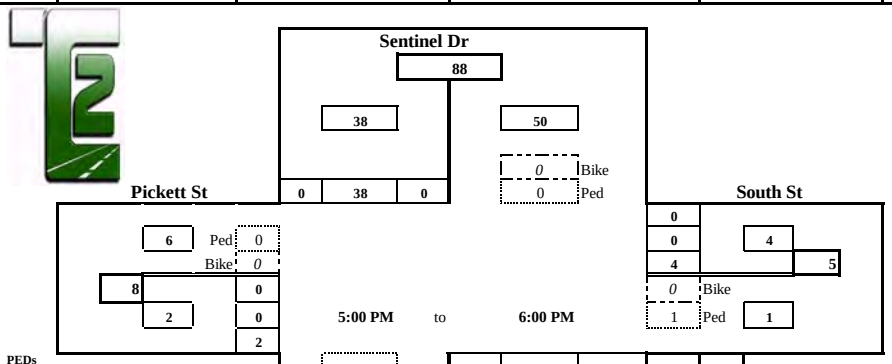
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Sentinel Dr & South St/Pickett St **Date of Count:** Thurs 6/20/2019

Location: Lakewood, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) Sentinel Dr				From South on (NB) Sentinel Dr				From East on (WB) South St				From West on (EB) Pickett St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	0	19	0	0	1	4	1	0	1	0	0	0	0	0	1	27
4:30 P	0	0	16	0	0	1	1	1	0	3	0	0	0	0	0	0	22
4:45 P	0	0	19	0	2	0	7	0	0	3	0	0	0	0	0	1	30
5:00 P	2	0	3	0	0	1	2	1	0	3	0	0	0	0	0	1	11
5:15 P	0	0	8	0	0	0	5	1	0	4	0	0	0	0	0	0	18
5:30 P	0	0	10	0	0	2	13	0	0	0	0	0	0	0	0	1	26
5:45 P	0	0	6	0	0	3	14	0	0	0	0	0	0	0	0	0	23
6:00 P	0	0	14	0	0	1	18	0	0	0	0	0	0	0	0	1	34
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	2	0	95	0	2	9	64	4	0	14	0	0	0	0	0	5	191
Peak Hour: 5:00 PM to 6:00 PM																	
Total	0	0	38	0	0	6	50	1	0	4	0	0	0	0	0	2	101
Approach			38				57				4				2		101
%HV			n/a				n/a				n/a				n/a		0.0%
PHF			0.68				0.75				0.25				0.50		0.74



PEDs Across:	N	S	E	W	
INT 01		1			1
INT 02	2		3		5
INT 03			1	2	3
INT 04	1	1		1	3
INT 05			1		1
INT 06		2			2
INT 07		2			2
INT 08		1			1
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	3	7	5	3	18

Bicycles From:	N	S	E	W	
INT 01					0
INT 02			1		1
INT 03					0
INT 04		2			2
INT 05					0
INT 06					0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	2	1	0	3

136 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.50	n/a
Check	WB	0.25	n/a
In: 101	NB	0.75	n/a
Out: 101	SB	0.68	n/a
	T Int.	0.74	0.0%

Conditions:

Special Notes

TSI19016TM_09p

Prepared for: **Transportation Solutions, Inc.**

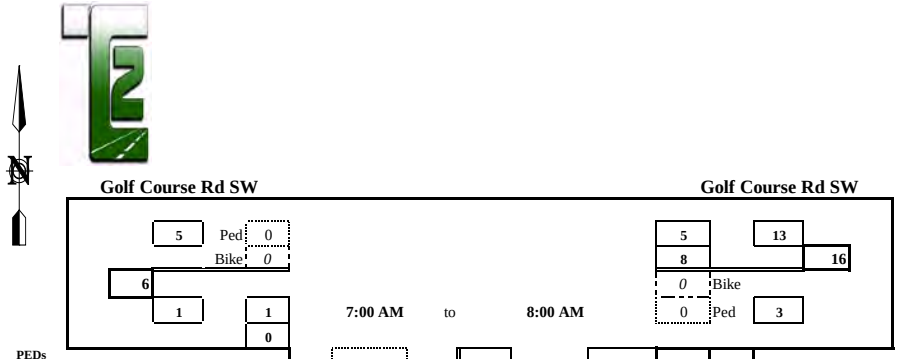
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Kids First Pl & Golf Course Rd SW
Location: Lakewood, Washington
Date of Count: Thurs 6/20/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) 0				From South on (NB) Kids First Pl				From East on (WB) Golf Course Rd SW				From West on (EB) Golf Course Rd SW				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	0	0	0	0	0	0	2	0	3	2	0	0	0	0	0	7
7:30 A	0	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	4
7:45 A	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
8:00 A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
8:15 A	0	0	0	0	0	0	0	1	0	2	1	0	0	0	1	0	5
8:30 A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:45 A	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	3
9:00 A	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	0	0	0	0	0	4	0	15	8	0	0	0	2	0	29
Peak Hour: 7:00 AM to 8:00 AM																	
Total	0	0	0	0	0	0	0	2	0	8	5	0	0	0	1	0	16
Approach	0				2				13				1				16
%HV	n/a				n/a				n/a				n/a				0.0%
PHF	n/a				0.25				0.65				0.25				0.57



PEDs Across:

	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06				1	1
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	1	1

Bicycles From:

	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO BIKES				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

28 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.25	n/a
Check	WB	0.65	n/a
In: 16	NB	0.25	n/a
Out: 16	SB	n/a	n/a
	T Int.	0.57	0.0%

Conditions:

Special Notes

Prepared for: **Transportation Solutions, Inc.**

Traffic Count Consultants, Inc.

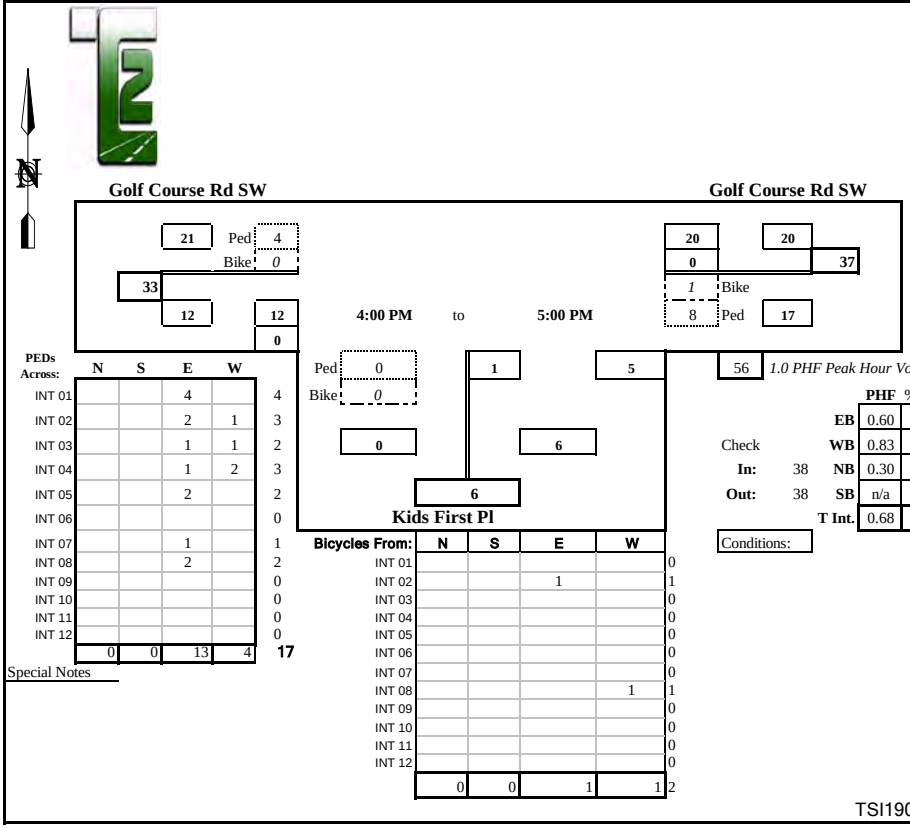
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Kids First Pl & Golf Course Rd SW **Date of Count:** Thurs 6/20/2019

Location: Lakewood, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) 0				From South on (NB) Kids First Pl				From East on (WB) Golf Course Rd SW				From West on (EB) Golf Course Rd SW				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	0	0	0	0	1	0	4	0	0	6	0	0	0	3	0	14
4:30 P	0	0	0	0	0	0	0	1	0	0	6	0	0	0	2	0	9
4:45 P	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	5
5:00 P	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	10
5:15 P	0	0	0	0	0	0	0	2	0	0	8	0	0	0	2	0	12
5:30 P	0	0	0	0	0	0	0	1	0	0	5	0	0	0	2	0	8
5:45 P	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3
6:00 P	0	0	0	0	0	0	0	0	0	0	2	0	1	0	10	0	12
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	0	0	0	1	0	8	0	0	37	0	1	0	27	0	73
	Peak Hour: 4:00 PM to 5:00 PM																
Total	0	0	0	0	0	1	0	5	0	0	20	0	0	0	12	0	38
Approach	0				6				20				12				38
%HV	n/a				n/a				n/a				n/a				0.0%
PHF	n/a				0.30				0.83				0.60				0.68



PEDs Across:

	N	S	E	W	
INT 01			4		4
INT 02			2	1	3
INT 03			1	1	2
INT 04			1	2	3
INT 05			2		2
INT 06					0
INT 07			1		1
INT 08			2		2
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	13	4	17

Bicycles From:

	N	S	E	W	
INT 01					0
INT 02			1		1
INT 03					0
INT 04					0
INT 05					0
INT 06					0
INT 07					0
INT 08				1	1
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	1	1	2

56 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.60	n/a
Check	WB	0.83	n/a
In: 38	NB	0.30	n/a
Out: 38	SB	n/a	n/a
	T Int.	0.68	0.0%

Conditions:

Special Notes

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	0	257	61	0	157
Future Vol, veh/h	7	0	257	61	0	157
Conflicting Peds, #/hr	0	0	0	50	50	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	33	0	2	2	0	0
Mvmt Flow	13	0	476	113	0	291

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	874	583	0	0	639	0
Stage 1	583	-	-	-	-	-
Stage 2	291	-	-	-	-	-
Critical Hdwy	6.73	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.73	-	-	-	-	-
Critical Hdwy Stg 2	5.73	-	-	-	-	-
Follow-up Hdwy	3.797	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	283	516	-	-	955	-
Stage 1	502	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	269	491	-	-	910	-
Mov Cap-2 Maneuver	269	-	-	-	-	-
Stage 1	478	-	-	-	-	-
Stage 2	693	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	269	910	-
HCM Lane V/C Ratio	-	-	0.048	-	-
HCM Control Delay (s)	-	-	19.1	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	6	7	0	0	2	321	24	0	158	0
Future Vol, veh/h	0	0	6	7	0	0	2	321	24	0	158	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	50	50	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	54	92	54	92	54	54	54	54	92
Heavy Vehicles, %	2	2	2	0	2	0	2	2	0	0	33	2
Mvmt Flow	0	0	7	13	0	0	2	594	44	0	293	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	913	985	293	967	963	666	293	0	0	688	0	0
Stage 1	293	293	-	670	670	-	-	-	-	-	-	-
Stage 2	620	692	-	297	293	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.52	6.2	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4.018	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	254	248	746	236	256	463	1269	-	-	916	-	-
Stage 1	715	670	-	450	455	-	-	-	-	-	-	-
Stage 2	476	445	-	716	670	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	253	236	746	223	243	441	1269	-	-	872	-	-
Mov Cap-2 Maneuver	253	236	-	223	243	-	-	-	-	-	-	-
Stage 1	714	670	-	428	432	-	-	-	-	-	-	-
Stage 2	475	423	-	710	670	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	22.1	0	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1269	-	-	746	223	872	-	-
HCM Lane V/C Ratio	0.002	-	-	0.009	0.058	-	-	-
HCM Control Delay (s)	7.8	0	-	9.9	22.1	0	-	-
HCM Lane LOS	A	A	-	A	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	335	57	382	203	78	29	69	286	48	44	72
Future Volume (veh/h)	198	335	57	382	203	78	29	69	286	48	44	72
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1900	1863	1863	1863	1743	1743	1900
Adj Flow Rate, veh/h	233	394	67	449	239	92	34	81	336	56	52	85
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	9	9	9
Cap, veh/h	570	900	152	583	960	359	344	361	599	216	76	125
Arrive On Green	0.11	0.30	0.30	0.19	0.38	0.38	0.19	0.19	0.19	0.13	0.13	0.13
Sat Flow, veh/h	1757	2992	504	1774	2521	944	1774	1863	1541	1660	586	958
Grp Volume(v), veh/h	233	229	232	449	166	165	34	81	336	56	0	137
Grp Sat Flow(s),veh/h/ln	1757	1752	1744	1774	1770	1695	1774	1863	1541	1660	0	1545
Q Serve(g_s), s	9.7	11.3	11.5	17.9	6.9	7.2	1.7	3.9	18.5	3.3	0.0	9.1
Cycle Q Clear(g_c), s	9.7	11.3	11.5	17.9	6.9	7.2	1.7	3.9	18.5	3.3	0.0	9.1
Prop In Lane	1.00		0.29	1.00		0.56	1.00		1.00	1.00		0.62
Lane Grp Cap(c), veh/h	570	527	524	583	674	645	344	361	599	216	0	201
V/C Ratio(X)	0.41	0.44	0.44	0.77	0.25	0.26	0.10	0.22	0.56	0.26	0.00	0.68
Avail Cap(c_a), veh/h	622	527	524	724	674	645	362	381	615	416	0	387
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.6	30.3	30.4	19.0	22.8	22.9	35.7	36.6	26.2	42.2	0.0	44.7
Incr Delay (d2), s/veh	0.2	2.6	2.7	3.0	0.9	1.0	0.0	0.1	0.6	0.2	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.2	9.8	9.9	14.0	6.3	6.3	1.5	3.7	12.6	2.7	0.0	7.1
LnGrp Delay(d),s/veh	21.8	32.9	33.1	22.1	23.6	23.8	35.7	36.7	26.8	42.4	0.0	46.2
LnGrp LOS	C	C	C	C	C	C	D	D	C	D		D
Approach Vol, veh/h		694			780			451			193	
Approach Delay, s/veh		29.2			22.8			29.2			45.1	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.9	25.4	37.4		19.0	16.8	46.0
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		22.0	29.0	27.0		27.0	15.0	41.0
Max Q Clear Time (g_c+I1), s		20.5	19.9	13.5		11.1	11.7	9.2
Green Ext Time (p_c), s		0.2	0.5	2.6		0.5	0.1	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	640	651	88	4	12
Future Vol, veh/h	29	640	651	88	4	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	8	8
Mvmt Flow	31	681	693	94	4	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	787	0	-	0	1143	394
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	403	-
Critical Hdwy	4.14	-	-	-	6.96	7.06
Critical Hdwy Stg 1	-	-	-	-	5.96	-
Critical Hdwy Stg 2	-	-	-	-	5.96	-
Follow-up Hdwy	2.22	-	-	-	3.58	3.38
Pot Cap-1 Maneuver	828	-	-	-	185	588
Stage 1	-	-	-	-	417	-
Stage 2	-	-	-	-	626	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	828	-	-	-	174	588
Mov Cap-2 Maneuver	-	-	-	-	174	-
Stage 1	-	-	-	-	392	-
Stage 2	-	-	-	-	626	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	15.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	828	-	-	-	369
HCM Lane V/C Ratio	0.037	-	-	-	0.046
HCM Control Delay (s)	9.5	0.3	-	-	15.2
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	607	717	87	111	23
Future Volume (veh/h)	37	607	717	87	111	23
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1900	1900
Adj Flow Rate, veh/h	41	674	797	97	123	26
Adj No. of Lanes	0	2	2	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	175	1715	1682	205	244	52
Arrive On Green	0.53	0.53	0.53	0.53	0.17	0.17
Sat Flow, veh/h	77	3325	3271	387	1454	307
Grp Volume(v), veh/h	372	343	444	450	150	0
Grp Sat Flow(s),veh/h/ln	1707	1610	1770	1795	1773	0
Q Serve(g_s), s	0.0	3.8	4.7	4.7	2.3	0.0
Cycle Q Clear(g_c), s	3.5	3.8	4.7	4.7	2.3	0.0
Prop In Lane	0.11			0.22	0.82	0.17
Lane Grp Cap(c), veh/h	1038	852	937	950	298	0
V/C Ratio(X)	0.36	0.40	0.47	0.47	0.50	0.00
Avail Cap(c_a), veh/h	1385	1218	1339	1358	1163	0
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	0.00
Uniform Delay (d), s/veh	4.1	4.2	4.4	4.4	11.2	0.0
Incr Delay (d2), s/veh	0.2	0.3	0.4	0.4	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.3	3.0	4.2	4.2	2.1	0.0
LnGrp Delay(d),s/veh	4.3	4.5	4.8	4.8	12.6	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h		715	894		150	
Approach Delay, s/veh		4.4	4.8		12.6	
Approach LOS		A	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				20.2		9.5		20.2
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				22.5		19.5		22.5
Max Q Clear Time (g_c+I1), s				5.8		4.3		6.7
Green Ext Time (p_c), s				9.4		0.3		9.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.3
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	714	801	114	52	4
Future Vol, veh/h	4	714	801	114	52	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	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	5	821	921	131	60	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1052	0	-	0	1408	526
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	421	-
Critical Hdwy	4.14	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.22	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	657	-	-	-	132	502
Stage 1	-	-	-	-	326	-
Stage 2	-	-	-	-	636	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	657	-	-	-	130	502
Mov Cap-2 Maneuver	-	-	-	-	130	-
Stage 1	-	-	-	-	321	-
Stage 2	-	-	-	-	636	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	52.7
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	657	-	-	-	137
HCM Lane V/C Ratio	0.007	-	-	-	0.47
HCM Control Delay (s)	10.5	0.1	-	-	52.7
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	661	23	15	745	54	25	22	27	207	54	146
Future Volume (veh/h)	83	661	23	15	745	54	25	22	27	207	54	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	90	718	25	16	810	0	27	24	29	225	59	159
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	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, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	115	1694	59	35	1557	0	201	213	186	386	307	269
Arrive On Green	0.06	0.49	0.49	0.02	0.44	0.00	0.03	0.12	0.12	0.08	0.17	0.17
Sat Flow, veh/h	1774	3489	121	1774	3632	0	1792	1787	1563	1792	1787	1565
Grp Volume(v), veh/h	90	364	379	16	810	0	27	24	29	225	59	159
Grp Sat Flow(s),veh/h/ln	1774	1770	1841	1774	1770	0	1792	1787	1563	1792	1787	1565
Q Serve(g_s), s	3.1	8.2	8.2	0.5	10.2	0.0	0.0	0.7	1.0	0.0	1.7	5.7
Cycle Q Clear(g_c), s	3.1	8.2	8.2	0.5	10.2	0.0	0.0	0.7	1.0	0.0	1.7	5.7
Prop In Lane	1.00		0.07	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	859	894	35	1557	0	201	213	186	386	307	269
V/C Ratio(X)	0.78	0.42	0.42	0.46	0.52	0.00	0.13	0.11	0.16	0.58	0.19	0.59
Avail Cap(c_a), veh/h	188	859	894	145	1557	0	293	827	723	387	830	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	10.2	10.2	29.8	12.5	0.0	28.0	24.1	24.3	24.3	21.8	23.4
Incr Delay (d2), s/veh	4.3	1.5	1.5	3.6	1.2	0.0	0.1	0.1	0.1	1.5	0.1	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(95%),veh/ln	2.9	7.7	7.9	0.5	9.0	0.0	0.8	0.7	0.8	6.6	1.6	4.6
LnGrp Delay(d),s/veh	32.6	11.8	11.7	33.3	13.7	0.0	28.1	24.2	24.4	25.8	21.9	24.2
LnGrp LOS	C	B	B	C	B		C	C	C	C	C	C
Approach Vol, veh/h		833			826			80			443	
Approach Delay, s/veh		14.0			14.1			25.6			24.7	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	11.8	5.7	34.3	6.3	15.0	8.5	31.5
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	5.1	28.4	5.0	28.5	5.0	28.5	6.5	27.0
Max Q Clear Time (g_c+I1), s	2.0	3.0	2.5	10.2	2.0	7.7	5.1	12.2
Green Ext Time (p_c), s	0.1	0.1	0.0	6.7	0.1	0.8	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	16.6
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	2	159	414	0
Future Vol, veh/h	0	2	2	159	414	0
Conflicting Peds, #/hr	0	1	6	0	0	6
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	4	1	0
Mvmt Flow	0	2	2	169	440	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	619	447	446	0	-	0
Stage 1	446	-	-	-	-	-
Stage 2	173	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	455	616	1125	-	-	-
Stage 1	649	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	449	612	1119	-	-	-
Mov Cap-2 Maneuver	530	-	-	-	-	-
Stage 1	644	-	-	-	-	-
Stage 2	857	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1119	-	612	-	-
HCM Lane V/C Ratio	0.002	-	0.003	-	-
HCM Control Delay (s)	8.2	0	10.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	9	117	379	4
Future Vol, veh/h	0	4	9	117	379	4
Conflicting Peds, #/hr	0	1	5	0	0	5
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	5	10	133	431	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	592	440	441	0	-	0
Stage 1	439	-	-	-	-	-
Stage 2	153	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	469	617	1119	-	-	-
Stage 1	650	-	-	-	-	-
Stage 2	875	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	460	613	1114	-	-	-
Mov Cap-2 Maneuver	534	-	-	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	871	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1114	-	613	-	-
HCM Lane V/C Ratio	0.009	-	0.007	-	-
HCM Control Delay (s)	8.3	0	10.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	4.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	0	7	4	0	1
Future Vol, veh/h	1	0	7	4	0	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	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	17	0	0	0	0	2
Mvmt Flow	2	0	13	7	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	35	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	33	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1634	-	983	1082
Stage 1	-	-	-	-	1026	-
Stage 2	-	-	-	-	995	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1634	-	975	1082
Mov Cap-2 Maneuver	-	-	-	-	975	-
Stage 1	-	-	-	-	1026	-
Stage 2	-	-	-	-	987	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.6	8.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1082	-	-	1634	-
HCM Lane V/C Ratio	0.002	-	-	0.008	-
HCM Control Delay (s)	8.3	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	0	110	2	0	126
Future Vol, veh/h	16	0	110	2	0	126
Conflicting Peds, #/hr	0	0	0	20	20	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	0	175	3	0	200

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	397	197	0	0	198	0
Stage 1	197	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	612	849	-	-	1387	-
Stage 1	841	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	600	833	-	-	1361	-
Mov Cap-2 Maneuver	600	-	-	-	-	-
Stage 1	825	-	-	-	-	-
Stage 2	838	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	600	1361	-
HCM Lane V/C Ratio	-	-	0.042	-	-
HCM Control Delay (s)	-	-	11.3	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	0	112	1	0	142
Future Vol, veh/h	4	0	112	1	0	142
Conflicting Peds, #/hr	0	0	0	20	20	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	0	151	1	0	192

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	364	172	0	0	172	0
Stage 1	172	-	-	-	-	-
Stage 2	192	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	639	877	-	-	1417	-
Stage 1	863	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	627	860	-	-	1390	-
Mov Cap-2 Maneuver	627	-	-	-	-	-
Stage 1	847	-	-	-	-	-
Stage 2	845	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	627	1390	-
HCM Lane V/C Ratio	-	-	0.009	-	-
HCM Control Delay (s)	-	-	10.8	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	413	38	313	507	37	69	18	287	66	25	57
Future Volume (veh/h)	64	413	38	313	507	37	69	18	287	66	25	57
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	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
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	69	444	41	337	545	40	74	19	309	71	27	61
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
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	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	329	805	74	453	1203	88	629	660	796	139	39	89
Arrive On Green	0.04	0.24	0.24	0.15	0.36	0.36	0.35	0.35	0.35	0.08	0.08	0.08
Sat Flow, veh/h	1792	3304	304	1792	3375	247	1792	1881	1568	1792	506	1143
Grp Volume(v), veh/h	69	239	246	337	288	297	74	19	309	71	0	88
Grp Sat Flow(s),veh/h/ln	1792	1787	1821	1792	1787	1836	1792	1881	1568	1792	0	1649
Q Serve(g_s), s	3.3	13.4	13.6	15.6	14.2	14.3	3.2	0.8	14.0	4.4	0.0	6.0
Cycle Q Clear(g_c), s	3.3	13.4	13.6	15.6	14.2	14.3	3.2	0.8	14.0	4.4	0.0	6.0
Prop In Lane	1.00		0.17	1.00		0.13	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	329	436	444	453	637	654	629	660	796	139	0	128
V/C Ratio(X)	0.21	0.55	0.55	0.74	0.45	0.45	0.12	0.03	0.39	0.51	0.00	0.69
Avail Cap(c_a), veh/h	334	436	444	474	637	654	629	660	796	421	0	387
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.6	38.0	38.0	25.9	28.4	28.4	25.3	24.5	17.6	50.9	0.0	51.7
Incr Delay (d2), s/veh	0.1	4.9	4.9	5.2	2.3	2.3	0.4	0.1	1.4	1.1	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	11.7	11.9	12.9	11.9	12.2	3.0	0.7	10.4	4.0	0.0	5.1
LnGrp Delay(d),s/veh	30.7	42.9	42.9	31.1	30.7	30.7	25.6	24.5	19.0	52.0	0.0	54.1
LnGrp LOS	C	D	D	C	C	C	C	C	B	D		D
Approach Vol, veh/h		554			922			402			159	
Approach Delay, s/veh		41.4			30.8			20.5			53.2	
Approach LOS		D			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		45.4	22.7	33.0		13.9	9.7	46.0
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		22.0	19.0	27.0		27.0	5.0	41.0
Max Q Clear Time (g_c+I1), s		16.0	17.6	15.6		8.0	5.3	16.3
Green Ext Time (p_c), s		0.4	0.1	3.3		0.4	0.0	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	33.4
HCM 2010 LOS	C

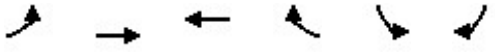
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	770	852	7	48	22
Future Vol, veh/h	2	770	852	7	48	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	2	802	888	7	50	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	895	0	-	0	1297	448
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	405	-
Critical Hdwy	4.12	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.21	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	760	-	-	-	156	564
Stage 1	-	-	-	-	366	-
Stage 2	-	-	-	-	648	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	760	-	-	-	155	564
Mov Cap-2 Maneuver	-	-	-	-	155	-
Stage 1	-	-	-	-	364	-
Stage 2	-	-	-	-	648	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	32.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	760	-	-	-	201
HCM Lane V/C Ratio	0.003	-	-	-	0.363
HCM Control Delay (s)	9.8	0	-	-	32.8
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	1.6



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	816	807	11	111	46
Future Volume (veh/h)	7	816	807	11	111	46
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
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
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	7	859	849	12	117	48
Adj No. of Lanes	0	2	2	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	0	0
Cap, veh/h	66	1365	1412	20	557	228
Arrive On Green	0.39	0.39	0.39	0.39	0.45	0.45
Sat Flow, veh/h	7	3572	3702	51	1228	504
Grp Volume(v), veh/h	463	403	420	441	166	0
Grp Sat Flow(s),veh/h/ln	1868	1626	1787	1872	1742	0
Q Serve(g_s), s	0.0	11.6	10.9	10.9	3.3	0.0
Cycle Q Clear(g_c), s	11.5	11.6	10.9	10.9	3.3	0.0
Prop In Lane	0.02			0.03	0.70	0.29
Lane Grp Cap(c), veh/h	794	637	699	733	790	0
V/C Ratio(X)	0.58	0.63	0.60	0.60	0.21	0.00
Avail Cap(c_a), veh/h	977	799	878	920	790	0
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	0.00
Uniform Delay (d), s/veh	14.3	14.3	14.0	14.0	9.6	0.0
Incr Delay (d2), s/veh	0.7	1.1	0.8	0.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.1	9.1	9.2	9.6	3.1	0.0
LnGrp Delay(d),s/veh	14.9	15.4	14.9	14.8	10.2	0.0
LnGrp LOS	B	B	B	B	B	
Approach Vol, veh/h		866	861		166	
Approach Delay, s/veh		15.1	14.9		10.2	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				27.2		30.8		27.2
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				28.5		20.5		28.5
Max Q Clear Time (g_c+I1), s				13.6		5.3		12.9
Green Ext Time (p_c), s				9.1		0.4		9.4

Intersection Summary	
HCM 2010 Ctrl Delay	14.6
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	902	804	11	46	4
Future Vol, veh/h	0	902	804	11	46	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	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	960	855	12	49	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	867	0	-	0	1341	434
Stage 1	-	-	-	-	861	-
Stage 2	-	-	-	-	480	-
Critical Hdwy	4.12	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.21	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	779	-	-	-	146	576
Stage 1	-	-	-	-	379	-
Stage 2	-	-	-	-	594	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	779	-	-	-	146	576
Mov Cap-2 Maneuver	-	-	-	-	146	-
Stage 1	-	-	-	-	379	-
Stage 2	-	-	-	-	594	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	39.9
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	779	-	-	-	155
HCM Lane V/C Ratio	-	-	-	-	0.343
HCM Control Delay (s)	0	-	-	-	39.9
HCM Lane LOS	A	-	-	-	E
HCM 95th %tile Q(veh)	0	-	-	-	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	758	50	64	657	212	26	88	66	168	57	118
Future Volume (veh/h)	130	758	50	64	657	212	26	88	66	168	57	118
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.96	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	135	790	52	67	684	0	27	92	69	175	59	123
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	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, %	1	1	1	1	1	1	0	0	0	1	1	1
Cap, veh/h	171	1548	102	96	1476	0	305	280	188	362	333	290
Arrive On Green	0.10	0.45	0.45	0.05	0.41	0.00	0.03	0.14	0.14	0.08	0.19	0.19
Sat Flow, veh/h	1792	3404	224	1792	3668	0	1810	2027	1364	1792	1787	1557
Grp Volume(v), veh/h	135	415	427	67	684	0	27	81	80	175	59	123
Grp Sat Flow(s),veh/h/ln	1792	1787	1841	1792	1787	0	1810	1805	1586	1792	1787	1557
Q Serve(g_s), s	4.8	10.8	10.8	2.4	9.1	0.0	0.8	2.6	3.0	5.1	1.8	4.6
Cycle Q Clear(g_c), s	4.8	10.8	10.8	2.4	9.1	0.0	0.8	2.6	3.0	5.1	1.8	4.6
Prop In Lane	1.00		0.12	1.00		0.00	1.00		0.86	1.00		1.00
Lane Grp Cap(c), veh/h	171	813	837	96	1476	0	305	249	219	362	333	290
V/C Ratio(X)	0.79	0.51	0.51	0.69	0.46	0.00	0.09	0.32	0.37	0.48	0.18	0.42
Avail Cap(c_a), veh/h	211	813	837	178	1476	0	390	751	660	362	746	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	12.7	12.7	30.4	13.9	0.0	23.0	25.4	25.6	22.0	22.4	23.5
Incr Delay (d2), s/veh	11.8	2.3	2.2	3.3	1.0	0.0	0.0	0.3	0.4	0.4	0.1	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(95%),veh/ln	5.3	9.8	10.0	2.3	8.2	0.0	0.7	2.4	2.4	0.7	1.6	3.6
LnGrp Delay(d),s/veh	40.7	14.9	14.9	33.7	15.0	0.0	23.0	25.7	26.0	22.4	22.5	23.9
LnGrp LOS	D	B	B	C	B		C	C	C	C	C	C
Approach Vol, veh/h		977			751			188			357	
Approach Delay, s/veh		18.5			16.6			25.4			22.9	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	13.5	8.0	34.2	6.4	16.7	10.7	31.5
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	5.1	27.2	6.5	28.2	5.0	27.3	7.7	27.0
Max Q Clear Time (g_c+I1), s	7.1	5.0	4.4	12.8	2.8	6.6	6.8	11.1
Green Ext Time (p_c), s	0.0	1.4	0.0	6.0	0.0	1.3	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	19.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	1	490	280	0
Future Vol, veh/h	0	4	1	490	280	0
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	0	4	1	533	304	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	842	307	307	0	-	0
Stage 1	307	-	-	-	-	-
Stage 2	535	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	337	738	1265	-	-	-
Stage 1	751	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	335	736	1261	-	-	-
Mov Cap-2 Maneuver	449	-	-	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	589	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1261	-	736	-	-
HCM Lane V/C Ratio	0.001	-	0.006	-	-
HCM Control Delay (s)	7.9	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	11	32	360	292	2
Future Vol, veh/h	3	11	32	360	292	2
Conflicting Peds, #/hr	0	1	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	3	12	34	383	311	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	765	315	315	0	-	0
Stage 1	314	-	-	-	-	-
Stage 2	451	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	374	730	1257	-	-	-
Stage 1	745	-	-	-	-	-
Stage 2	646	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	360	728	1255	-	-	-
Mov Cap-2 Maneuver	473	-	-	-	-	-
Stage 1	718	-	-	-	-	-
Stage 2	645	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1255	-	653	-	-
HCM Lane V/C Ratio	0.027	-	0.023	-	-
HCM Control Delay (s)	7.9	0	10.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	19	1	5
Future Vol, veh/h	4	0	0	19	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	0	0	28	1	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	6	0	34	6
Stage 1	-	-	-	-	6	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1628	-	984	1083
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1000	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1628	-	984	1083
Mov Cap-2 Maneuver	-	-	-	-	984	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1000	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1065	-	-	1628	-
HCM Lane V/C Ratio	0.008	-	-	-	-
HCM Control Delay (s)	8.4	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	0	257	61	0	157
Future Vol, veh/h	7	0	257	61	0	157
Conflicting Peds, #/hr	0	0	0	50	50	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	33	0	2	2	0	0
Mvmt Flow	13	0	476	113	0	291

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	874	583	0	0	639	0
Stage 1	583	-	-	-	-	-
Stage 2	291	-	-	-	-	-
Critical Hdwy	6.73	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.73	-	-	-	-	-
Critical Hdwy Stg 2	5.73	-	-	-	-	-
Follow-up Hdwy	3.797	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	283	516	-	-	955	-
Stage 1	502	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	269	491	-	-	910	-
Mov Cap-2 Maneuver	269	-	-	-	-	-
Stage 1	478	-	-	-	-	-
Stage 2	693	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	269	910	-
HCM Lane V/C Ratio	-	-	0.048	-	-
HCM Control Delay (s)	-	-	19.1	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	0	321	24	0	158
Future Vol, veh/h	7	0	321	24	0	158
Conflicting Peds, #/hr	0	0	0	50	50	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	0	0	2	0	0	33
Mvmt Flow	13	0	594	44	0	293

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	959	666	0	0	688	0
Stage 1	666	-	-	-	-	-
Stage 2	293	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	288	463	-	-	916	-
Stage 1	515	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	274	441	-	-	872	-
Mov Cap-2 Maneuver	274	-	-	-	-	-
Stage 1	490	-	-	-	-	-
Stage 2	762	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	274	872	-
HCM Lane V/C Ratio	-	-	0.047	-	-
HCM Control Delay (s)	-	-	18.8	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	413	70	471	250	78	36	69	352	48	45	72
Future Volume (veh/h)	198	413	70	471	250	78	36	69	352	48	45	72
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1900	1863	1863	1863	1743	1743	1900
Adj Flow Rate, veh/h	233	486	82	554	294	92	42	81	414	56	53	85
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	9	9	9
Cap, veh/h	511	733	123	581	995	305	354	372	695	215	77	123
Arrive On Green	0.12	0.24	0.24	0.24	0.37	0.37	0.20	0.20	0.20	0.13	0.13	0.13
Sat Flow, veh/h	1757	2994	502	1774	2668	819	1774	1863	1542	1660	594	952
Grp Volume(v), veh/h	233	283	285	554	193	193	42	81	414	56	0	138
Grp Sat Flow(s),veh/h/ln	1757	1752	1744	1774	1770	1717	1774	1863	1542	1660	0	1546
Q Serve(g_s), s	10.8	16.1	16.2	24.7	8.5	8.7	2.1	4.0	22.0	3.3	0.0	9.4
Cycle Q Clear(g_c), s	10.8	16.1	16.2	24.7	8.5	8.7	2.1	4.0	22.0	3.3	0.0	9.4
Prop In Lane	1.00		0.29	1.00		0.48	1.00		1.00	1.00		0.62
Lane Grp Cap(c), veh/h	511	429	427	581	660	640	354	372	695	215	0	200
V/C Ratio(X)	0.46	0.66	0.67	0.95	0.29	0.30	0.12	0.22	0.60	0.26	0.00	0.69
Avail Cap(c_a), veh/h	545	429	427	614	660	640	354	372	695	407	0	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	0.00	1.00
Uniform Delay (d), s/veh	25.9	37.5	37.6	22.5	24.3	24.4	36.2	36.9	23.3	43.2	0.0	45.8
Incr Delay (d2), s/veh	0.2	7.8	8.0	24.2	1.1	1.2	0.1	0.1	1.0	0.2	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.0	13.6	13.6	22.3	7.8	7.8	1.9	3.7	14.9	2.8	0.0	7.4
LnGrp Delay(d),s/veh	26.2	45.2	45.6	46.7	25.5	25.6	36.2	37.0	24.3	43.4	0.0	47.4
LnGrp LOS	C	D	D	D	C	C	D	D	C	D		D
Approach Vol, veh/h		801			940			537			194	
Approach Delay, s/veh		39.8			38.0			27.1			46.3	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.0	32.0	32.0		19.3	17.8	46.1
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		22.0	29.0	27.0		27.0	15.0	41.0
Max Q Clear Time (g_c+I1), s		24.0	26.7	18.2		11.4	12.8	10.7
Green Ext Time (p_c), s		0.0	0.3	2.6		0.5	0.1	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	36.9
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	784	787	88	4	12
Future Vol, veh/h	29	784	787	88	4	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	8	8
Mvmt Flow	31	834	837	94	4	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	931	0	-	0	1363	466
Stage 1	-	-	-	-	884	-
Stage 2	-	-	-	-	479	-
Critical Hdwy	4.14	-	-	-	6.96	7.06
Critical Hdwy Stg 1	-	-	-	-	5.96	-
Critical Hdwy Stg 2	-	-	-	-	5.96	-
Follow-up Hdwy	2.22	-	-	-	3.58	3.38
Pot Cap-1 Maneuver	731	-	-	-	132	527
Stage 1	-	-	-	-	350	-
Stage 2	-	-	-	-	572	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	731	-	-	-	122	527
Mov Cap-2 Maneuver	-	-	-	-	122	-
Stage 1	-	-	-	-	322	-
Stage 2	-	-	-	-	572	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	18.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	731	-	-	-	288
HCM Lane V/C Ratio	0.042	-	-	-	0.059
HCM Control Delay (s)	10.1	0.4	-	-	18.3
HCM Lane LOS	B	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	751	853	87	111	23
Future Volume (veh/h)	37	751	853	87	111	23
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1900	1900
Adj Flow Rate, veh/h	41	834	948	97	123	26
Adj No. of Lanes	0	2	2	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	158	1827	1821	186	228	48
Arrive On Green	0.56	0.56	0.56	0.56	0.16	0.16
Sat Flow, veh/h	63	3339	3335	332	1454	307
Grp Volume(v), veh/h	453	422	517	528	150	0
Grp Sat Flow(s),veh/h/ln	1707	1610	1770	1804	1773	0
Q Serve(g_s), s	0.0	5.0	5.8	5.8	2.5	0.0
Cycle Q Clear(g_c), s	4.5	5.0	5.8	5.8	2.5	0.0
Prop In Lane	0.09			0.18	0.82	0.17
Lane Grp Cap(c), veh/h	1081	904	994	1013	278	0
V/C Ratio(X)	0.42	0.47	0.52	0.52	0.54	0.00
Avail Cap(c_a), veh/h	1299	1135	1247	1271	1083	0
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	0.00
Uniform Delay (d), s/veh	4.1	4.2	4.3	4.3	12.4	0.0
Incr Delay (d2), s/veh	0.3	0.4	0.4	0.4	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	4.0	5.1	5.2	2.4	0.0
LnGrp Delay(d),s/veh	4.3	4.5	4.8	4.8	14.0	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h		875	1045		150	
Approach Delay, s/veh		4.4	4.8		14.0	
Approach LOS		A	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				22.4		9.5		22.4
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				22.5		19.5		22.5
Max Q Clear Time (g_c+I1), s				7.0		4.5		7.8
Green Ext Time (p_c), s				10.6		0.3		10.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.3
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	858	937	114	52	4
Future Vol, veh/h	4	858	937	114	52	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	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	5	986	1077	131	60	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1208	0	-	0	1646	604
Stage 1	-	-	-	-	1143	-
Stage 2	-	-	-	-	503	-
Critical Hdwy	4.14	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.22	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	573	-	-	-	92	446
Stage 1	-	-	-	-	270	-
Stage 2	-	-	-	-	578	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	573	-	-	-	90	446
Mov Cap-2 Maneuver	-	-	-	-	90	-
Stage 1	-	-	-	-	265	-
Stage 2	-	-	-	-	578	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	100
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	573	-	-	-	95
HCM Lane V/C Ratio	0.008	-	-	-	0.678
HCM Control Delay (s)	11.3	0.1	-	-	100
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	785	27	18	856	67	29	27	33	255	67	168
Future Volume (veh/h)	99	785	27	18	856	67	29	27	33	255	67	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	108	853	29	20	930	0	32	29	36	277	73	183
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	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, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	138	1669	57	41	1499	0	179	208	182	379	330	289
Arrive On Green	0.08	0.48	0.48	0.02	0.42	0.00	0.03	0.12	0.12	0.10	0.18	0.18
Sat Flow, veh/h	1774	3492	119	1774	3632	0	1792	1787	1562	1792	1787	1566
Grp Volume(v), veh/h	108	432	450	20	930	0	32	29	36	277	73	183
Grp Sat Flow(s),veh/h/ln	1774	1770	1841	1774	1770	0	1792	1787	1562	1792	1787	1566
Q Serve(g_s), s	3.8	10.8	10.8	0.7	13.1	0.0	0.0	0.9	1.3	2.0	2.2	6.9
Cycle Q Clear(g_c), s	3.8	10.8	10.8	0.7	13.1	0.0	0.0	0.9	1.3	2.0	2.2	6.9
Prop In Lane	1.00		0.06	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	846	880	41	1499	0	179	208	182	379	330	289
V/C Ratio(X)	0.78	0.51	0.51	0.48	0.62	0.00	0.18	0.14	0.20	0.73	0.22	0.63
Avail Cap(c_a), veh/h	181	846	880	139	1499	0	263	796	696	379	799	700
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	11.5	11.5	30.7	14.4	0.0	29.8	25.3	25.5	25.3	22.1	24.0
Incr Delay (d2), s/veh	10.9	2.2	2.1	3.2	1.9	0.0	0.2	0.1	0.2	6.2	0.1	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(95%),veh/ln	4.1	9.6	9.9	0.7	11.0	0.0	1.0	0.8	1.0	8.9	2.0	5.4
LnGrp Delay(d),s/veh	39.8	13.7	13.6	33.9	16.3	0.0	30.0	25.4	25.7	31.5	22.2	24.9
LnGrp LOS	D	B	B	C	B		C	C	C	C	C	C
Approach Vol, veh/h		990			950			97			533	
Approach Delay, s/veh		16.5			16.7			27.0			28.0	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	11.9	6.0	35.0	6.5	16.3	9.5	31.5
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	5.1	28.4	5.0	28.5	5.0	28.5	6.5	27.0
Max Q Clear Time (g_c+I1), s	4.0	3.3	2.7	12.8	2.0	8.9	5.8	15.1
Green Ext Time (p_c), s	0.1	0.2	0.0	7.5	0.0	1.0	0.0	6.4

Intersection Summary	
HCM 2010 Ctrl Delay	19.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	2	196	510	0
Future Vol, veh/h	0	2	2	196	510	0
Conflicting Peds, #/hr	0	1	6	0	0	6
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	4	1	0
Mvmt Flow	0	2	2	209	543	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	762	550	549	0	-	0
Stage 1	549	-	-	-	-	-
Stage 2	213	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	376	539	1031	-	-	-
Stage 1	583	-	-	-	-	-
Stage 2	827	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	371	535	1025	-	-	-
Mov Cap-2 Maneuver	468	-	-	-	-	-
Stage 1	578	-	-	-	-	-
Stage 2	822	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.8	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1025	-	535	-	-
HCM Lane V/C Ratio	0.002	-	0.004	-	-
HCM Control Delay (s)	8.5	0	11.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	9	144	467	4
Future Vol, veh/h	0	4	9	144	467	4
Conflicting Peds, #/hr	0	1	5	0	0	5
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	5	10	164	531	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	723	540	541	0	-	0
Stage 1	539	-	-	-	-	-
Stage 2	184	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	393	542	1028	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	848	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	385	539	1023	-	-	-
Mov Cap-2 Maneuver	475	-	-	-	-	-
Stage 1	576	-	-	-	-	-
Stage 2	844	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1023	-	539	-	-
HCM Lane V/C Ratio	0.01	-	0.008	-	-
HCM Control Delay (s)	8.6	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	0	7	5	0	1
Future Vol, veh/h	4	0	7	5	0	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	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	17	0	0	0	0	2
Mvmt Flow	7	0	13	9	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	7	0	42	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	35	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1627	-	974	1075
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	993	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1627	-	966	1075
Mov Cap-2 Maneuver	-	-	-	-	966	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	985	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.2	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1075	-	-	1627	-
HCM Lane V/C Ratio	0.002	-	-	0.008	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	0	110	2	0	126
Future Vol, veh/h	16	0	110	2	0	126
Conflicting Peds, #/hr	0	0	0	20	20	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	0	175	3	0	200

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	397	197	0	0	198	0
Stage 1	197	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	612	849	-	-	1387	-
Stage 1	841	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	600	833	-	-	1361	-
Mov Cap-2 Maneuver	600	-	-	-	-	-
Stage 1	825	-	-	-	-	-
Stage 2	838	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	600	1361	-
HCM Lane V/C Ratio	-	-	0.042	-	-
HCM Control Delay (s)	-	-	11.3	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	0	112	1	0	142
Future Vol, veh/h	4	0	112	1	0	142
Conflicting Peds, #/hr	0	0	0	20	20	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	0	151	1	0	192

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	364	172	0	0	172	0
Stage 1	172	-	-	-	-	-
Stage 2	192	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	639	877	-	-	1417	-
Stage 1	863	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	627	860	-	-	1390	-
Mov Cap-2 Maneuver	627	-	-	-	-	-
Stage 1	847	-	-	-	-	-
Stage 2	845	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	627	1390	-
HCM Lane V/C Ratio	-	-	0.009	-	-
HCM Control Delay (s)	-	-	10.8	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	509	47	386	625	37	85	19	354	66	25	57
Future Volume (veh/h)	64	509	47	386	625	37	85	19	354	66	25	57
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	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
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	69	547	51	415	672	40	91	20	381	71	27	61
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
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	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	286	775	72	426	1229	73	624	656	811	139	39	89
Arrive On Green	0.04	0.23	0.23	0.17	0.36	0.36	0.35	0.35	0.35	0.08	0.08	0.08
Sat Flow, veh/h	1792	3300	307	1792	3427	204	1792	1881	1568	1792	506	1143
Grp Volume(v), veh/h	69	296	302	415	350	362	91	20	381	71	0	88
Grp Sat Flow(s),veh/h/ln	1792	1787	1820	1792	1787	1844	1792	1881	1568	1792	0	1649
Q Serve(g_s), s	3.3	17.4	17.5	19.0	18.0	18.0	4.0	0.8	17.9	4.4	0.0	6.0
Cycle Q Clear(g_c), s	3.3	17.4	17.5	19.0	18.0	18.0	4.0	0.8	17.9	4.4	0.0	6.0
Prop In Lane	1.00		0.17	1.00		0.11	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	286	420	427	426	641	661	624	656	811	139	0	128
V/C Ratio(X)	0.24	0.70	0.71	0.97	0.55	0.55	0.15	0.03	0.47	0.51	0.00	0.69
Avail Cap(c_a), veh/h	290	420	427	426	641	661	624	656	811	421	0	387
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.4	40.3	40.4	29.3	29.4	29.4	25.7	24.7	18.0	50.9	0.0	51.7
Incr Delay (d2), s/veh	0.2	9.5	9.5	36.3	3.3	3.2	0.5	0.1	2.0	1.1	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.0	14.8	15.1	12.8	14.5	14.9	3.7	0.8	12.8	4.0	0.0	5.1
LnGrp Delay(d),s/veh	31.6	49.9	49.9	65.6	32.7	32.7	26.2	24.7	19.9	52.0	0.0	54.1
LnGrp LOS	C	D	D	E	C	C	C	C	B	D		D
Approach Vol, veh/h		667			1127			492			159	
Approach Delay, s/veh		48.0			44.8			21.3			53.2	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		45.1	24.0	32.0		13.9	9.7	46.3
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		22.0	19.0	27.0		27.0	5.0	41.0
Max Q Clear Time (g_c+I1), s		19.9	21.0	19.5		8.0	5.3	20.0
Green Ext Time (p_c), s		0.3	0.0	3.2		0.4	0.0	5.2

Intersection Summary	
HCM 2010 Ctrl Delay	41.5
HCM 2010 LOS	D

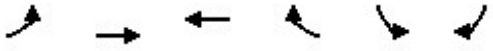
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	933	1043	7	48	22
Future Vol, veh/h	2	933	1043	7	48	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	2	972	1086	7	50	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1093	0	-	0	1580	547
Stage 1	-	-	-	-	1090	-
Stage 2	-	-	-	-	490	-
Critical Hdwy	4.12	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.21	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	640	-	-	-	102	486
Stage 1	-	-	-	-	288	-
Stage 2	-	-	-	-	587	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	640	-	-	-	101	486
Mov Cap-2 Maneuver	-	-	-	-	101	-
Stage 1	-	-	-	-	286	-
Stage 2	-	-	-	-	587	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	60.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	640	-	-	-	134
HCM Lane V/C Ratio	0.003	-	-	-	0.544
HCM Control Delay (s)	10.6	0	-	-	60.1
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	2.7



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	979	998	11	111	46
Future Volume (veh/h)	7	979	998	11	111	46
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
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
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	7	1031	1051	12	117	48
Adj No. of Lanes	0	2	2	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	0	0
Cap, veh/h	65	1523	1581	18	501	206
Arrive On Green	0.44	0.44	0.44	0.44	0.41	0.41
Sat Flow, veh/h	6	3573	3714	41	1228	504
Grp Volume(v), veh/h	555	483	519	544	166	0
Grp Sat Flow(s),veh/h/ln	1867	1626	1787	1874	1742	0
Q Serve(g_s), s	0.0	13.8	13.4	13.4	3.6	0.0
Cycle Q Clear(g_c), s	13.7	13.8	13.4	13.4	3.6	0.0
Prop In Lane	0.01			0.02	0.70	0.29
Lane Grp Cap(c), veh/h	878	710	781	819	711	0
V/C Ratio(X)	0.63	0.68	0.66	0.66	0.23	0.00
Avail Cap(c_a), veh/h	978	799	878	921	711	0
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	0.00
Uniform Delay (d), s/veh	13.0	13.1	13.0	13.0	11.2	0.0
Incr Delay (d2), s/veh	1.1	2.0	1.6	1.5	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.6	10.8	11.1	11.5	3.3	0.0
LnGrp Delay(d),s/veh	14.2	15.1	14.6	14.5	12.0	0.0
LnGrp LOS	B	B	B	B	B	
Approach Vol, veh/h		1038	1063		166	
Approach Delay, s/veh		14.6	14.5		12.0	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				29.8		28.2		29.8
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				28.5		20.5		28.5
Max Q Clear Time (g_c+I1), s				15.8		5.6		15.4
Green Ext Time (p_c), s				9.5		0.4		9.8

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1065	995	11	46	4
Future Vol, veh/h	0	1065	995	11	46	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	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	1133	1059	12	49	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1071	0	-	0	1632	536
Stage 1	-	-	-	-	1065	-
Stage 2	-	-	-	-	567	-
Critical Hdwy	4.12	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.21	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	652	-	-	-	94	494
Stage 1	-	-	-	-	297	-
Stage 2	-	-	-	-	537	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	652	-	-	-	94	494
Mov Cap-2 Maneuver	-	-	-	-	94	-
Stage 1	-	-	-	-	297	-
Stage 2	-	-	-	-	537	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	74.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	652	-	-	-	101
HCM Lane V/C Ratio	-	-	-	-	0.527
HCM Control Delay (s)	0	-	-	-	74.8
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	890	59	79	814	261	32	108	81	207	70	146
Future Volume (veh/h)	153	890	59	79	814	261	32	108	81	207	70	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.96	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	159	927	61	82	848	0	33	112	84	216	73	152
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	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, %	1	1	1	1	1	1	0	0	0	1	1	1
Cap, veh/h	198	1535	101	105	1427	0	288	300	204	352	339	296
Arrive On Green	0.11	0.45	0.45	0.06	0.40	0.00	0.03	0.15	0.15	0.08	0.19	0.19
Sat Flow, veh/h	1792	3404	224	1792	3668	0	1810	2020	1373	1792	1787	1558
Grp Volume(v), veh/h	159	487	501	82	848	0	33	99	97	216	73	152
Grp Sat Flow(s),veh/h/ln	1792	1787	1841	1792	1787	0	1810	1805	1588	1792	1787	1558
Q Serve(g_s), s	5.9	13.9	13.9	3.1	12.6	0.0	1.0	3.3	3.8	5.1	2.3	5.9
Cycle Q Clear(g_c), s	5.9	13.9	13.9	3.1	12.6	0.0	1.0	3.3	3.8	5.1	2.3	5.9
Prop In Lane	1.00		0.12	1.00		0.00	1.00		0.86	1.00		1.00
Lane Grp Cap(c), veh/h	198	806	830	105	1427	0	288	268	236	352	339	296
V/C Ratio(X)	0.80	0.60	0.60	0.78	0.59	0.00	0.11	0.37	0.41	0.61	0.22	0.51
Avail Cap(c_a), veh/h	204	806	830	172	1427	0	360	726	639	352	722	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	14.0	14.0	31.4	16.0	0.0	23.1	25.9	26.1	24.3	23.1	24.6
Incr Delay (d2), s/veh	18.4	3.3	3.2	4.6	1.8	0.0	0.1	0.3	0.4	2.3	0.1	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(95%),veh/ln	7.0	12.0	12.3	2.9	10.8	0.0	0.9	3.0	3.0	2.9	2.1	4.6
LnGrp Delay(d),s/veh	47.7	17.4	17.3	36.0	17.8	0.0	23.1	26.2	26.5	26.6	23.2	25.1
LnGrp LOS	D	B	B	D	B		C	C	C	C	C	C
Approach Vol, veh/h		1147			930			229			441	
Approach Delay, s/veh		21.5			19.4			25.9			25.5	
Approach LOS		C			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	14.6	8.5	35.0	6.8	17.3	12.0	31.5
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	5.1	27.2	6.5	28.2	5.0	27.3	7.7	27.0
Max Q Clear Time (g_c+I1), s	7.1	5.8	5.1	15.9	3.0	7.9	7.9	14.6
Green Ext Time (p_c), s	0.0	1.7	0.0	6.6	0.0	1.6	0.0	6.6

Intersection Summary	
HCM 2010 Ctrl Delay	21.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	1	604	345	0
Future Vol, veh/h	0	4	1	604	345	0
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	0	4	1	657	375	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1037	378	378	0	-	0
Stage 1	378	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	258	673	1192	-	-	-
Stage 1	697	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	256	671	1189	-	-	-
Mov Cap-2 Maneuver	383	-	-	-	-	-
Stage 1	694	-	-	-	-	-
Stage 2	516	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1189	-	671	-	-
HCM Lane V/C Ratio	0.001	-	0.006	-	-
HCM Control Delay (s)	8	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	11	32	444	360	2
Future Vol, veh/h	3	11	32	444	360	2
Conflicting Peds, #/hr	0	1	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	3	12	34	472	383	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	926	387	387	0	-	0
Stage 1	386	-	-	-	-	-
Stage 2	540	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	301	665	1183	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	288	663	1181	-	-	-
Mov Cap-2 Maneuver	415	-	-	-	-	-
Stage 1	663	-	-	-	-	-
Stage 2	587	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.3	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1181	-	588	-	-
HCM Lane V/C Ratio	0.029	-	0.025	-	-
HCM Control Delay (s)	8.1	0	11.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	9	0	0	34	1	5
Future Vol, veh/h	9	0	0	34	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	0	0	50	1	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	13	0	63	13
Stage 1	-	-	-	-	13	-
Stage 2	-	-	-	-	50	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1619	-	948	1073
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	978	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1619	-	948	1073
Mov Cap-2 Maneuver	-	-	-	-	948	-
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	978	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1050	-	-	1619	-
HCM Lane V/C Ratio	0.008	-	-	-	-
HCM Control Delay (s)	8.5	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	0	257	70	0	157
Future Vol, veh/h	15	0	257	70	0	157
Conflicting Peds, #/hr	0	0	0	50	50	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	33	0	2	2	0	0
Mvmt Flow	28	0	476	130	0	291

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	882	591	0	0	656	0
Stage 1	591	-	-	-	-	-
Stage 2	291	-	-	-	-	-
Critical Hdwy	6.73	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.73	-	-	-	-	-
Critical Hdwy Stg 2	5.73	-	-	-	-	-
Follow-up Hdwy	3.797	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	280	511	-	-	941	-
Stage 1	497	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	267	487	-	-	896	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	473	-	-	-	-	-
Stage 2	693	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	267	896	-
HCM Lane V/C Ratio	-	-	0.104	-	-
HCM Control Delay (s)	-	-	20	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	330	0	0	166
Future Vol, veh/h	0	0	330	0	0	166
Conflicting Peds, #/hr	0	0	0	50	50	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	0	0	2	0	0	33
Mvmt Flow	0	0	611	0	0	307

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	968	661	0	0	661	0
Stage 1	661	-	-	-	-	-
Stage 2	307	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	284	466	-	-	937	-
Stage 1	517	-	-	-	-	-
Stage 2	751	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	270	444	-	-	892	-
Mov Cap-2 Maneuver	270	-	-	-	-	-
Stage 1	492	-	-	-	-	-
Stage 2	751	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	892	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	401	70	467	250	73	36	67	354	48	46	72
Future Volume (veh/h)	190	401	70	467	250	73	36	67	354	48	46	72
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1900	1863	1863	1863	1743	1743	1900
Adj Flow Rate, veh/h	224	472	82	549	294	86	42	79	416	56	54	85
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	9	9	9
Cap, veh/h	506	731	126	583	1018	293	355	373	692	216	78	123
Arrive On Green	0.11	0.25	0.25	0.24	0.38	0.38	0.20	0.20	0.20	0.13	0.13	0.13
Sat Flow, veh/h	1757	2979	514	1774	2714	780	1774	1863	1542	1660	601	946
Grp Volume(v), veh/h	224	276	278	549	190	190	42	79	416	56	0	139
Grp Sat Flow(s),veh/h/ln	1757	1752	1741	1774	1770	1724	1774	1863	1542	1660	0	1547
Q Serve(g_s), s	10.3	15.5	15.7	24.3	8.3	8.5	2.1	3.9	22.0	3.3	0.0	9.4
Cycle Q Clear(g_c), s	10.3	15.5	15.7	24.3	8.3	8.5	2.1	3.9	22.0	3.3	0.0	9.4
Prop In Lane	1.00		0.30	1.00		0.45	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	506	430	427	583	664	647	355	373	692	216	0	201
V/C Ratio(X)	0.44	0.64	0.65	0.94	0.29	0.29	0.12	0.21	0.60	0.26	0.00	0.69
Avail Cap(c_a), veh/h	548	430	427	620	664	647	355	373	692	408	0	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	0.00	1.00
Uniform Delay (d), s/veh	26.0	37.2	37.2	22.4	24.0	24.1	36.0	36.8	23.4	43.1	0.0	45.7
Incr Delay (d2), s/veh	0.2	7.2	7.4	21.7	1.1	1.2	0.1	0.1	1.0	0.2	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.6	13.1	13.2	21.7	7.6	7.7	1.9	3.6	15.0	2.8	0.0	7.5
LnGrp Delay(d),s/veh	26.2	44.4	44.7	44.1	25.1	25.3	36.1	36.9	24.4	43.3	0.0	47.3
LnGrp LOS	C	D	D	D	C	C	D	D	C	D		D
Approach Vol, veh/h		778			929			537			195	
Approach Delay, s/veh		39.3			36.3			27.2			46.1	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.0	31.7	32.0		19.3	17.4	46.3
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		22.0	29.0	27.0		27.0	15.0	41.0
Max Q Clear Time (g_c+I1), s		24.0	26.3	17.7		11.4	12.3	10.5
Green Ext Time (p_c), s		0.0	0.3	2.6		0.5	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	36.0
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	778	780	84	5	10
Future Vol, veh/h	25	778	780	84	5	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	8	8
Mvmt Flow	27	828	830	89	5	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	919	0	-	0	1343	460
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	468	-
Critical Hdwy	4.14	-	-	-	6.96	7.06
Critical Hdwy Stg 1	-	-	-	-	5.96	-
Critical Hdwy Stg 2	-	-	-	-	5.96	-
Follow-up Hdwy	2.22	-	-	-	3.58	3.38
Pot Cap-1 Maneuver	738	-	-	-	136	532
Stage 1	-	-	-	-	354	-
Stage 2	-	-	-	-	580	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	738	-	-	-	127	532
Mov Cap-2 Maneuver	-	-	-	-	127	-
Stage 1	-	-	-	-	330	-
Stage 2	-	-	-	-	580	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	19.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	738	-	-	-	258
HCM Lane V/C Ratio	0.036	-	-	-	0.062
HCM Control Delay (s)	10.1	0.3	-	-	19.9
HCM Lane LOS	B	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	763	850	75	91	15
Future Volume (veh/h)	20	763	850	75	91	15
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1900	1900
Adj Flow Rate, veh/h	22	848	944	83	101	17
Adj No. of Lanes	0	2	2	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	135	1883	1836	161	239	40
Arrive On Green	0.56	0.56	0.56	0.56	0.16	0.16
Sat Flow, veh/h	28	3462	3385	289	1510	254
Grp Volume(v), veh/h	460	410	507	520	119	0
Grp Sat Flow(s),veh/h/ln	1795	1610	1770	1812	1780	0
Q Serve(g_s), s	0.0	4.8	5.6	5.6	1.9	0.0
Cycle Q Clear(g_c), s	4.6	4.8	5.6	5.6	1.9	0.0
Prop In Lane	0.05			0.16	0.85	0.14
Lane Grp Cap(c), veh/h	1120	898	987	1010	281	0
V/C Ratio(X)	0.41	0.46	0.51	0.51	0.42	0.00
Avail Cap(c_a), veh/h	1376	1145	1258	1288	1096	0
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	0.00
Uniform Delay (d), s/veh	4.1	4.2	4.3	4.3	12.0	0.0
Incr Delay (d2), s/veh	0.2	0.4	0.4	0.4	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	3.9	5.0	5.1	1.8	0.0
LnGrp Delay(d),s/veh	4.4	4.5	4.8	4.7	13.0	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h		870	1027		119	
Approach Delay, s/veh		4.4	4.8		13.0	
Approach LOS		A	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				22.1		9.5		22.1
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				22.5		19.5		22.5
Max Q Clear Time (g_c+I1), s				6.8		3.9		7.6
Green Ext Time (p_c), s				10.4		0.3		10.0

Intersection Summary	
HCM 2010 Ctrl Delay	5.1
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	840	916	103	51	10
Future Vol, veh/h	14	840	916	103	51	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	16	966	1053	118	59	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1171	0	-	0	1627	586
Stage 1	-	-	-	-	1112	-
Stage 2	-	-	-	-	515	-
Critical Hdwy	4.14	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.22	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	592	-	-	-	95	459
Stage 1	-	-	-	-	281	-
Stage 2	-	-	-	-	570	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	592	-	-	-	89	459
Mov Cap-2 Maneuver	-	-	-	-	89	-
Stage 1	-	-	-	-	265	-
Stage 2	-	-	-	-	570	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	94.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	592	-	-	-	103
HCM Lane V/C Ratio	0.027	-	-	-	0.681
HCM Control Delay (s)	11.3	0.3	-	-	94.1
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	765	27	18	824	64	29	28	33	254	67	168
Future Volume (veh/h)	100	765	27	18	824	64	29	28	33	254	67	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	109	832	29	20	896	0	32	30	36	276	73	183
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	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, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	139	1669	58	41	1498	0	179	208	182	379	330	289
Arrive On Green	0.08	0.48	0.48	0.02	0.42	0.00	0.03	0.12	0.12	0.10	0.18	0.18
Sat Flow, veh/h	1774	3489	122	1774	3632	0	1792	1787	1562	1792	1787	1566
Grp Volume(v), veh/h	109	422	439	20	896	0	32	30	36	276	73	183
Grp Sat Flow(s),veh/h/ln	1774	1770	1841	1774	1770	0	1792	1787	1562	1792	1787	1566
Q Serve(g_s), s	3.8	10.4	10.4	0.7	12.5	0.0	0.0	1.0	1.3	2.0	2.2	6.9
Cycle Q Clear(g_c), s	3.8	10.4	10.4	0.7	12.5	0.0	0.0	1.0	1.3	2.0	2.2	6.9
Prop In Lane	1.00		0.07	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	139	846	881	41	1498	0	179	208	182	379	330	289
V/C Ratio(X)	0.78	0.50	0.50	0.48	0.60	0.00	0.18	0.14	0.20	0.73	0.22	0.63
Avail Cap(c_a), veh/h	181	846	881	139	1498	0	263	796	695	379	798	700
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	11.4	11.4	30.8	14.2	0.0	29.8	25.3	25.5	25.4	22.1	24.0
Incr Delay (d2), s/veh	11.3	2.1	2.0	3.2	1.8	0.0	0.2	0.1	0.2	6.1	0.1	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(95%),veh/ln	4.2	9.4	9.7	0.7	10.5	0.0	1.0	0.9	1.0	8.9	2.0	5.4
LnGrp Delay(d),s/veh	40.1	13.5	13.4	34.0	16.0	0.0	30.0	25.4	25.7	31.4	22.2	24.9
LnGrp LOS	D	B	B	C	B		C	C	C	C	C	C
Approach Vol, veh/h		970			916			98			532	
Approach Delay, s/veh		16.4			16.4			27.0			27.9	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	11.9	6.0	35.0	6.5	16.3	9.5	31.5
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	5.1	28.4	5.0	28.5	5.0	28.5	6.5	27.0
Max Q Clear Time (g_c+I1), s	4.0	3.3	2.7	12.4	2.0	8.9	5.8	14.5
Green Ext Time (p_c), s	0.1	0.2	0.0	7.3	0.0	1.0	0.0	6.4

Intersection Summary	
HCM 2010 Ctrl Delay	19.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	2	195	509	0
Future Vol, veh/h	0	2	2	195	509	0
Conflicting Peds, #/hr	0	1	6	0	0	6
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	4	1	0
Mvmt Flow	0	2	2	207	541	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	758	548	547	0	-	0
Stage 1	547	-	-	-	-	-
Stage 2	211	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	378	540	1033	-	-	-
Stage 1	584	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	373	536	1027	-	-	-
Mov Cap-2 Maneuver	470	-	-	-	-	-
Stage 1	579	-	-	-	-	-
Stage 2	824	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1027	-	536	-	-
HCM Lane V/C Ratio	0.002	-	0.004	-	-
HCM Control Delay (s)	8.5	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	8	144	467	4
Future Vol, veh/h	0	3	8	144	467	4
Conflicting Peds, #/hr	0	1	5	0	0	5
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	9	164	531	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	721	540	541	0	-	0
Stage 1	539	-	-	-	-	-
Stage 2	182	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	394	542	1028	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	849	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	386	539	1023	-	-	-
Mov Cap-2 Maneuver	475	-	-	-	-	-
Stage 1	576	-	-	-	-	-
Stage 2	845	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1023	-	539	-	-
HCM Lane V/C Ratio	0.009	-	0.006	-	-
HCM Control Delay (s)	8.6	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	3	0	10	1	0	1
Future Vol, veh/h	3	0	10	1	0	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	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	17	0	0	0	0	2
Mvmt Flow	6	0	19	2	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	6	0	46	6
Stage 1	-	-	-	-	6	-
Stage 2	-	-	-	-	40	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1628	-	969	1077
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	988	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1628	-	957	1077
Mov Cap-2 Maneuver	-	-	-	-	957	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	976	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.6	8.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1077	-	-	1628	-
HCM Lane V/C Ratio	0.002	-	-	0.011	-
HCM Control Delay (s)	8.3	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	0	110	3	0	126
Future Vol, veh/h	20	0	110	3	0	126
Conflicting Peds, #/hr	0	0	0	20	20	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	32	0	175	5	0	200

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	398	198	0	0	200	0
Stage 1	198	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	611	848	-	-	1384	-
Stage 1	840	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	599	832	-	-	1358	-
Mov Cap-2 Maneuver	599	-	-	-	-	-
Stage 1	824	-	-	-	-	-
Stage 2	838	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	599	1358	-
HCM Lane V/C Ratio	-	-	0.053	-	-
HCM Control Delay (s)	-	-	11.3	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	113	0	0	146
Future Vol, veh/h	0	0	113	0	0	146
Conflicting Peds, #/hr	0	0	0	20	20	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	153	0	0	197

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	370	173	0	0	173	0
Stage 1	173	-	-	-	-	-
Stage 2	197	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	634	876	-	-	1416	-
Stage 1	862	-	-	-	-	-
Stage 2	841	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	622	859	-	-	1389	-
Mov Cap-2 Maneuver	622	-	-	-	-	-
Stage 1	846	-	-	-	-	-
Stage 2	841	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1389	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	508	47	388	618	37	85	19	354	65	27	56
Future Volume (veh/h)	64	508	47	388	618	37	85	19	354	65	27	56
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	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
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	69	546	51	417	665	40	91	20	381	70	29	60
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
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	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	288	775	72	427	1228	74	624	655	810	140	42	87
Arrive On Green	0.04	0.23	0.23	0.17	0.36	0.36	0.35	0.35	0.35	0.08	0.08	0.08
Sat Flow, veh/h	1792	3300	307	1792	3424	206	1792	1881	1568	1792	539	1115
Grp Volume(v), veh/h	69	295	302	417	347	358	91	20	381	70	0	89
Grp Sat Flow(s),veh/h/ln	1792	1787	1820	1792	1787	1843	1792	1881	1568	1792	0	1654
Q Serve(g_s), s	3.3	17.4	17.5	19.0	17.8	17.8	4.0	0.8	18.0	4.3	0.0	6.0
Cycle Q Clear(g_c), s	3.3	17.4	17.5	19.0	17.8	17.8	4.0	0.8	18.0	4.3	0.0	6.0
Prop In Lane	1.00		0.17	1.00		0.11	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	288	420	427	427	641	661	624	655	810	140	0	129
V/C Ratio(X)	0.24	0.70	0.71	0.98	0.54	0.54	0.15	0.03	0.47	0.50	0.00	0.69
Avail Cap(c_a), veh/h	292	420	427	427	641	661	624	655	810	421	0	388
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	0.00	1.00
Uniform Delay (d), s/veh	31.4	40.3	40.4	29.4	29.3	29.3	25.7	24.7	18.0	50.9	0.0	51.7
Incr Delay (d2), s/veh	0.2	9.5	9.5	37.3	3.3	3.2	0.5	0.1	2.0	1.0	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.0	14.8	15.1	13.0	14.4	14.7	3.7	0.8	12.8	3.9	0.0	5.1
LnGrp Delay(d),s/veh	31.6	49.8	49.8	66.7	32.6	32.5	26.2	24.8	19.9	51.9	0.0	54.1
LnGrp LOS	C	D	D	E	C	C	C	C	B	D		D
Approach Vol, veh/h		666			1122			492			159	
Approach Delay, s/veh		47.9			45.3			21.3			53.1	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		45.0	24.0	32.0		14.0	9.7	46.3
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		22.0	19.0	27.0		27.0	5.0	41.0
Max Q Clear Time (g_c+I1), s		20.0	21.0	19.5		8.0	5.3	19.8
Green Ext Time (p_c), s		0.3	0.0	3.2		0.4	0.0	5.2

Intersection Summary	
HCM 2010 Ctrl Delay	41.7
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	932	1040	14	40	20
Future Vol, veh/h	1	932	1040	14	40	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	1	971	1083	15	42	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1098	0	-	0	1579	549
Stage 1	-	-	-	-	1091	-
Stage 2	-	-	-	-	488	-
Critical Hdwy	4.12	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.21	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	637	-	-	-	102	485
Stage 1	-	-	-	-	288	-
Stage 2	-	-	-	-	588	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	637	-	-	-	102	485
Mov Cap-2 Maneuver	-	-	-	-	102	-
Stage 1	-	-	-	-	287	-
Stage 2	-	-	-	-	588	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	51.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	637	-	-	-	138
HCM Lane V/C Ratio	0.002	-	-	-	0.453
HCM Control Delay (s)	10.7	0	-	-	51.1
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	4	973	1008	13	85	40
Future Volume (veh/h)	4	973	1008	13	85	40
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
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
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	4	1024	1061	14	89	42
Adj No. of Lanes	0	2	2	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	0	0
Cap, veh/h	64	1524	1573	21	479	226
Arrive On Green	0.44	0.44	0.44	0.44	0.41	0.41
Sat Flow, veh/h	3	3584	3706	48	1170	552
Grp Volume(v), veh/h	551	477	525	550	132	0
Grp Sat Flow(s),veh/h/ln	1874	1626	1787	1873	1736	0
Q Serve(g_s), s	0.0	13.6	13.6	13.6	2.8	0.0
Cycle Q Clear(g_c), s	13.5	13.6	13.6	13.6	2.8	0.0
Prop In Lane	0.01			0.03	0.67	0.32
Lane Grp Cap(c), veh/h	879	708	778	816	710	0
V/C Ratio(X)	0.63	0.67	0.67	0.67	0.19	0.00
Avail Cap(c_a), veh/h	982	799	878	920	710	0
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	0.00
Uniform Delay (d), s/veh	13.1	13.1	13.1	13.1	11.0	0.0
Incr Delay (d2), s/veh	1.1	1.9	1.7	1.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.5	10.7	11.5	11.9	2.6	0.0
LnGrp Delay(d),s/veh	14.1	15.0	14.8	14.8	11.5	0.0
LnGrp LOS	B	B	B	B	B	
Approach Vol, veh/h		1028	1075		132	
Approach Delay, s/veh		14.5	14.8		11.5	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				29.8		28.2		29.8
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				28.5		20.5		28.5
Max Q Clear Time (g_c+I1), s				15.6		4.8		15.6
Green Ext Time (p_c), s				9.7		0.3		9.6

Intersection Summary	
HCM 2010 Ctrl Delay	14.5
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1030	1004	13	52	7
Future Vol, veh/h	3	1030	1004	13	52	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	3	1096	1068	14	55	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1082	0	-	0	1629	541
Stage 1	-	-	-	-	1075	-
Stage 2	-	-	-	-	554	-
Critical Hdwy	4.12	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.21	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	646	-	-	-	94	491
Stage 1	-	-	-	-	293	-
Stage 2	-	-	-	-	545	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	646	-	-	-	93	491
Mov Cap-2 Maneuver	-	-	-	-	93	-
Stage 1	-	-	-	-	289	-
Stage 2	-	-	-	-	545	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	83.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	646	-	-	-	103
HCM Lane V/C Ratio	0.005	-	-	-	0.609
HCM Control Delay (s)	10.6	0.1	-	-	83.6
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	860	59	79	824	243	32	108	81	204	70	147
Future Volume (veh/h)	154	860	59	79	824	243	32	108	81	204	70	147
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.96	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	160	896	61	82	858	0	33	112	84	212	73	153
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	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, %	1	1	1	1	1	1	0	0	0	1	1	1
Cap, veh/h	199	1532	104	105	1426	0	287	300	204	351	339	296
Arrive On Green	0.11	0.45	0.45	0.06	0.40	0.00	0.03	0.15	0.15	0.08	0.19	0.19
Sat Flow, veh/h	1792	3396	231	1792	3668	0	1810	2020	1373	1792	1787	1558
Grp Volume(v), veh/h	160	472	485	82	858	0	33	99	97	212	73	153
Grp Sat Flow(s),veh/h/ln	1792	1787	1840	1792	1787	0	1810	1805	1588	1792	1787	1558
Q Serve(g_s), s	5.9	13.3	13.3	3.1	12.8	0.0	1.0	3.3	3.8	5.1	2.3	6.0
Cycle Q Clear(g_c), s	5.9	13.3	13.3	3.1	12.8	0.0	1.0	3.3	3.8	5.1	2.3	6.0
Prop In Lane	1.00		0.13	1.00		0.00	1.00		0.86	1.00		1.00
Lane Grp Cap(c), veh/h	199	806	830	105	1426	0	287	268	236	351	339	296
V/C Ratio(X)	0.80	0.58	0.58	0.78	0.60	0.00	0.12	0.37	0.41	0.60	0.22	0.52
Avail Cap(c_a), veh/h	204	806	830	172	1426	0	358	726	638	351	721	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	13.8	13.8	31.4	16.1	0.0	23.1	25.9	26.1	24.2	23.2	24.6
Incr Delay (d2), s/veh	18.6	3.1	3.0	4.6	1.9	0.0	0.1	0.3	0.4	2.1	0.1	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(95%),veh/ln	7.1	11.7	11.9	2.9	10.9	0.0	0.9	3.0	3.0	2.6	2.1	4.7
LnGrp Delay(d),s/veh	48.0	16.9	16.9	36.0	18.0	0.0	23.2	26.3	26.5	26.2	23.3	25.1
LnGrp LOS	D	B	B	D	B		C	C	C	C	C	C
Approach Vol, veh/h		1117			940			229			438	
Approach Delay, s/veh		21.3			19.5			25.9			25.4	
Approach LOS		C			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	14.6	8.5	35.0	6.8	17.3	12.0	31.5
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	5.1	27.2	6.5	28.2	5.0	27.3	7.7	27.0
Max Q Clear Time (g_c+I1), s	7.1	5.8	5.1	15.3	3.0	8.0	7.9	14.8
Green Ext Time (p_c), s	0.0	1.7	0.0	6.7	0.0	1.6	0.0	6.4

Intersection Summary	
HCM 2010 Ctrl Delay	21.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	1	587	343	0
Future Vol, veh/h	0	4	1	587	343	0
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	0	4	1	638	373	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1016	376	376	0	-	0
Stage 1	376	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	266	675	1194	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	264	673	1191	-	-	-
Mov Cap-2 Maneuver	390	-	-	-	-	-
Stage 1	696	-	-	-	-	-
Stage 2	527	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1191	-	673	-	-
HCM Lane V/C Ratio	0.001	-	0.006	-	-
HCM Control Delay (s)	8	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	8	14	445	361	1
Future Vol, veh/h	2	8	14	445	361	1
Conflicting Peds, #/hr	0	1	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	2	9	15	473	384	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	890	388	387	0	-	0
Stage 1	387	-	-	-	-	-
Stage 2	503	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	316	665	1183	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	612	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	309	663	1181	-	-	-
Mov Cap-2 Maneuver	434	-	-	-	-	-
Stage 1	678	-	-	-	-	-
Stage 2	611	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1181	-	600	-	-
HCM Lane V/C Ratio	0.013	-	0.018	-	-
HCM Control Delay (s)	8.1	0	11.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	5	0	0	15	1	5
Future Vol, veh/h	5	0	0	15	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	0	0	22	1	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	7	0	29	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1627	-	991	1081
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1006	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1627	-	991	1081
Mov Cap-2 Maneuver	-	-	-	-	991	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1006	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1065	-	-	1627	-
HCM Lane V/C Ratio	0.008	-	-	-	-
HCM Control Delay (s)	8.4	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	0	257	70	0	157
Future Vol, veh/h	15	0	257	70	0	157
Conflicting Peds, #/hr	0	0	0	50	50	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	33	0	2	2	0	0
Mvmt Flow	28	0	476	130	0	291

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	882	591	0	0	656	0
Stage 1	591	-	-	-	-	-
Stage 2	291	-	-	-	-	-
Critical Hdwy	6.73	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.73	-	-	-	-	-
Critical Hdwy Stg 2	5.73	-	-	-	-	-
Follow-up Hdwy	3.797	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	280	511	-	-	941	-
Stage 1	497	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	267	487	-	-	896	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	473	-	-	-	-	-
Stage 2	693	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	267	896	-
HCM Lane V/C Ratio	-	-	0.104	-	-
HCM Control Delay (s)	-	-	20	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	330	0	0	166
Future Vol, veh/h	0	0	330	0	0	166
Conflicting Peds, #/hr	0	0	0	50	50	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	0	0	2	0	0	33
Mvmt Flow	0	0	611	0	0	307

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	968	661	0	0	661	0
Stage 1	661	-	-	-	-	-
Stage 2	307	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	284	466	-	-	937	-
Stage 1	517	-	-	-	-	-
Stage 2	751	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	270	444	-	-	892	-
Mov Cap-2 Maneuver	270	-	-	-	-	-
Stage 1	492	-	-	-	-	-
Stage 2	751	-	-	-	-	-

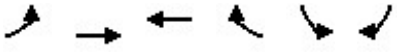
Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	892	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	401	70	467	250	73	36	67	354	48	46	72
Future Volume (veh/h)	190	401	70	467	250	73	36	67	354	48	46	72
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1900	1863	1863	1863	1743	1743	1900
Adj Flow Rate, veh/h	224	472	82	549	294	86	42	79	416	56	54	85
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	9	9	9
Cap, veh/h	506	731	126	583	1018	293	355	373	692	216	78	123
Arrive On Green	0.11	0.25	0.25	0.24	0.38	0.38	0.20	0.20	0.20	0.13	0.13	0.13
Sat Flow, veh/h	1757	2979	514	1774	2714	780	1774	1863	1542	1660	601	946
Grp Volume(v), veh/h	224	276	278	549	190	190	42	79	416	56	0	139
Grp Sat Flow(s),veh/h/ln	1757	1752	1741	1774	1770	1724	1774	1863	1542	1660	0	1547
Q Serve(g_s), s	10.3	15.5	15.7	24.3	8.3	8.5	2.1	3.9	22.0	3.3	0.0	9.4
Cycle Q Clear(g_c), s	10.3	15.5	15.7	24.3	8.3	8.5	2.1	3.9	22.0	3.3	0.0	9.4
Prop In Lane	1.00		0.30	1.00		0.45	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	506	430	427	583	664	647	355	373	692	216	0	201
V/C Ratio(X)	0.44	0.64	0.65	0.94	0.29	0.29	0.12	0.21	0.60	0.26	0.00	0.69
Avail Cap(c_a), veh/h	548	430	427	620	664	647	355	373	692	408	0	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	0.00	1.00
Uniform Delay (d), s/veh	26.0	37.2	37.2	22.4	24.0	24.1	36.0	36.8	23.4	43.1	0.0	45.7
Incr Delay (d2), s/veh	0.2	7.2	7.4	21.7	1.1	1.2	0.1	0.1	1.0	0.2	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.6	13.1	13.2	21.7	7.6	7.7	1.9	3.6	15.0	2.8	0.0	7.5
LnGrp Delay(d),s/veh	26.2	44.4	44.7	44.1	25.1	25.3	36.1	36.9	24.4	43.3	0.0	47.3
LnGrp LOS	C	D	D	D	C	C	D	D	C	D		D
Approach Vol, veh/h		778			929			537			195	
Approach Delay, s/veh		39.3			36.3			27.2			46.1	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.0	31.7	32.0		19.3	17.4	46.3
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		22.0	29.0	27.0		27.0	15.0	41.0
Max Q Clear Time (g_c+I1), s		24.0	26.3	17.7		11.4	12.3	10.5
Green Ext Time (p_c), s		0.0	0.3	2.6		0.5	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	36.0
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	25	778	780	84	86	10
Future Volume (veh/h)	25	778	780	84	86	10
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1759	1900
Adj Flow Rate, veh/h	27	828	830	89	91	11
Adj No. of Lanes	0	2	2	0	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	141	1881	1807	194	230	28
Arrive On Green	0.56	0.56	0.56	0.56	0.16	0.16
Sat Flow, veh/h	38	3441	3319	346	1462	177
Grp Volume(v), veh/h	451	404	455	464	103	0
Grp Sat Flow(s),veh/h/ln	1784	1610	1770	1802	1655	0
Q Serve(g_s), s	0.0	4.7	4.9	4.9	1.8	0.0
Cycle Q Clear(g_c), s	4.5	4.7	4.9	4.9	1.8	0.0
Prop In Lane	0.06			0.19	0.88	0.11
Lane Grp Cap(c), veh/h	1119	902	992	1010	260	0
V/C Ratio(X)	0.40	0.45	0.46	0.46	0.40	0.00
Avail Cap(c_a), veh/h	1518	1290	1417	1443	1065	0
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	0.00
Uniform Delay (d), s/veh	4.1	4.1	4.1	4.1	12.1	0.0
Incr Delay (d2), s/veh	0.2	0.3	0.3	0.3	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	3.8	4.3	4.3	1.6	0.0
LnGrp Delay(d),s/veh	4.3	4.5	4.5	4.5	13.0	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h		855	919		103	
Approach Delay, s/veh		4.4	4.5		13.0	
Approach LOS		A	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				22.3		9.5		22.3
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				25.5		20.5		25.5
Max Q Clear Time (g_c+I1), s				6.7		3.8		6.9
Green Ext Time (p_c), s				11.1		0.2		11.0

Intersection Summary	
HCM 2010 Ctrl Delay	4.9
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	864	850	75	0	15
Future Vol, veh/h	0	864	850	75	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	0	960	944	83	0	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	514
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	511
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	511
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	511
HCM Lane V/C Ratio	-	-	-	0.033
HCM Control Delay (s)	-	-	-	12.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	875	916	103	61	10
Future Volume (veh/h)	34	875	916	103	61	10
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1900	1900
Adj Flow Rate, veh/h	39	1006	1053	118	70	11
Adj No. of Lanes	0	2	2	0	0	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	137	2022	1981	222	208	33
Arrive On Green	0.62	0.62	0.62	0.62	0.14	0.14
Sat Flow, veh/h	50	3361	3303	359	1521	239
Grp Volume(v), veh/h	541	504	580	591	82	0
Grp Sat Flow(s),veh/h/ln	1717	1610	1770	1799	1782	0
Q Serve(g_s), s	0.0	6.4	6.8	6.8	1.5	0.0
Cycle Q Clear(g_c), s	5.7	6.4	6.8	6.8	1.5	0.0
Prop In Lane	0.07			0.20	0.85	0.13
Lane Grp Cap(c), veh/h	1165	994	1092	1110	244	0
V/C Ratio(X)	0.46	0.51	0.53	0.53	0.34	0.00
Avail Cap(c_a), veh/h	1373	1211	1331	1353	902	0
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	0.00
Uniform Delay (d), s/veh	3.8	3.9	4.0	4.0	14.3	0.0
Incr Delay (d2), s/veh	0.3	0.4	0.4	0.4	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.3	5.0	6.0	6.1	1.5	0.0
LnGrp Delay(d),s/veh	4.1	4.3	4.4	4.4	15.1	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h		1045	1171		82	
Approach Delay, s/veh		4.2	4.4		15.1	
Approach LOS		A	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				27.1		9.5		27.1
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				27.5		18.5		27.5
Max Q Clear Time (g_c+I1), s				8.4		3.5		8.8
Green Ext Time (p_c), s				14.0		0.1		13.7

Intersection Summary	
HCM 2010 Ctrl Delay	4.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	765	27	18	824	64	29	28	33	254	67	168
Future Volume (veh/h)	100	765	27	18	824	64	29	28	33	254	67	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	109	832	29	20	896	0	32	30	36	276	73	183
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	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, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	139	1669	58	41	1498	0	179	208	182	379	330	289
Arrive On Green	0.08	0.48	0.48	0.02	0.42	0.00	0.03	0.12	0.12	0.10	0.18	0.18
Sat Flow, veh/h	1774	3489	122	1774	3632	0	1792	1787	1562	1792	1787	1566
Grp Volume(v), veh/h	109	422	439	20	896	0	32	30	36	276	73	183
Grp Sat Flow(s),veh/h/ln	1774	1770	1841	1774	1770	0	1792	1787	1562	1792	1787	1566
Q Serve(g_s), s	3.8	10.4	10.4	0.7	12.5	0.0	0.0	1.0	1.3	2.0	2.2	6.9
Cycle Q Clear(g_c), s	3.8	10.4	10.4	0.7	12.5	0.0	0.0	1.0	1.3	2.0	2.2	6.9
Prop In Lane	1.00		0.07	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	139	846	881	41	1498	0	179	208	182	379	330	289
V/C Ratio(X)	0.78	0.50	0.50	0.48	0.60	0.00	0.18	0.14	0.20	0.73	0.22	0.63
Avail Cap(c_a), veh/h	181	846	881	139	1498	0	263	796	695	379	798	700
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	11.4	11.4	30.8	14.2	0.0	29.8	25.3	25.5	25.4	22.1	24.0
Incr Delay (d2), s/veh	11.3	2.1	2.0	3.2	1.8	0.0	0.2	0.1	0.2	6.1	0.1	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(95%),veh/ln	4.2	9.4	9.7	0.7	10.5	0.0	1.0	0.9	1.0	8.9	2.0	5.4
LnGrp Delay(d),s/veh	40.1	13.5	13.4	34.0	16.0	0.0	30.0	25.4	25.7	31.4	22.2	24.9
LnGrp LOS	D	B	B	C	B		C	C	C	C	C	C
Approach Vol, veh/h		970			916			98			532	
Approach Delay, s/veh		16.4			16.4			27.0			27.9	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	11.9	6.0	35.0	6.5	16.3	9.5	31.5
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	5.5	28.4	5.0	28.5	5.0	28.5	6.5	27.0
Max Q Clear Time (g_c+I1), s	4.0	3.3	2.7	12.4	2.0	8.9	5.8	14.5
Green Ext Time (p_c), s	0.1	0.2	0.0	7.3	0.0	1.0	0.0	6.4

Intersection Summary	
HCM 2010 Ctrl Delay	19.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	2	195	509	0
Future Vol, veh/h	0	2	2	195	509	0
Conflicting Peds, #/hr	0	1	6	0	0	6
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	4	1	0
Mvmt Flow	0	2	2	207	541	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	758	548	547	0	-	0
Stage 1	547	-	-	-	-	-
Stage 2	211	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	378	540	1033	-	-	-
Stage 1	584	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	373	536	1027	-	-	-
Mov Cap-2 Maneuver	470	-	-	-	-	-
Stage 1	579	-	-	-	-	-
Stage 2	824	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1027	-	536	-	-
HCM Lane V/C Ratio	0.002	-	0.004	-	-
HCM Control Delay (s)	8.5	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	8	144	467	4
Future Vol, veh/h	0	3	8	144	467	4
Conflicting Peds, #/hr	0	1	5	0	0	5
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	9	164	531	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	721	540	541	0	-	0
Stage 1	539	-	-	-	-	-
Stage 2	182	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	394	542	1028	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	849	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	386	539	1023	-	-	-
Mov Cap-2 Maneuver	475	-	-	-	-	-
Stage 1	576	-	-	-	-	-
Stage 2	845	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1023	-	539	-	-
HCM Lane V/C Ratio	0.009	-	0.006	-	-
HCM Control Delay (s)	8.6	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	3	0	10	1	0	1
Future Vol, veh/h	3	0	10	1	0	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	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	17	0	0	0	0	2
Mvmt Flow	6	0	19	2	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	6	0	46	6
Stage 1	-	-	-	-	6	-
Stage 2	-	-	-	-	40	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1628	-	969	1077
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	988	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1628	-	957	1077
Mov Cap-2 Maneuver	-	-	-	-	957	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	976	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.6	8.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1077	-	-	1628	-
HCM Lane V/C Ratio	0.002	-	-	0.011	-
HCM Control Delay (s)	8.3	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	0	110	3	0	126
Future Vol, veh/h	20	0	110	3	0	126
Conflicting Peds, #/hr	0	0	0	20	20	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	32	0	175	5	0	200

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	398	198	0	0	200	0
Stage 1	198	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	611	848	-	-	1384	-
Stage 1	840	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	599	832	-	-	1358	-
Mov Cap-2 Maneuver	599	-	-	-	-	-
Stage 1	824	-	-	-	-	-
Stage 2	838	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	599	1358	-
HCM Lane V/C Ratio	-	-	0.053	-	-
HCM Control Delay (s)	-	-	11.3	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	113	0	0	146
Future Vol, veh/h	0	0	113	0	0	146
Conflicting Peds, #/hr	0	0	0	20	20	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	153	0	0	197

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	370	173	0	0	173	0
Stage 1	173	-	-	-	-	-
Stage 2	197	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	634	876	-	-	1416	-
Stage 1	862	-	-	-	-	-
Stage 2	841	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	622	859	-	-	1389	-
Mov Cap-2 Maneuver	622	-	-	-	-	-
Stage 1	846	-	-	-	-	-
Stage 2	841	-	-	-	-	-

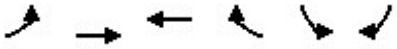
Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1389	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	508	47	388	618	37	85	19	354	65	27	56
Future Volume (veh/h)	64	508	47	388	618	37	85	19	354	65	27	56
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	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
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	69	546	51	417	665	40	91	20	381	70	29	60
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
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	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	288	775	72	427	1228	74	624	655	810	140	42	87
Arrive On Green	0.04	0.23	0.23	0.17	0.36	0.36	0.35	0.35	0.35	0.08	0.08	0.08
Sat Flow, veh/h	1792	3300	307	1792	3424	206	1792	1881	1568	1792	539	1115
Grp Volume(v), veh/h	69	295	302	417	347	358	91	20	381	70	0	89
Grp Sat Flow(s),veh/h/ln	1792	1787	1820	1792	1787	1843	1792	1881	1568	1792	0	1654
Q Serve(g_s), s	3.3	17.4	17.5	19.0	17.8	17.8	4.0	0.8	18.0	4.3	0.0	6.0
Cycle Q Clear(g_c), s	3.3	17.4	17.5	19.0	17.8	17.8	4.0	0.8	18.0	4.3	0.0	6.0
Prop In Lane	1.00		0.17	1.00		0.11	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	288	420	427	427	641	661	624	655	810	140	0	129
V/C Ratio(X)	0.24	0.70	0.71	0.98	0.54	0.54	0.15	0.03	0.47	0.50	0.00	0.69
Avail Cap(c_a), veh/h	292	420	427	427	641	661	624	655	810	421	0	388
HCM Platoon Ratio	1.00	1.00	1.00	1.00	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	0.67	0.67	0.67	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.4	40.3	40.4	29.4	29.3	29.3	25.7	24.7	18.0	50.9	0.0	51.7
Incr Delay (d2), s/veh	0.2	9.5	9.5	29.8	2.2	2.1	0.5	0.1	2.0	1.0	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.0	14.8	15.1	11.1	13.2	13.6	3.7	0.8	12.8	3.9	0.0	5.1
LnGrp Delay(d),s/veh	31.6	49.8	49.8	59.2	31.5	31.5	26.2	24.8	19.9	51.9	0.0	54.1
LnGrp LOS	C	D	D	E	C	C	C	C	B	D		D
Approach Vol, veh/h		666			1122			492			159	
Approach Delay, s/veh		47.9			41.8			21.3			53.1	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		45.0	24.0	32.0		14.0	9.7	46.3
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		22.0	19.0	27.0		27.0	5.0	41.0
Max Q Clear Time (g_c+I1), s		20.0	21.0	19.5		8.0	5.3	19.8
Green Ext Time (p_c), s		0.3	0.0	3.2		0.4	0.0	5.2

Intersection Summary	
HCM 2010 Ctrl Delay	40.1
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	928	1040	14	90	20
Future Volume (veh/h)	5	928	1040	14	90	20
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	5	967	1083	15	94	21
Adj No. of Lanes	0	2	2	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	0	0
Cap, veh/h	73	1644	1699	24	507	113
Arrive On Green	0.47	0.47	0.47	0.47	0.35	0.35
Sat Flow, veh/h	4	3580	3704	50	1436	321
Grp Volume(v), veh/h	520	452	536	562	116	0
Grp Sat Flow(s),veh/h/ln	1872	1626	1787	1872	1772	0
Q Serve(g_s), s	0.0	10.4	11.6	11.6	2.3	0.0
Cycle Q Clear(g_c), s	10.3	10.4	11.6	11.6	2.3	0.0
Prop In Lane	0.01			0.03	0.81	0.18
Lane Grp Cap(c), veh/h	952	765	841	881	625	0
V/C Ratio(X)	0.55	0.59	0.64	0.64	0.19	0.00
Avail Cap(c_a), veh/h	1096	893	981	1028	625	0
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	0.00
Uniform Delay (d), s/veh	9.9	9.9	10.2	10.2	11.4	0.0
Incr Delay (d2), s/veh	0.5	0.8	1.1	1.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.1	8.2	9.9	10.3	2.2	0.0
LnGrp Delay(d),s/veh	10.4	10.7	11.3	11.2	12.1	0.0
LnGrp LOS	B	B	B	B	B	
Approach Vol, veh/h		972	1098		116	
Approach Delay, s/veh		10.5	11.3		12.1	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				28.5		22.5		28.5
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				28.0		18.0		28.0
Max Q Clear Time (g_c+I1), s				12.4		4.3		13.6
Green Ext Time (p_c), s				11.1		0.2		10.4

Intersection Summary	
HCM 2010 Ctrl Delay	11.0
HCM 2010 LOS	B

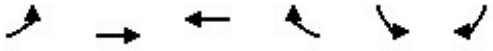
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1023	1008	13	0	40
Future Vol, veh/h	0	1023	1008	13	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	1077	1061	14	0	42

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	538
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	493
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	493
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	493
HCM Lane V/C Ratio	-	-	-	0.085
HCM Control Delay (s)	-	-	-	13
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	995	1004	13	87	7
Future Volume (veh/h)	3	995	1004	13	87	7
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	3	1059	1068	14	93	7
Adj No. of Lanes	0	2	2	0	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	0	0
Cap, veh/h	104	2101	2167	28	236	18
Arrive On Green	0.60	0.60	0.60	0.60	0.14	0.14
Sat Flow, veh/h	2	3587	3707	47	1653	124
Grp Volume(v), veh/h	569	493	528	554	101	0
Grp Sat Flow(s),veh/h/ln	1877	1626	1787	1873	1795	0
Q Serve(g_s), s	0.0	6.1	5.9	5.9	1.8	0.0
Cycle Q Clear(g_c), s	6.1	6.1	5.9	5.9	1.8	0.0
Prop In Lane	0.01			0.03	0.92	0.07
Lane Grp Cap(c), veh/h	1229	976	1072	1123	257	0
V/C Ratio(X)	0.46	0.51	0.49	0.49	0.39	0.00
Avail Cap(c_a), veh/h	1522	1232	1354	1418	1001	0
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	0.00
Uniform Delay (d), s/veh	4.0	4.0	4.0	4.0	13.6	0.0
Incr Delay (d2), s/veh	0.3	0.4	0.4	0.3	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.6	4.9	5.2	5.4	1.7	0.0
LnGrp Delay(d),s/veh	4.3	4.4	4.3	4.3	14.6	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h		1062	1082		101	
Approach Delay, s/veh		4.4	4.3		14.6	
Approach LOS		A	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				25.5		9.5		25.5
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				26.5		19.5		26.5
Max Q Clear Time (g_c+I1), s				8.1		3.8		7.9
Green Ext Time (p_c), s				12.9		0.2		13.0

Intersection Summary	
HCM 2010 Ctrl Delay	4.8
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	860	59	79	824	243	32	108	81	204	70	147
Future Volume (veh/h)	154	860	59	79	824	243	32	108	81	204	70	147
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.96	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	160	896	61	82	858	0	33	112	84	212	73	153
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	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, %	1	1	1	1	1	1	0	0	0	1	1	1
Cap, veh/h	199	1532	104	105	1426	0	287	300	204	351	339	296
Arrive On Green	0.11	0.45	0.45	0.06	0.40	0.00	0.03	0.15	0.15	0.08	0.19	0.19
Sat Flow, veh/h	1792	3396	231	1792	3668	0	1810	2020	1373	1792	1787	1558
Grp Volume(v), veh/h	160	472	485	82	858	0	33	99	97	212	73	153
Grp Sat Flow(s),veh/h/ln	1792	1787	1840	1792	1787	0	1810	1805	1588	1792	1787	1558
Q Serve(g_s), s	5.9	13.3	13.3	3.1	12.8	0.0	1.0	3.3	3.8	5.1	2.3	6.0
Cycle Q Clear(g_c), s	5.9	13.3	13.3	3.1	12.8	0.0	1.0	3.3	3.8	5.1	2.3	6.0
Prop In Lane	1.00		0.13	1.00		0.00	1.00		0.86	1.00		1.00
Lane Grp Cap(c), veh/h	199	806	830	105	1426	0	287	268	236	351	339	296
V/C Ratio(X)	0.80	0.58	0.58	0.78	0.60	0.00	0.12	0.37	0.41	0.60	0.22	0.52
Avail Cap(c_a), veh/h	204	806	830	172	1426	0	358	726	638	351	721	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	13.8	13.8	31.4	16.1	0.0	23.1	25.9	26.1	24.2	23.2	24.6
Incr Delay (d2), s/veh	18.6	3.1	3.0	4.6	1.9	0.0	0.1	0.3	0.4	2.1	0.1	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(95%),veh/ln	7.1	11.7	11.9	2.9	10.9	0.0	0.9	3.0	3.0	2.6	2.1	4.7
LnGrp Delay(d),s/veh	48.0	16.9	16.9	36.0	18.0	0.0	23.2	26.3	26.5	26.2	23.3	25.1
LnGrp LOS	D	B	B	D	B		C	C	C	C	C	C
Approach Vol, veh/h		1117			940			229			438	
Approach Delay, s/veh		21.3			19.5			25.9			25.4	
Approach LOS		C			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	14.6	8.5	35.0	6.8	17.3	12.0	31.5
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	5.1	27.2	6.5	28.2	5.0	27.3	7.7	27.0
Max Q Clear Time (g_c+I1), s	7.1	5.8	5.1	15.3	3.0	8.0	7.9	14.8
Green Ext Time (p_c), s	0.0	1.7	0.0	6.7	0.0	1.6	0.0	6.4

Intersection Summary		
HCM 2010 Ctrl Delay		21.8
HCM 2010 LOS		C

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	1	587	343	0
Future Vol, veh/h	0	4	1	587	343	0
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	0	4	1	638	373	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1016	376	376	0	-	0
Stage 1	376	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	266	675	1194	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	264	673	1191	-	-	-
Mov Cap-2 Maneuver	390	-	-	-	-	-
Stage 1	696	-	-	-	-	-
Stage 2	527	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1191	-	673	-	-
HCM Lane V/C Ratio	0.001	-	0.006	-	-
HCM Control Delay (s)	8	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	8	14	445	361	1
Future Vol, veh/h	2	8	14	445	361	1
Conflicting Peds, #/hr	0	1	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	2	9	15	473	384	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	890	388	387	0	-	0
Stage 1	387	-	-	-	-	-
Stage 2	503	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	316	665	1183	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	612	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	309	663	1181	-	-	-
Mov Cap-2 Maneuver	434	-	-	-	-	-
Stage 1	678	-	-	-	-	-
Stage 2	611	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1181	-	600	-	-
HCM Lane V/C Ratio	0.013	-	0.018	-	-
HCM Control Delay (s)	8.1	0	11.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	5	0	0	15	1	5
Future Vol, veh/h	5	0	0	15	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	0	0	22	1	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	7	0	29	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1627	-	991	1081
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1006	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1627	-	991	1081
Mov Cap-2 Maneuver	-	-	-	-	991	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1006	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1065	-	-	1627	-
HCM Lane V/C Ratio	0.008	-	-	-	-
HCM Control Delay (s)	8.4	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

DSHS Siting Options for a New 350-Bed Forensic Hospital

	Property Availability and Acquisition	At Least 40 Acres Available	Zoning	Availability of Public Utilities	Proximity to I-5	Access to Professional Staff	Availability of Campus Supports	Site Development Costs	Total Project Cost	Legislative Siting Direction	Score	Comments
Pierce County												
Lakewood WSH Campus, SW Corner	DSHS Owned	40 Acres	Appropriate	Yes	Good	Very Good	Very Good	Demo Required	As Budgeted	Yes	**46**	**Preferred Option**
Lakewood Former Fort Steilacoom Golf Course	DSHS Owned	> 40 Acres	Impossible	Nearby	Good	Very Good	Very Good	Dev'ment Ready	As Budgeted	No	40	City opposed to rezone
Rainier School in Buckley	DSHS Owned	> 40 Acres	Very Difficult	Limited	Fair	Fair	Probably	Poor Soils	More Expensive	No	31	City opposed to rezone, lahar zone
McNeil Island	Federal Deed	> 40 Acres	Very Difficult	Limited	Poor	Poor	No	Feasible	Most Expensive	No	22	Federal deed with DOC limits accessibility
Thurston County												
Hawk's Prairie near Cabellas	For Sale	40 Acres	Conditional Use	Yes	Very Good	Good	No	Dev'ment Ready	More Expensive	No	34	Inconsistent with Hawk's Prairie Master Plan
Port Property near Tumwater Airport	Lease Available	> 40 acres	Rezone Req'd	Yes	Good	Fair	No	Dev'ment Ready	More Expensive	No	30	Port approval required, unlikely
Adjacent to DOE in Lacey	Not for Sale	< 40 acres	Rezone Req'd	Yes	Very Good	Good	No	Sloping Site	More Expensive	No	29	Site limitations in size and topography
Adjacent to TESC in Olympia	Not for Sale	> 40 acres	Rezone Req'd	Limited	Fair	Fair	No	Wooded Site	Most Expensive	No	26	Utilities likely not available from TESC

Strong = 5
Supportive = 4
Average = 3
Poor = 2
Not Feasible = 1

EXHIBIT #27