Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Source: Arris Studio Architects 3/3/19

Prepared for the City of San Luis Obispo

Submitted by
W-Trans

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Executive Summary

The proposed project consists of two hotels with a combined 218 rooms. The hotels would be located at 950 Aero Drive in the City of San Luis Obispo. Access to the site would be via a new driveway 300 feet west of the Broad Street/Aero Drive intersection. On a typical day the project would be expected to generate an average of 1,822 daily weekday trips, of which 102 would occur during the a.m. peak hour and 131 during the p.m. peak hour.

The study area includes 13 existing intersections as well as the future intersection of Buckley Road/South Higuera Street, plus four study segments on Broad Street and Tank Farm Road. At each intersection, the service levels for vehicles, pedestrians, and bicyclists were reviewed as well as the project queuing. For the study roadways, all the previously aforementioned modes of travel were analyzed in addition to transit operations. Conditions during the morning and evening weekday peak period were analyzed for existing and cumulative scenarios.

Under the Existing and Cumulative plus Project conditions, the project is expected to result in three project-specific adverse impacts at the following intersections and segments for the indicated mode of travel. Measures recommended to mitigate these impacts are also summarized in Table 1.

Table 1 – Existing and Cumulative Plus Project Impacts and Recommended Mitigation

Study Facility	Mode	Adverse Impact	Mitigation Measure
Existing Plus Project			
Tank Farm Rd/ Long St	Auto	The proposed project would increase the V/C on a stop-controlled approach operating unacceptably by more than 0.01 and a peak hour signal warrant is met.	Improvements at intersection are included in City's TIF and will be in place prior to the occupancy of the hotel. Payment towards the TIF would mitigate the adverse impact.
Tank Farm Rd/ Santa Fe Rd	Auto	The proposed project would increase the V/C on a stop-controlled approach operating unacceptably by more than 0.01 and a peak hour signal warrant is met.	While long-term improvements at the intersection would be mitigated through the payment of fees, to improve an adverse project impact under the existing conditions, the City should consider restriping the median on the west leg into an acceleration lane.
Aerovista Ln/ Broad St	Auto	The proposed project would increase the V/C on a stop-controlled approach operating unacceptably by more than 0.01 and a peak hour signal warrant is met.	To improve the project-specific impact under the existing conditions, the City should consider restricting left-turn maneuvers during the peak periods.
Tank Farm Rd/ South Higuera St	Auto	The NB right-turn queue exceeds storage capacity and project would increase the length by more than one car length.	While improvements are slated to be completed by other nearby projects, project specific interim improvements at the intersection would be signal timing optimization.
Tank Farm Rd/ Broad St	Auto	The EB right-turn queue exceeds storage capacity and project would increase the length by more than one car length.	To address the project-specific adverse impact, the project should pay towards the planned improvements specifically to convert the westbound right-turn lane to a shared through/right-turn lane. Optimize signal timing splits

Table 1 – Existing and Cumulative Plus Project Impacts and Recommended Mitigation			
Study Facility	**Mode**	**Adverse Impact**	**Mitigation Measure**
Broad St: Tank Farm Rd to Aero Dr (SB)	Auto	The proposed project would cause the facility to degrade to an unacceptable service level.	At the intersection of Broad Street/Aero Drive, the project should install a southbound right-turn lane, southbound right-turn overlap, optimize splits.
Cumulative Plus Project			
Broad St/ Capitolio Way	Auto	The proposed project would increase the V/C on a stop-controlled approach operating unacceptably by more than 0.01 and a peak hour signal warrant is met for a cumulatively adverse impact.	Since this is a cumulatively considered impact and there would be a nearby signalized intersection for driver to reroute, no mitigation is proposed considering that the intersection operates acceptably overall.
Broad St: Tank Farm Rd to Industrial Rd (NB)	Ped	The proposed project would reduce an already cumulatively deficient pedestrian score.	A striped bicycle buffer would improve the pedestrian score. It is understood that this improvement is a part of the TIF.

Notes: TIF = Traffic Impact Fee

Outside of the operational analysis, based on the review of the collisions, a trend in broadside collisions at the intersection of Aerovista Place/Broad Street was identified between northbound and eastbound drivers. There is an existing two-way left-turn lane which, if being properly utilized, would reduce the number of these incidents. At the time of the site visit the striping was recently installed, and this improvement in visibility may contribute to better use of the lane. It is recommended that the City continue to monitor the collisions at this intersection for potential need of additional measures.

There is currently a clear line of sight at the project driveway. To maintain sight lines, any landscaping along Aero Drive should be either low-lying vegetation or trees with canopies that are maintained and do not fall below seven feet above the elevation of the roadway. Additionally, parking should be restricted for 30 feet on either side of the driveway.

It is understood that parking is currently allowed in the bike lanes on Aero Drive. It is recommended that the City revisit this practice to determine if this is consistent with the City's policies on bicycle access.

Introduction

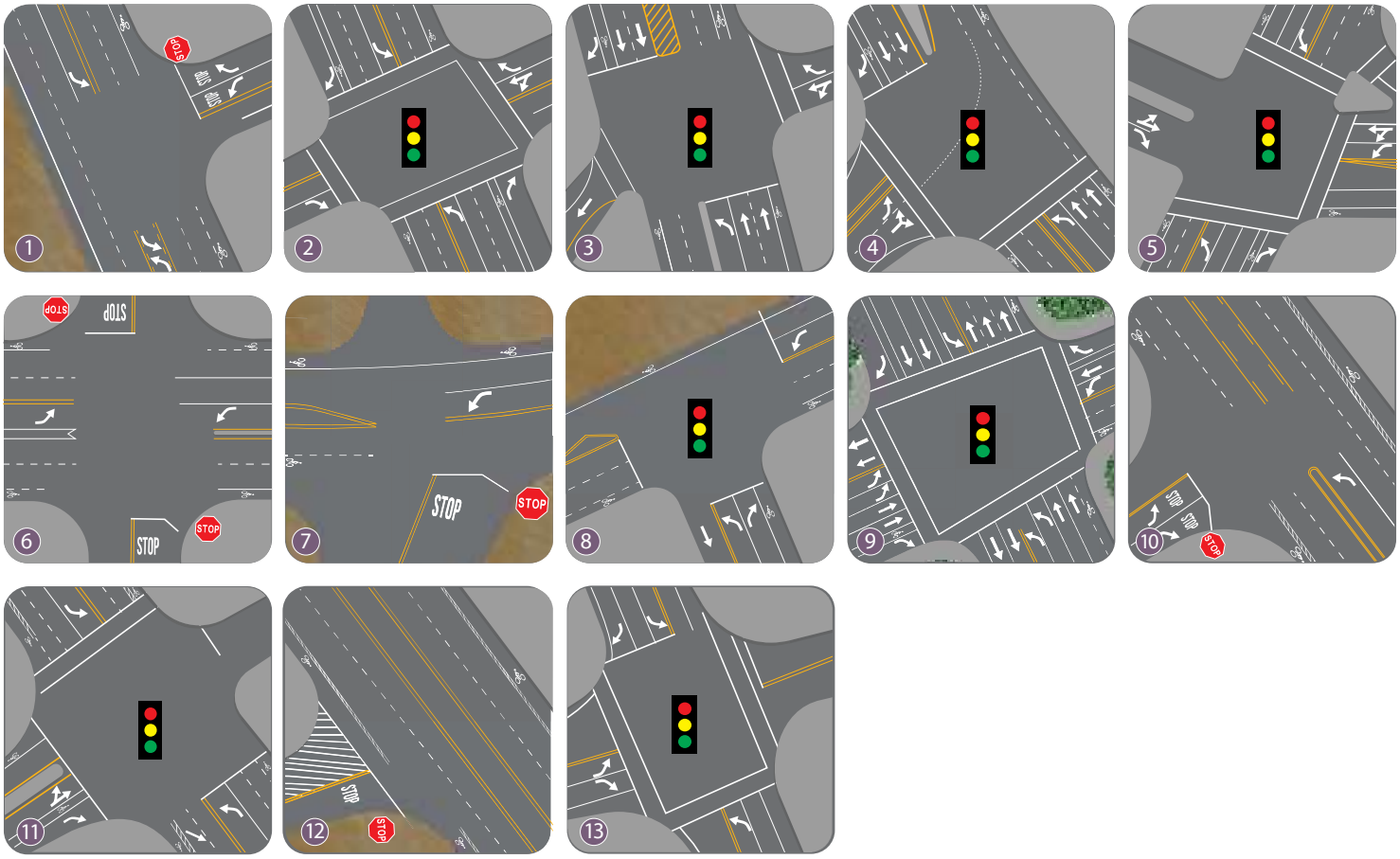
This report presents an analysis of the potential traffic impacts that would be associated with development of a proposed Airport Hotels project to be located at 950 Aero Drive on the west corner of Broad Street and Aero Drive in the City of San Luis Obispo. The traffic study was completed in accordance with the criteria established by the City of San Luis Obispo and is consistent with standard traffic engineering techniques.

Prelude

The purpose of a traffic impact study is to provide City staff and policy makers with data they can use to make an informed decision regarding the potential traffic impacts of a proposed project, and any associated improvements that would be required to mitigate these impacts to a level of insignificance as defined by the City's General Plan or other policies. Vehicular traffic impacts are typically evaluated by determining the number of new trips that the proposed use would be expected to generate, distributing these trips to the surrounding street system based on existing travel patterns or anticipated travel patterns specific to the proposed project, then analyzing the impact the new traffic would be expected to have on critical intersections or roadway segments. Impacts relative to access for pedestrians, bicyclists, and to transit are also addressed.

Project Profile

The proposed project entails two hotels totaling 218 rooms to be located at 950 Aero Drive in the City of San Luis Obispo. The hotels would be constructed in two phases. The first of the hotels to be constructed would have 100 guest rooms and include guest amenities like dining, meeting space, fitness room, breakfast area and bar. The second hotel would consist of 118 rooms and, in addition to the guest amenities listed above (except for the bar), would also include a pool. For both hotels, the guest amenities would be for patrons only and not open to the public. The hotels would be accessed from a single driveway on Aero Drive and would provide a total of 218 parking spaces. The project site is on the west corner of Broad Street and Aero Drive, as shown in Figure 1.



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Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Figure 1 – Study Area and Existing Lane Configurations

Transportation Setting

Operational Analysis

Study Area and Periods

The study area consists of the following intersections:

1. Capitolio Way/Broad Street (SR 227)
2. Industrial Way/Broad Street (SR 227)
3. Los Osos Valley Road/US 101 South Ramps
4. Los Osos Valley Road/US 101 North Ramps
5. Tank Farm Road/South Higuera Street
6. Tank Farm Road/Long Street
7. Tank Farm Road/Santa Fe Road
8. Tank Farm Road/Mindbody Entrance
9. Tank Farm Road/Broad Street (SR 227)
10. Aerovista Place/Broad Street (SR 227)
11. Aero Drive/Broad Street (SR 227)
12. Airport Drive/Broad Street (SR 227)
13. Buckley Road/Edna Road (SR 227)
14. Buckley Road/South Higuera Street (Cumulative Intersection)

Operating conditions during the a.m. and p.m. peak periods were evaluated to capture the highest potential impacts for the proposed project as well as the highest volumes on the local transportation network. The morning peak hour occurs between 7:00 and 9:00 a.m. and reflects conditions during the home to work or school commute, while the p.m. peak hour occurs between 4:00 and 6:00 p.m. and typically reflects the highest level of congestion during the homeward bound commute. Traffic turning movement counts for all but four of the intersections were obtained from the City. Those that were collected as part of this study are in Appendix A.

Study Intersections

Capitolio Way/Broad Street (SR 227) is a tee-intersection with stop-control on the east leg. There are no marked crosswalks.

Industrial Way/Broad Street (SR 227) is a signalized intersection with protected left-turn phasing on each approach. Bike lanes are present along Broad Street, and there are crosswalks with pedestrian phasing on each leg.

Los Osos Valley Road/US 101 South Ramps is a signalized four-legged intersection, with the off- and on-ramp for US 101 South on the north and south leg, respectively. The left-turn movement on westbound Los Osos Valley Road is a protected movement. There are crosswalks with pedestrian phasing on the on- and off-ramps.

Los Osos Valley Road/US 101 North Ramps is a signalized tee intersection, with a protected left-turn movement on westbound Los Osos Valley Road and a right-turn overlap on eastbound Los Osos Valley Road. There are striped crosswalks on the US 101 Ramp leg as well as the east leg of the intersection served by an exclusive pedestrian phase where bicyclists or pedestrians can cross to any other corner.

Tank Farm Road/South Higuera Street is a signalized intersection with protected left-turn phasing in the north and south direction and split phasing in the east and west direction and a right-turn overlap in the northbound

direction. The westbound channelized right-turn lane is yield-controlled. There are bike lanes on Tank Farm Road and South Higuera Street and crosswalks on each leg served by pedestrian phasing.

Tank Farm Road/Long Street is a four-legged intersection with stop-control on Long Street. There are no crosswalks at the intersection but there are bike lanes on Farm Tank Road.

Tank Farm Road/Santa Fe Road is a tee intersection with the northbound approach stop-controlled. There are bike lanes on Tank Farm Road, but no crosswalks.

Tank Farm Road/Mindbody Entrance is a three-legged signalized intersection. There are no crosswalks.

Tank Farm Road/Broad Street (SR 227) is a four-legged signalized intersection with protected left-turn phasing at all four approaches; southbound Broad Street also has right-turn overlap phasing. There are bike lanes and crosswalks at all four legs of the intersection.

Aerovista Place/Broad Street (SR 227) is a tee intersection with the eastbound approach stop-controlled. There are no crosswalks, but there are bike lanes on the north and south legs of the intersection.

Aero Drive/Broad Street (SR 227) is a four-legged signalized intersection with protected left-turn phasing on the northbound and southbound approaches. There are bike lanes on the north, south and west legs of the intersection. There are crosswalks on the west and north legs of the intersection.

Airport Drive/Broad Street (SR 227) is a tee intersection with the eastbound approach stop-controlled. There are no crosswalks provided. There are bike lanes on the north and south legs of the intersection.

Buckley Road/Edna Road (SR 227) is a signalized four-legged intersection with protected left-turn phasing at the northbound, southbound and eastbound approaches. There is also an eastbound right-turn overlap phase. There are crosswalks at the east, west and south legs of the intersection.

Buckley Road/South Higuera Street

The locations of the study intersections and the existing lane configurations and controls are shown in Figure 1.

Study Roadways

Broad Street (SR 227) between Orcutt Road and Tank Farm Road is a five-lane north-south road with a posted speed limit of 40 miles per hour (mph).

Broad Street (SR 227) between Tank Farm Road and City Limits is a five-lane road oriented north-south. The posted speed limit is 45 mph.

Tank Farm Road between Broad Street (SR 227) and South Higuera Street is a two-lane road that is oriented east-west. It has a 50-mph posted speed limit.

Tank Farm Road between Broad Street (SR 227) and Orcutt Road is a five-lane east-west road. The posted speed limits are 35 mph between Broad Street and Righetti Ranch Road and 40 mph east of Righetti Road to the eastern limits of the study section.

Collision History

The collision history for the study area was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated based on records provided from the City for the city intersections as well as the collision records available from the California Highway Patrol as published in their Statewide Integrated Traffic Records System (SWITRS) reports. The five-year period reviewed was March 1, 2014 through February 28, 2019.

As presented in Table 2, the calculated collision rates for the study intersections were compared to average collision rates for similar facilities statewide, as indicated in *2014 Collision Data on California State Highways*, California Department of Transportation (Caltrans). Based on the available collision data, with the exception of Aerovista Place/Broad Street and Buckley Road/Edna Road, all of the study intersections have collision rates lower than the statewide average. The collision rate calculations are provided in Appendix B.

Table 2 – Collision Rates at the Study Intersections

Study Intersection	Number of Collisions (2014-2019)	Calculated Collision Rate (c/mve)	Statewide Average Collision Rate (c/mve)
1. Capitolio Wy/Broad St (SR 227)	2	0.04	0.14
2. Industrial Wy/Broad St (SR 227	17	0.29	0.43
3. Los Osos Valley Rd/US 101 S Ramps	9	0.14	0.28
4. Los Osos Valley Rd/US 101 N Ramps	7	0.13	0.28
5. Tank Farm Rd/S Higuera St	11	0.21	0.43
6. Tank Farm Rd/Long St	6	0.16	0.23
7. Tank Farm Rd/Santa Fe Rd	4	0.10	0.23
8. Tank Farm Rd/Mindbody Entrance	4	0.10	0.28
9. Tank Farm Rd/Broad St (SR 227)	26	0.34	0.43
10. Aerovista Pl/Broad St (SR 227)	6	**0.16**	0.14
11. Aero Dr/Broad St (SR 227)	5	0.14	0.43
12. Airport Dr/Broad St (SR 227)	2	0.06	0.16
13. Buckley Rd/Edna Rd (SR 227)	23	**0.65**	0.58

Note: c/mve = collisions per million vehicles entering; **bold** text = collision rate is higher than the statewide average

The collisions records for the intersections of Aerovista Place/Broad Street and Buckley Road/Edna Road were reviewed for any trends. Of the six collisions at Aerovista Place/Broad Street, five were broadside collisions either due to right-of-way violations or improper turning. Of those five, four were eastbound drivers making a left-turn maneuver onto Broad Street. The other collision was a northbound driver making a left turn to Aerovista Place. While broadside collisions are common at two-way stop-controlled intersections, there is a two-way left-turn lane on Broad Street, which allows for a two-stage maneuver to enter the through street. Since four of the six collisions involved northbound through vehicles, this indicates that the drivers may not have been using the two-way left-turn lane. At the time of the site visit, Broad Street had been recently restriped, so the two-way left-turn lane was very visible but based on the available aerials, the striping was faded prior to that time. Though all-way stop controls are not currently warranted as there were no more than two crashes in a single twelve-month period, it is recommended that the City monitor the collision history for this intersection to determine if measures are warranted to potentially reduce the collision rate.

At the intersection of Buckley Road/Edna Road, 20 of the 23 collisions were rear-end collisions; 17 of which had a primary collision factor of unsafe speeds. Nine of the rear-end collisions were in the southbound direction, six were in the northbound direction, and the remaining two were from the minor approaches. The intersection is known to experience long northbound queues in the morning peak period and southbound queues in the evening peak. There are currently plans to improve the intersection, as well as several to the north and south, by installing roundabouts designed for speeds of 30 miles per hour. With this improvement project, queues and the speed at which drivers travel along the road would be reduced.

Based on a review of the collision records provided by the City in conjunction with the rates from the SWITRS database, the collision rates for the study segments are lower compared to statewide averages for similar facilities as shown in Table 3.

Table 3 – Collision Rates for the Study Segments

Study Roadway Segments	Number of Collisions (2014-2019)	Calculated Collision Rate (c/mvm)	Statewide Average Collision Rate (c/mvm)
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd	48	0.99	1.67
2. Broad St (SR 227): Tank Farm Rd to City Limits	26	0.49	1.67
3. Tank Farm Rd: Broad St (SR 227) to S Higuera St	42	0.85	1.03
4. Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	19	0.80	1.42

Note: c/mvm = collisions per million vehicles miles

Alternative Modes

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In general, a network of sidewalks, crosswalks, pedestrian signals, and curb ramps provide access for pedestrians in the study area, except for Tank Farm Road between Windmill Lane and the Mindbody entrance. In the vicinity of the project site, facilities exist where the properties have been developed.

- **Broad Street (SR 227) between Orcutt Road and Tank Farm Road** – There are discontinuous sidewalks on both sides of this section of Broad Street between Orcutt Road and Tank Farm Road. There are marked crosswalks at some intersecting streets with curb ramps present at most intersections.

- **Broad Street (SR 227) between Tank Farm Road and City Limits** – There are discontinuous sidewalks and intermittent streetlighting on both sides of this segment of Broad Street. There are crosswalks only at Tank Farm Road and Broad Street, though curb ramps are present at each intersection.

- **Tank Farm Road between Broad Street (SR 227) and South Higuera Street** – There are discontinuous sidewalks on both sides of this segment, though there is streetlighting. There are crosswalks present at the two major intersections along the segment.

- **Tank Farm Road between Broad Street (SR 227) and Orcutt Road** – There are sidewalks with streetlighting provided on both sides of this segment; the sidewalk on the north side of the segment ends at Righetti Ranch Road. Curb ramps are found at every intersection and there are crosswalks at most intersections.

Bicycle Facilities

The *Highway Design Manual*, Caltrans, 2017, classifies bikeways into four categories:

- **Class I Multi-Use Path** – a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- **Class II Bike Lane** – a striped and signed lane for one-way bike travel on a street or highway.
- **Class III Bike Route** – signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- **Class IV Bikeway** – also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

In the project area, Class II bike lanes exist on Broad Street between Orcutt Road and the city limits as well as Tank Farm Road from South Higuera Street to Orcutt Street. According to the *City of San Luis Obispo Bicycle Transportation Plan,* 2013, there are planned Class II bicycle lanes along Tank Farm Road from Old Windmill Lane to Santa Fe Road. Bicyclists ride in the roadway and/or on sidewalks along all other streets within the project study area. Table 4 summarizes the existing and planned bicycle facilities in the project vicinity.

Table 4 – Bicycle Facility Summary

Status Facility	Class	Length (miles)	Begin Point	End Point
Existing				
Broad St	III	0.6	Monterey St	High St
Broad St	II	3.4	High St	City Limits
Tank Farm Rd	II	0.3	S Higuera St	Windmill Ln
Tank Farm Rd	II	1.3	Santa Fe Rd	Orcutt St
S Higuera St	II	3.3	Nipomo St	City Limits
Planned				
Tank Farm Rd	I	1.17	Old Windmill Ln	Santa Fe Rd
Buckley Rd	II	3.2	Broad St	S Higuera St

Source: *City of San Luis Obispo Bicycle Transportation Plan*, City of San Luis Obispo Public Works Department, 2013

Transit Facilities

The San Luis Obispo Transit provides fixed route bus service in San Luis Obispo. SLO Transit Route 1A provides loop service to destinations throughout the City and connects the Broad Street and Johnson area with to the downtown transit center and the SLO Airport. Route 1A operates Monday through Friday at approximately one-hour headways between 6:15 a.m. and 8:00 p.m. Saturday and Sunday service operates with approximately one-hour headways between 8:15 a.m. and 8:00 p.m.

Two bicycles can be carried on most SLO Transit buses. Bike rack space is on a first come, first served basis. Additional bicycles are allowed on SLO Transit buses at the discretion of the driver.

Dial-a-ride, also known as paratransit, or door-to-door service, is available for those who are unable to independently use the transit system due to a physical or mental disability. SLO Paratransit is designed to serve the needs of individuals with disabilities within San Luis Obispo and the greater San Luis Obispo area.

Capacity Analysis

Intersection Level of Service Methodologies

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

The study intersections were analyzed using methodologies published in the *Highway Capacity Manual* (HCM), Transportation Research Board, 2018. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle or pedestrian.

Automobile Analysis

The vehicular Levels of Service for the intersections with side street stop controls, or those which are unsignalized and have one or two approaches stop controlled, were analyzed using the "Two-Way Stop-Controlled" intersection capacity method from the HCM. This methodology determines a level of service for each minor turning movement by estimating the level of average delay in seconds per vehicle. Results are presented for individual movements together with the weighted overall average delay for the intersection.

The study intersections that are currently controlled by a traffic signal, or may be in the future, were evaluated using the signalized methodology from the HCM. This methodology is based on factors including traffic volumes, green time for each movement, phasing, whether the signals are coordinated or not, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology. For purposes of this study, delays were calculated using signal timing from the City's Synchro model. For the signalized intersections not included in the Synchro model, timing was obtained from the jurisdiction that maintains the intersection.

The ranges of delay associated with the various levels of service are indicated in Table 5.

Table 5 – Automobile Intersection Level of Service Criteria			
LOS	**Two-Way Stop-Controlled**	**Signalized**	**Roundabout**
A	Delay of 0 to 10 seconds. Gaps in traffic are readily available for drivers exiting the minor street.	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.	Delay of 0 to 10 seconds.
B	Delay of 10 to 15 seconds. Gaps in traffic are somewhat less readily available than with LOS A, but no queuing occurs on the minor street.	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.	Delay of 10 to 15 seconds.
C	Delay of 15 to 25 seconds. Acceptable gaps in traffic are less frequent, and drivers may approach while another vehicle is already waiting to exit the side street.	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.	Delay of 15 to 25 seconds.
D	Delay of 25 to 35 seconds. There are fewer acceptable gaps in traffic, and drivers may enter a queue of one or two vehicles on the side street.	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.	Delay of 25 to 35 seconds.
E	Delay of 35 to 50 seconds. Few acceptable gaps in traffic are available, and longer queues may form on the side street.	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop, and drivers consider the delay excessive.	Delay of 35 to 50 seconds.
F	Delay of more than 50 seconds *or a V/C greater than one*. Drivers may wait for long periods before there is an acceptable gap in traffic for exiting the side streets, creating long queues.	Delay of more than 80 seconds *or a V/C greater than one*. Vehicles may wait through more than one cycle to clear the intersection.	Delay of more than 50 seconds.

Reference: *Highway Capacity Manual,* Transportation Research Board, 2018

Non-Automobile Analysis

Similar to the automobile analysis methodology, the pedestrian and bicycle Levels of Service at the study intersections were based on the type of control, either for a signalized intersection or a two-way stop-controlled intersection. While the methodology for two-way stop-control is based on control delay, the methodology for signalized intersections is based on perceived service where a wide variety of factors, including the physical features of the facilities as well as the delay experienced, are considered in developing an operational "score". The expectation for signalized intersections is that they are designed to carry higher traffic volumes and will result in greater pedestrian delay than an unsignalized intersection.

Based on direction from the City, the intersections of US 101 Ramps with Los Osos Valley, Buckley Road/Edna Road (SR 227), and the future intersection of Buckley Road/South Higuera Street were not analyzed for alternative mode service levels.

The ranges of perceived levels of service for pedestrians and cyclists are indicated in Table 6.

Table 6 – Pedestrian and Bicycle Intersection Level of Service Criteria		
LOS	**Two-Way Stop-Controlled**	**Signalized**
A	Delay of 0 to 5 seconds. Usually no conflicting traffic.	≤1.50
B	Delay of 5 to 10 seconds. Occasionally some delay due to conflicting traffic.	> 1.50 - 2.50
C	Delay of 10 to 20 seconds. Delay noticeable to pedestrians, but not inconveniencing.	> 2.50 - 3.50
D	Delay of 20 to 30 seconds. Delay noticeable and irritating, increased likelihood of risk taking.	> 3.50 - 4.50
E	Delay of 30 to 45 seconds. Delay approaches tolerance level, risk-taking behavior likely.	> 4.50 - 5.50
F	Delay of more than 45 seconds. Delay exceed tolerance level, high likelihood of pedestrian risk taking	> 5.50

Reference: *Highway Capacity Manual,* Transportation Research Board, 2018

Multimodal Roadways Segment Level of Service Methodology

The roadway segment Level of Service methodology found in Chapter 18, "Urban Street Segments," of the *Highway Capacity Manual* is the basis of the automobile LOS analysis. This method does not address the capacity of a facility, but rather determines a Level of Service based the calculated percentage of the street's base free-flow speed. In essence, congestion occurs as traffic volumes increase, and the overall travel speed is reduced due to increased delay. Therefore, the slower the speed, the lower that speed is as a percentage of free-flow speed, and the lower the Level of Service.

The relationship between Level of Service and percentages of free-flow speed is presented in Table 7.

Table 7 – Automobile Level of Service Criteria	
Level of Service	**Travel Speed as a Percentage of Base Free-Flow Speed (%)**
A	>80
B	>67-80
C	>50-67
D	>40-50
E	>30-40
F	≤30

Reference: *Highway Capacity Manual*, Transportation Research Board, 2018

The pedestrian, bicycle, and transit roadway segment LOS methodologies from Chapter 18 were also applied. Similar to the methodology for pedestrian facilities at signalized intersections, the LOS is based on perceived service where a wide variety of factors, including the physical features of the facilities as well as the delay experienced, are considered in developing the operational scores. The relationship between the Level of Service and the scores for pedestrians, bicyclists, and transit is presented in Table 8.

Table 8 –Level of Service Criteria for Multimodal Segment Analysis			
Level of Service	**Pedestrian LOS Score***	**Bicycle LOS Score**	**Transit LOS Score**
A	<2.00	<2.00	<2.00
B	>2.00-2.75	>2.00-2.75	>2.00-2.75
C	>2.75-3.50	>2.75-3.50	>2.75-3.50
D	>3.50-4.25	>3.50-4.25	>3.50-4.25
E	>4.25-5.00	>4.25-5.00	>4.25-5.00
F	>5.00	>5.00	>5.00

Reference: *Highway Capacity Manual*, Transportation Research Board, 2018; *For the purposes of the analysis, it was assumed that that pedestrian space was equal to or greater than 60 ft^2/person

Traffic Operation Standards

Caltrans

While the intersections that include ramps for interstate facilities, as well as state routes, like Broad Road (SR 227), are often controlled by Caltrans, the City operates and maintains both the US 101 North and South Ramps on Los Osos Valley Road. Of the study intersections located on SR 227, only the intersection with Buckley Road is maintained by Caltrans and therefore their significance thresholds were applied in the analysis for this location only. Caltrans indicates that they endeavor to maintain operation at the transition from LOS C to LOS D.

For queuing impacts, Caltrans considers a queueing impact if the project causes the 95th percentile queue to extend past the gore point on the freeway.

City of San Luis Obispo

With the exception of the SR 227/Buckley Road intersection, all of the study intersections are within the City's jurisdiction. Based on the City's Transportation Impact Study Guidelines, the following standards of significance were applied for automobile and non-auto modes of travel at intersections and along the study roadway segments.

Intersection Operations

Automobile

At signalized intersections the City considers acceptable operating conditions to be LOS D or better. Based on City standards, the project is considered to have an adverse impact if:

- The project causes the intersection to degrade to LOSE or F or further degrade an unacceptable service level and increase the V/C ratio by 0.01 or more, where the V/C ratio reported is the highest V/C reported for the overall intersection.
- The project causes the 95th percentile turning movement queues to exceed the available turn pocket capacity or increase the queue where the capacity is already exceeded by one vehicle-length (25 feet) or more.
- The project's proposed roadway geometry alterations cause an acceptably operating intersection to operate unacceptably or an intersection already operating unacceptably to deteriorate further.

At unsignalized intersections the intersection is considered to be operating acceptably if the overall service level is LOS D or better. The proposed project is considered to have an adverse impact if:

- The project causes intersection service level, overall or for a movement, to decrease to an unacceptable LOS E or F or causes it to further degrade, the V/C is increased by 0.01 or more, and the Peak Hour Volume signal warrant is met.
- The project-added volume causes the 95th percentile turning movement queue to exceed the available turn pocket capacity or increase the already exceeded queue by one vehicles length.
- The proposed project's geometry causes an intersection already operating unacceptably to degrade further or fall below the acceptable thresholds.

Pedestrian and Bicycle

At both unsignalized and signalized intersections, the acceptable service level is LOS D or better. The project is considered to have an adverse impact if:

- The project causes the service level to degrade to an unacceptable LOS E or F or causes it to further degrade.
- The proposed project's geometry causes the minimum LOS standard to be exceeded or further degrades already exceeded LOS standards.

Multimodal Segment Analysis

For the multimodal segment analysis or for alternative modes at an intersection, as applicable, the minimum acceptable operation is LOS D or better and the project is considered to have an adverse impact if:

- For automobiles, the segment LOS degrades to LOS E or F or further degrades already exceeded service levels and the speed would decrease by 1 mph or more;
- For pedestrian facilities, the LOS degrades from acceptable service level to LOS E or F;
- For bicycle facilities, the LOS degrades from an acceptable LOS D or better to LOS E or F;
- For transit facilities, the segment's service level degrades to LOS E or F from an acceptable service level; or, a segment with an already unacceptable service level would degrade further, based on the LOS or engineering judgement, as a result of the proposed project.

Modal Priorities

As part of the City's standards, in addition to maintaining minimum levels of services, the City's General Plan also prioritizes various modes of travel, depending on the type of facility, so that construction, expansion, or alteration of facilities for one mode does not degrade the service level of a higher-priority mode. The priorities based on the General Plan's Circulation Element are summarized in Table 9.

Table 9 – Modal Priorities for Level of Services

Priority	Residential Corridors and Neighborhoods	Commercial Corridors and Areas	Regional Arterial and Highway Corridors
1	Pedestrians	Vehicles	Vehicles
2	Bicycles	Bicycles	Transit
3	Vehicles	Transit	Bicycles
4	Transit	Pedestrians	Pedestrians

Reference: *Highway Capacity Manual,* Transportation Research Board, 2018

Existing Conditions

The Existing Conditions scenario provides an evaluation of current operation based on existing traffic volumes during the a.m. and p.m. peak periods. This condition does not include project-generated traffic volumes. Volume data was collected while local schools were in session.

Intersection Levels of Service

Automobile Operations Analysis

Under existing conditions, the study intersections are operating acceptably at LOS D or better overall during both peak hours, with the exception of the intersection of Edna Road/Buckley Road during the evening peak hour. Based on the field observations, the capacity of Edna Road, downstream of the intersection, results in southbound queuing. The existing traffic volumes are shown in Figure 2. A summary of the intersection Level of Service calculations is contained in Table 10, and copies of the Level of Service calculations are provided in Appendix C.

Table 10 – Existing Peak Hour Intersection Auto Levels of Service

Study Intersection ***Approach***	**AM Peak**			**PM Peak**		
	V/C*	**Delay**	**LOS**	**V/C**	**Delay**	**LOS**
1. Capitolio Wy/Broad St (SR 227)	0.20	1.3	A	0.15	1.8	A
Westbound (Capitolio Wy) Approach	*0.16*	*17.1*	*C*	*0.45*	*22.8*	*C*
2. Industrial Wy/Broad St (SR 227	0.78	19.2	B	0.96	30.8	C
3. Los Osos Valley Rd/US 101 S Ramps	0.93	15.5	B	**1.06**	17.0	B
4. Los Osos Valley Rd/US 101 N Ramps	0.67	23.8	C	0.70	16.6	B
5. Tank Farm Rd/S Higuera St	0.93	31.5	C	0.94	31.5	C
6. Tank Farm Rd/Long St	0.16	2.5	A	0.16	16.3	C
Northbound (Long St) Approach	*0.30*	*21.3*	*C*	*0.74*	***45.5***	***E***
Southbound (Long St) Approach	*0.14*	*26.0*	*D*	***1.15***	***	***F***
7. Tank Farm Rd/Santa Fe Rd	0.14	2.1	A	0.10	18.8	C
Northbound (Santa Fe Rd) Approach	*0.23*	*28.2*	*D*	***1.85***	***	***F***
Southbound (Santa Fe Rd) Approach	*0.07*	***38.0***	***E***	*0.10*	***102***	***F***
8. Tank Farm Rd/Mindbody Entrance	0.83	7.3	A	0.85	13.4	B
9. Tank Farm Rd/Broad St (SR 227)	0.91	48.0	D	0.98	37.3	D
10. Aerovista Pl/Broad St (SR 227)	0.10	1.2	A	0.03	3.7	A
Eastbound (Aerovista Pl) Approach	*0.33*	*28.2*	*D*	*0.68*	***41.6***	***E***
11. Aero Dr/Broad St (SR 227)	0.78	15.2	B	0.81	19.3	B
12. Airport Dr/Broad St (SR 227)	0.00	0.1	A	0.00	0.7	A
Eastbound (Airport Dr) Approach	*0.03*	*14.0*	*B*	*0.23*	*21.0*	*C*
13. Buckley Rd/Edna Rd (SR 227)	0.90	27.7	C	0.94	**106**	**F**

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics;* ** = delay greater than 120 seconds; **Bold** text = deficient operation; V/C indicated for the worst movements at a signalized intersection or the worst movement of the indicated approach for an unsignalized intersection

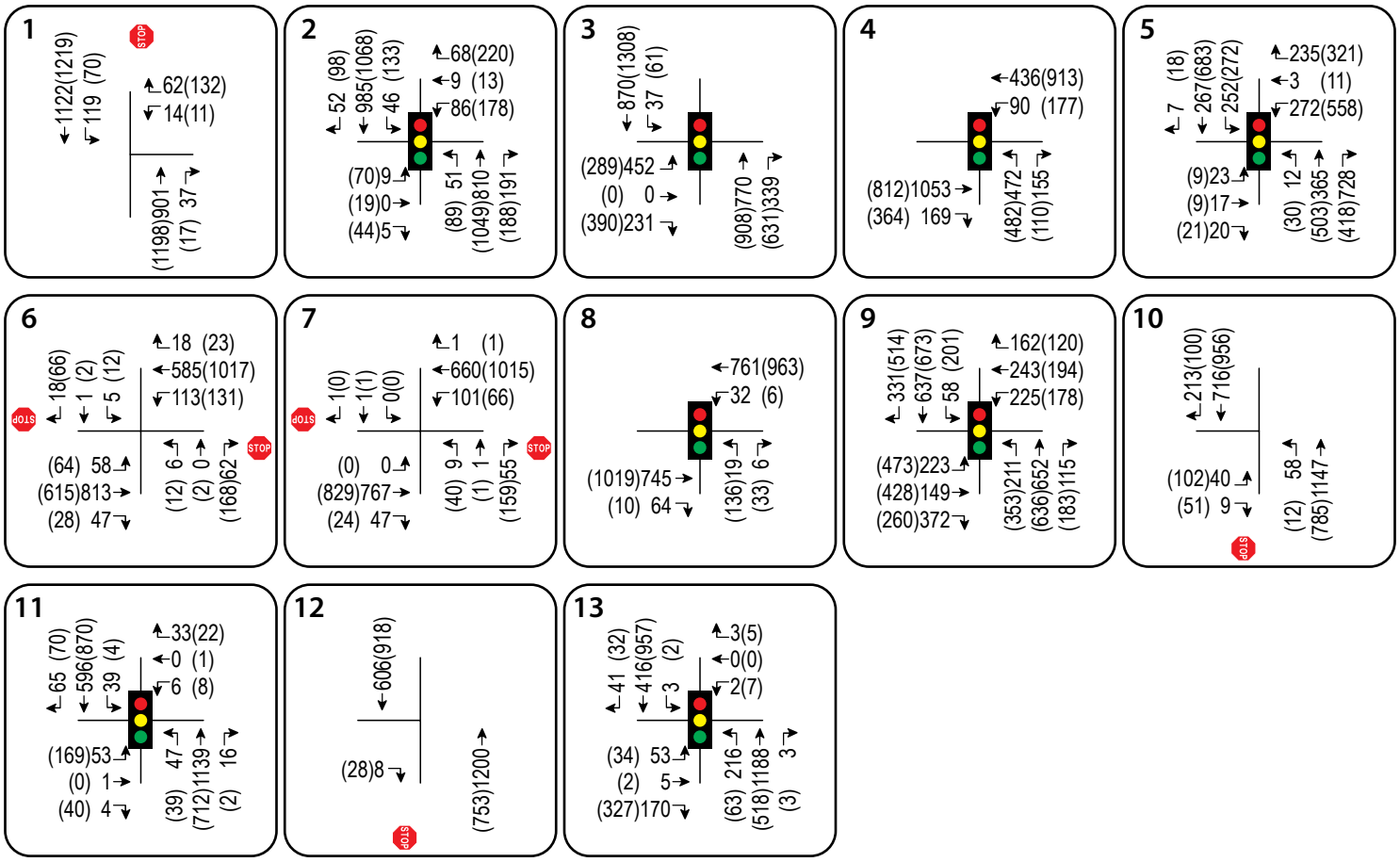

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Figure 2 – Existing Traffic Volumes

Under the existing conditions, the following intersections operate at unacceptable service levels for vehicles.

- During the p.m. peak hour, the southbound right-turn movement at Los Osos Valley Road/US 101 South Ramps intersection has a V/C ratio of more than one; however, the intersection is operating at an acceptable LOS B overall.
- The southbound approach to the intersection of Tank Farm Road and Long Street operates with an unacceptable delay during the morning peak hour. During the p.m. peak hour, both stop-controlled approaches operate at LOS F, with the northbound approach operating with a V/C greater than 1.0.
- While the intersection of Tank Farm Road/Santa Fe Road operates acceptably overall, one or both of the minor approaches operate unacceptably during both peak hours.
- The eastbound approach to the intersection of Aerovista Place and Broad Street operates at an unacceptable delay during the evening peak hour, but the intersection as a whole operates at LOS A.
- During the p.m. peak hour, the intersection of Buckley Road and Edna Road operates at an unacceptable LOS F.

Pedestrian Facility Analysis

Under existing conditions all the intersections are operating acceptably except for the two-way stop-controlled intersections of Capitolio Way/Broad Street, Tank Farm Road/Long Street, Tank Farm Road/Santa Fe Road, Aerovista Place/Broad Street, and Airport Drive/Broad Street, where long delays are encountered by pedestrians crossing the through street. Since each of these crossings is near a signalized intersection with pedestrian crossings that operate acceptably, no deficiencies are reported. As noted previously, the intersections not within the City's jurisdiction were not reviewed based on direction from the City. The results of the pedestrian analysis are summarized in Table 11 and the pedestrian Level of Service calculations are in Appendix D.

Table 11 – Existing Peak Hour Intersection Pedestrian Levels of Service					
Study Intersection	**Direction**	**AM Peak**		**PM Peak**	
		Score	**LOS**	**Score**	**LOS**
1. Capitolio Wy/Broad St (SR 227)	NB	**	**F**	**	**F**
	SB	**	**F**	**	**F**
2. Industrial Wy/Broad St (SR 227)	NB	3.19	C	3.31	C
	SB	3.07	C	3.18	C
	EB	2.01	B	2.25	C
	WB	2.27	B	2.53	B
5. Tank Farm Rd/S Higuera St	NB	3.27	C	3.57	D
	SB	2.68	C	2.93	C
	EB	2.00	B	2.04	B
	WB	3.02	C	3.32	C
6. Tank Farm Rd/Long St	EB	**	**F**	**	**F**
	WB	**	**F**	**	**F**
7. Tank Farm Rd/Santa Fe Rd	EB	**	**F**	**	**F**
	WB	**	**F**	**	**F**
8. Tank Farm Rd/Mindbody Entrance	NB	1.99	B	2.02	B
	EB	2.70	C	2.99	C
	WB	2.69	C	3.05	C
9. Tank Farm Rd/Broad St (SR 227)	NB	3.14	C	3.18	C
	SB	3.27	C	3.46	C
	EB	3.12	C	3.17	C
	WB	2.69	C	2.74	C
10. Aerovista Pl/Broad St (SR 227)	NB	**	**F**	**	**F**
	SB	**	**F**	**	**F**
11. Aero Dr/Broad St (SR 227)	NB	2.91	C	2.89	C
	SB	2.98	C	2.98	C
	EB	2.06	B	2.11	B
	WB	2.01	B	1.98	B
12. Airport Dr/Broad St (SR 227)	NB	**	**F**	**	**F**
	SB	**	**F**	**	**F**

Notes: LOS Score = Level of Service based on HCM 6th Edition pedestrian score. For TWSC intersections, LOS based on delay in seconds; ** = delay greater than 200 seconds; **Bold** text = deficient operation

Bicycle Facility Analysis

Under existing conditions all the signalized intersections have bicycle facilities that operate at an acceptable service level. For the unsignalized two-way stop-controlled intersections, the HCM does not have a service level methodology, so these locations were therefore not analyzed and are not included in the table. The results of the bicycle analysis are summarized in Table 12. The bicycle Level of Service calculations are in Appendix D.

Table 12 – Existing Peak Hour Intersection Bicycle Levels of Service					
Study Intersection	**Direction**	**AM Peak**		**PM Peak**	
		Score	**LOS**	**Score**	**LOS**
2. Industrial Wy/Broad St (SR 227)	NB	1.77	B	3.29	C
	SB	1.95	B	3.50	D
	EB	2.72	C	2.97	C
	WB	3.07	C	3.47	C
5. Tank Farm Rd/S Higuera St	NB	2.25	B	1.88	B
	SB	1.56	B	1.94	B
	EB	1.55	B	1.49	A
	WB	3.47	C	4.14	D
8. Tank Farm Rd/Mindbody Entrance	NB	1.08	A	1.40	A
	EB	1.53	B	1.82	B
	WB	3.76	D	4.07	D
9. Tank Farm Rd/Broad St (SR 227)	NB	2.28	B	2.58	C
	SB	2.85	C	3.05	C
	EB	2.29	B	2.62	C
	WB	3.05	C	2.68	C
11. Aero Dr/Broad St (SR 227)	NB	1.86	B	1.55	B
	SB	1.50	B	1.70	B
	EB	1.28	A	1.65	B
	WB	2.63	C	2.57	C

Notes: LOS Score = Level of Service based on HCM 6th Edition bicycle score

Roadway Segment Levels of Service

For each of the study roadway segments, the automobile, pedestrian, bicycle, and transit service levels were analyzed using the McTrans software version 7.8.5 which uses the HCM 6th edition. The segments were analyzed during the same peak periods as the intersection analysis. The Level of Service calculations are provided in Appendix E.

Automobile Operations Analysis

Under existing conditions, Broad Street between Industrial Road and Tank Farm Road operates at LOS F in the southbound direction during both peaks and LOS E in the northbound direction during the evening peak. Broad Street between Tank Farm Road and Aero Drive operates unacceptably in the northbound direction during both peaks and the segment operates unacceptably between Aero Drive and Buckley Road in the southbound direction during the evening peak hour.

The segment levels of service are summarized in Table 13.

Table 13 – Existing Peak Hour Roadway Segment Auto Levels of Service						
Study Roadway Segment		**Direction**	**AM Peak**		**PM Peak**	
			Speed	**PBFFS/LOS**	**Speed**	**PBFFS/LOS**
1.	Broad St (SR 227): Orcutt Rd to Tank Farm Rd					
	A. Orcutt Rd to Industrial Rd	NB	42.8	95/A	42.3	94/A
		SB	31.2	69/B	29.4	65/C
	B. Industrial Rd to Tank Farm Rd	NB	18.9	41/D	14.8	**32/E**
		SB	13.4	**29/F**	13.5	**29/F**
2.	Broad St (SR 227): Tank Farm Rd to City Limits					
	A. Tank Farm Rd to Aero Dr	NB	13.0	**29/F**	14.3	**31/E**
		SB	19.3	42/D	18.4	41/D
	B. Aero Dr to Buckley Rd	NB	36.2	78/B	38.0	82/A
		SB	31.8	69/B	21.2	**46/F**
3.	Tank Farm Rd: S Higuera St to Broad St (SR 227)					
	A. S Higuera St to Mindbody Entrance	EB	40.3	88/A	39.9	87/A
		WB	44.2	96/A	12.0	80/A
	B. Mindbody Entrance to Broad Street	EB	11.6	**28/F**	12.0	**29/F**
		WB	36.8	78.3/B	30.2	64/C
4.	Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	39.6	98/A	38.1	94/A
		WB	31.0	72/B	28.8	67/C

Notes: PBFFS = is the percent of "Base Free Flow Speed"; Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation

Pedestrian Analysis

For several of the study segments, large gaps in the sidewalk exist in one or both directions. Where sidewalks gaps exist in both directions, those segments are not included in the analysis. Of the study segments analyzed, the only segment that operates unacceptably was Broad Street between Industrial Road and Tank Farm Road.

The pedestrian levels of service for the segments that were analyzed are summarized in Table 14. The following segments that were not evaluated so are excluded from the table.

- Broad Street between Orcutt Road and Tank Farm Road (#1), southbound
- Broad Street between Aero Drive and Buckley Road (#2), both directions
- Tank Farm Road between South Higuera Street and Mindbody Entrance, both directions
- Tank Farm Road between Mindbody Entrance and Broad Street, westbound

Table 14 – Existing Peak Hour Roadway Segment Pedestrian Levels of Service

Study Roadway Segment	Direction	AM Peak		PM Peak	
		Score	LOS	Score	LOS
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd					
A. Orcutt Rd to Industrial Rd	NB	3.22	C	3.81	D
B. Industrial Rd to Tank Farm Rd	NB	4.11	D	**4.32**	**E**
	SB	3.79	D	4.23	D
2. Broad St (SR 227): Tank Farm Rd to City Limits					
A. Tank Farm Rd to Aero Dr	NB	2.99	C	2.63	B
	SB	3.48	D	3.30	C
3. Tank Farm Rd: S Higuera St to Broad St (SR 227)					
B. Mindbody Entrance to Broad St	EB	3.00	C	3.19	C
4. Tank Farm Rd: Broad St (SR 227) Orcutt Rd	EB	3.39	C	4.12	D
	WB	4.12	D	3.87	D

Notes: Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation

Bicycle Analysis

All the bicycle facilities within the study area currently operate acceptably. These results are summarized in Table 15.

Table 15 – Existing Peak Hour Roadway Segment Bicycle Levels of Service					
Study Roadway Segment	**Direction**	**AM Peak**		**PM Peak**	
		Score	**LOS**	**Score**	**LOS**
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd					
A. Orcutt Rd to Industrial Rd	NB	2.62	B	2.74	B
	SB	1.96	A	1.97	A
B. Industrial Rd to Tank Farm Rd	NB	2.27	B	2.40	B
	SB	2.01	B	2.24	B
2. Broad St (SR 227): Tank Farm Rd to City Limits					
A. Tank Farm Rd to Aero Dr	NB	1.77	A	1.67	A
	SB	1.86	A	1.90	A
B. Aero Dr to Buckley Rd	NB	1.22	A	1.08	A
	SB	1.15	A	1.32	A
3. Tank Farm Rd: S Higuera St to Broad St (SR 227)					
A. S Higuera St to Mindbody Entrance	EB	2.20	B	2.11	B
	WB	2.07	B	2.24	B
B. Mindbody Entrance to Broad Street	EB	1.77	A	1.88	A
	WB	1.89	A	2.07	B
4. Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	3.39	C	4.12	D
	WB	4.12	D	3.87	D

Notes: Speed is measured in miles per hour; LOS = Level of Service

Transit Analysis

Within the study area, there is a single transit route, 1A, which provides hourly service to the San Luis Obispo Airport. Given the limited service to the area, those segments that have one or more stops the transit facilities operate at unacceptable levels of service. Transit operations were not evaluated for segments that do not have a bus stop, including Broad Street between Aero Drive and Buckley Road, Tank Farm Road between South Higuera Street and Broad Street. The transit service levels for the roadways that were evaluated are summarized in Table 16.

Table 16 – Existing Peak Hour Roadway Segment Transit Levels of Service						
Study Roadway Segment		**Direction**	**AM Peak**		**PM Peak**	
			Score	**LOS**	**Score**	**LOS**
1.	Broad St (SR 227): Orcutt Rd to Tank Farm Rd					
	A. Orcutt Rd to Industrial Rd	NB	**4.60**	**E**	**4.68**	**E**
		SB	-	-	-	-
	B. Industrial Rd to Tank Farm Rd	NB	**5.36**	**F**	**5.45**	**F**
		SB	-	-	-	-
2.	Broad St (SR 227): Tank Farm Rd to City Limits					
	A. Tank Farm Rd to Aero Dr	NB	-	-	-	-
		SB	**4.97**	**E**	**4.96**	**E**
4.	Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	-	-	-	-
		WB	**5.15**	**F**	**5.13**	**F**

Notes: Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation; directions shown without results have no bus stops, so no analysis was performed.

Cumulative Conditions

Segment volumes for the horizon year of 2040 were obtained from the City's gravity demand model and translated to turning movement volumes at each of the study intersections using a combination of the "Furness" method and factoring, depending on how the model was configured at each intersection. The Furness method is an iterative process that employs existing turn movement data, existing link volumes and cumulative link volumes to project likely turning cumulative movement volumes at intersections. To be consistent with recently conducted traffic studies for other projects in the study area, the volumes were compared to those used in the *Northwest Corner Tank Farm/Broad Mixed-Use Project Traffic Study,* 2018, prepared by Central Coast Transportation Consulting. Where those volumes were higher, the higher numbers were used. Additionally, a minimum growth of 0.25 percent per year was applied.

For the ramp intersections, very little to no growth is anticipated given the planned new Prado Road interchange to the north that would connect the eastern side of the City with the existing and proposed shopping centers. Additionally, the on- and off-ramp intersection is planned to be relocated from Los Osos Valley Road and onto Calle Joaquin. Since this improvement is not fully funded, the relocation of the southbound ramps was not assumed for the analysis.

Per City staff, other infrastructure improvements in the study area expected to be complete by the Cumulative scenario horizon year include the signalization of the Long Street/Tank Farm Road intersection, the TIF or planned improvements at the intersections of Tank Farm Road/South Higuera Street and Tank Farm Road/Broad Street, the roundabouts at Tank farm Road/Santa Fe Road and Buckley Road/Broad street, the widening of Tank Farm Road, and extension of Buckley Road to South Higuera Street. This new intersection would be signalized and was included as a study intersection for the Cumulative scenarios only.

Other planned improvements include the widening of Tank Farm Road, a roundabout at Santa Fe Road, and the extension of Santa Fe Road to the Prado Road extension. Because these projects have not been fully designed and the funding is not yet secure, the improvements were not assumed for the analysis.

Cumulative volumes are shown in Figure 3.

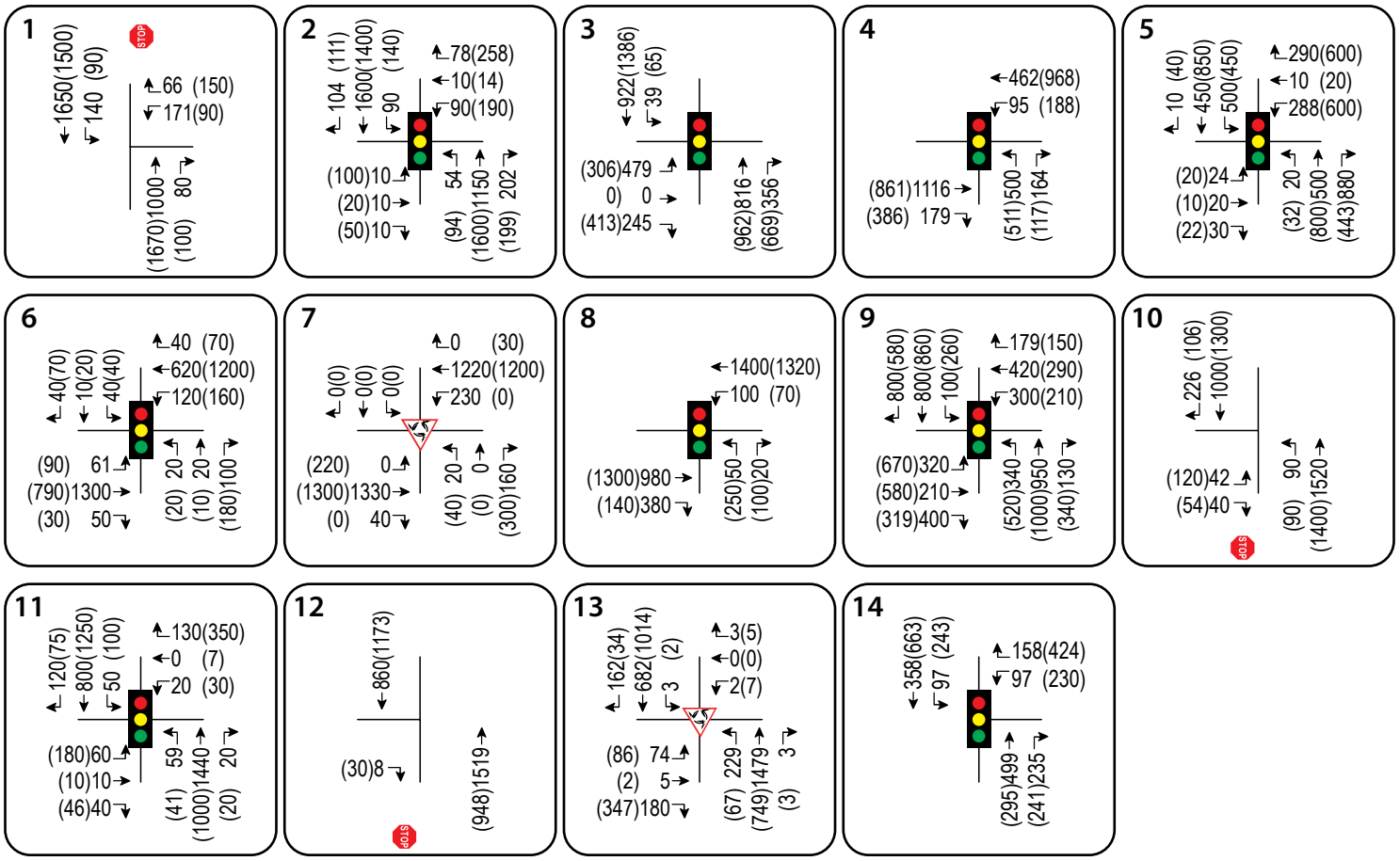

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Figure 3 – Cumulative Traffic Volumes

Intersection Levels of Service

Automobile Operations Analysis

Under the anticipated Cumulative volumes, and with the addition of planned improvements at the intersection of Tank Farm Road with Long Street, several of the study intersections are expected to operate with an unacceptable delay and/or v/c ratio. Cumulative operating conditions are summarized in Table 17. Calculations are in Appendix C.

Table 17 – Cumulative Peak Hour Intersection Auto Levels of Service

Study Intersection *Approach*	AM Peak			PM Peak		
	V/C*	Delay	LOS	V/C	Delay	LOS
1. Capitolio Wy/Broad St (SR 227)	0.22	15.4	C	0.26	7.1	A
Westbound (Capitolio Wy) Approach	***1.35***	**	***F***	***1.08***	***100***	***F***
2. Industrial Wy/Broad St (SR 227	0.84	22.2	C	**1.02**	45.0	D
3. Los Osos Valley Rd/US 101 S Ramps	0.92	15.1	B	**1.08**	18.9	B
4. Los Osos Valley Rd/US 101 N Ramps	0.66	23.7	C	0.70	16.3	B
5. Tank Farm Rd/S Higuera St	**1.05**	39.7	D	0.88	42.7	D
6. Tank Farm Rd/Long St	0.81	18.9	B	0.86	25.6	C
7. Tank Farm Rd/Santa Fe Rd	0.64	10.3	B	0.61	10.8	B
8. Tank Farm Rd/Mindbody Entrance	0.97	17.7	B	**1.03**	32.2	C
9. Tank Farm Rd/Broad St (SR 227)	**1.27**	**70.0**	**E**	0.90	36.1	D
10. Aerovista Pl/Broad St (SR 227)	0.16	1.2	A	0.19	7.6	A
Eastbound (Aerovista Pl) Approach	*0.30*	*27.9*	*D*	***1.06***	**	***F***
11. Aero Dr/Broad St (SR 227)	0.79	21.8	C	**1.12**	43.3	D
12. Airport Dr/Broad St (SR 227)	0.00	0.1	A	0.00	0.3	A
Eastbound (Airport Dr) Approach	*0.02*	*15.3*	*C*	*0.13*	*22.8*	*C*
13. Buckley Rd/Edna Rd (SR 227)	0.70	10.1	B	0.43	8.4	A
14. Buckley Rd/S Higuera St	0.76	9.3	A	0.79	15.6	B

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics;* ** = delay greater than 120 seconds; **Bold** text = deficient operation; V/C indicated for the worst movements at a signalized intersection or the worst movement of the indicated approach for an unsignalized intersection

Under the Cumulative conditions, the following intersections are expected to operate at unacceptable service levels for vehicles based on the City's standards.

- The westbound approach of Capitola Way with Broad Street is expected to operate at LOS F during both peak hours.
- The V/C ratio for the northbound through movement during the p.m. peak hour at the intersection of Industrial Way/Broad Street intersection is greater than one but the intersection delay is still acceptable.
- During the p.m. peak hour, the southbound right-turn movement at Los Osos Valley Road/US 101 South Ramps intersection has a V/C ratio of more than one; however, the intersection is expected to operate at an acceptable LOS B overall.

- With the improvements at the intersection that are to be made as part of the other nearby projects, Tank Farm Road/South Higuera Street is projected to operate at an acceptable LOS though the the northbound right-turn movement would have a V/C of 1.05.
- The westbound through movement at the intersection of Tank Farm Road/Mindbody entrance has a projected V/C ratio of more than one during the evening peak hour.
- During the morning peak, the intersection of Tank Farm Road/Broad Street is anticipated to operate at LOS E and have movements with a V/C ratio of more than one.
- At the intersection of Aerovista Place and Broad Street, during the evening peak hour, the eastbound approach is expected to operate with an unacceptable delay, but the intersection as a whole would operate at LOS A.

Pedestrian Facility Analysis

Under the cumulative conditions, all the study intersections are expected to operate acceptably except for the two-way stop-controlled intersections. With signalization of the Long Street/Tank Farm Road intersection, acceptable pedestrian service levels at the intersection would be achieved. Since each of these locations are near a signalized crossing that is expected to operate acceptably, no deficiencies within the study area identified. As noted previously, the intersections not within the City's jurisdiction were not reviewed based on direction from the City. The results of the pedestrian analysis are summarized in Table 18. Calculations are in Appendix D.

Table 18 – Cumulative Peak Hour Intersection Pedestrian Levels of Service					
Study Intersection	**Direction**	**AM Peak**		**PM Peak**	
		Score	**LOS**	**Score**	**LOS**
1. Capitolio Wy/Broad St (SR 227)	NB	**	**F**	**	**F**
	SB	**	**F**	**	**F**
2. Industrial Wy/Broad St (SR 227)	NB	3.34	C	3.47	C
	SB	3.24	C	3.35	C
	EB	2.02	B	2.08	C
	WB	2.26	B	2.51	B
5. Tank Farm Rd/S Higuera St	NB	3.34	C	3.63	D
	SB	2.90	C	3.15	C
	EB	1.99	B	2.04	B
	WB	3.07	C	3.44	C
6. Tank Farm Rd/Long St	NB	1.85	B	1.89	B
	SB	1.81	B	1.84	B
	EB	2.92	C	2.95	C
	WB	2.92	C	3.02	C
7. Tank Farm Rd/Santa Fe Rd	EB	**	**F**	**	**F**
	WB	**	**F**	**	**F**
8. Tank Farm Rd/Mindbody Entrance	NB	2.10	B	2.10	B
	EB	3.17	C	3.29	C
	WB	2.95	C	3.15	C
9. Tank Farm Rd/Broad St (SR 227)	NB	3.28	C	3.35	C
	SB	3.48	C	3.62	D
	EB	3.26	C	3.26	C
	WB	2.783	C	2.90	C
10. Aerovista Pl/Broad St (SR 227)	NB	**	**F**	**	**F**
	SB	**	**F**	**	**F**
11. Aero Dr/Broad St (SR 227)	NB	3.03	C	3.02	C
	SB	3.12	C	3.21	C
	EB	2.08	B	2.08	B
	WB	2.03	B	2.09	B
12. Airport Dr/Broad St (SR 227)	NB	**	**F**	**	**F**
	SB	**	**F**	**	**F**

Notes: LOS Score = Level of Service based on HCM 6th Edition pedestrian score. For TWSC intersections, LOS based on delay in seconds; ** = delay greater than 200 seconds; **Bold** text = deficient operation

Bicycle Facility Analysis

Under the cumulative conditions, all the signalized intersections have bicycle facilities that operate at an acceptable service level. Under these conditions, Tank Farm Road would be improved and include either a separated bicycle path or bike lanes on all of the study segment. For the unsignalized, two-way stop-controlled intersections, HCM does not have service level standards and these locations were therefore not analyzed. The results of the bicycle analysis are summarized in Table 19 and the calculations are included in Appendix D.

Table 19 – Cumulative Peak Hour Intersection Bicycle Levels of Service					
Study Intersection	**Direction**	**AM Peak**		**PM Peak**	
		Score	**LOS**	**Score**	**LOS**
2. Industrial Wy/Broad St (SR 227)	NB	2.01	B	3.70	D
	SB	2.33	B	3.50	C
	EB	2.73	C	2.96	C
	WB	2.98	C	3.46	C
5. Tank Farm Rd/S Higuera St	NB	2.38	B	2.09	B
	SB	1.89	B	2.07	B
	EB	1.71	B	1.68	B
	WB	3.40	C	3.44	C
6. Tank Farm Rd/Long St	NB	2.71	C	2.82	C
	SB	2.63	C	2.69	C
	EB	1.81	B	1.39	A
	WB	1.29	A	1.82	B
8. Tank Farm Rd/Mindbody Entrance	NB	1.14	A	1.60	B
	EB	1.95	B	2.02	B
	WB	3.65	D	3.47	C
9. Tank Farm Rd/Broad St (SR 227)	NB	2.58	C	2.94	C
	SB	3.20	C	3.19	C
	EB	2.37	B	2.90	C
	WB	3.25	C	2.84	C
11. Aero Dr/Broad St (SR 227)	NB	2.08	B	1.71	B
	SB	1.62	B	2.00	B
	EB	1.35	A	1.58	B
	WB	2.76	C	3.14	C

Notes: LOS Score = Level of Service based on HCM 6th Edition bicycle score

At the intersection of South Higuera Street/Tank farm Road, the eastbound bicycle service level is projected to be at LOS E; however, as part of the improvements to that intersection, a bike box would be installed in the westbound direction. Since the bicycle intersection service level methodology does not consider bike boxes, it would be reasonable that the service level would be better than projected.

Roadway Segment Levels of Service

For each of the study roadway segments, the automobile, pedestrian, bicycle, and transit service levels were analyzed. Copies of the Level of Service calculations are provided in Appendix E.

Automobile Operations Analysis

Under the cumulative scenario, several study segments are projected to operate at an unacceptable service level based on the percent of time spent following. The segment Levels of Service are summarized in Table 20.

Table 20 – Cumulative Peak Hour Roadway Segment Auto Levels of Service						
Study Roadway Segment		**Direction**	**AM Peak**		**PM Peak**	
			Speed	**BFFS/LOS**	**Speed**	**BFFS/LOS**
1.	Broad St (SR 227): Orcutt Rd to Tank Farm Rd					
	A. Orcutt Rd to Industrial Rd	NB	42.3	94/A	41.9	93/A
		SB	31.1	69/B	30.4	67/C
	B. Industrial Rd to Tank Farm Rd	NB	17.1	**37/E**	10.4	**23/E**
		SB	13.0	**28/F**	12.1	**26/F**
2.	Broad St (SR 227): Tank Farm Rd to City Limits					
	A. Tank Farm Rd to Aero Dr	NB	11.0	**24/F**	5.9	**13/F**
		SB	18.6	41/D	15.5	**34/E**
	B. Aero Dr to Buckley Rd	NB	34.8	75/B	29.3	63/C
		SB	31.1	67/B	18.0	**39/F**
3.	Tank Farm Rd: S Higuera St to Broad St (SR 227)					
	A. S Higuera St to Long St	EB	13.6	**30/F**	11.7	**25/F**
		WB	10.1	**22/F**	11.3	**25/F**
	B. Long St to Mindbody Entrance	EB	39.7	86/A	36.2	78/B
		WB	40.3	87/A	10.6	**23/F**
	C. Mindbody Entrance to Broad St	EB	10.8	**26/F**	11.8	**28/F**
		WB	33.3	71/B	22.1	47/D
4.	Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	39.4	97/A	37.6	93/A
		WB	28.0	65/C	25.7	60/C

Notes: BFFS = is the percent of "Base Free Flow Speed"; Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation

Pedestrian Analysis

In general, where there are pedestrian facilities, they operate at acceptable Levels of Service with the exception of Broad Street between Orcutt Road and Tank Farm Road in the northbound direction and between Industrial Road and Tank Farm Road in the southbound direction. Additionally, unacceptable operation is encountered during the morning peak hour in the westbound direction on Tank Farm Road between Broad Street and Orcutt Road.

The pedestrian Levels of Service are shown in Table 21.

Table 21 – Cumulative Peak Hour Roadway Segment Pedestrian Levels of Service

Study Roadway Segment	Direction	AM Peak		PM Peak	
		Score	LOS	Score	LOS
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd					
A. Orcutt Rd to Industrial Rd	NB	3.59	D	**4.25**	**E**
B. Industrial Rd to Tank Farm Rd	NB	**4.35**	**E**	**4.45**	**E**
	SB	3.97	D	**4.50**	**E**
2. Broad St (SR 227): Tank Farm Rd to City Limits					
A. Tank Farm Rd to Aero Dr	NB	3.33	C	3.46	C
	SB	3.63	D	3.42	C
3. Tank Farm Rd: S Higuera St to Broad St (SR 227)					
A. S Higuera St to Long St	EB	3.37	C	3.20	C
	WB	3.41	C	3.31	C
B. Mindbody Entrance to Broad St	EB	3.12	C	3.50	D
4. Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	3.56	D	4.20	D
	WB	**4.53**	**E**	3.93	D

Notes: Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation

Bicycle Analysis

Under the cumulative conditions, the bicycle facilities are expected to operate acceptably with the exception of the eastbound facilities on Tank Farm Road between the intersection of Broad Street and the City limits during the evening peak hour. These results are summarized in Table 22.

Table 22 – Cumulative Peak Hour Roadway Segment Bicycle Levels of Service

Study Roadway Segment	Direction	AM Peak		PM Peak	
		Score	LOS	Score	LOS
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd					
A. Orcutt Rd to Industrial Rd	NB	2.72	B	2.80	C
	SB	1.93	A	1.94	A
B. Industrial Rd to Tank Farm Rd	NB	2.47	B	2.69	B
	SB	2.21	B	2.29	B
2. Broad St (SR 227): Tank Farm Rd to City Limits					
A. Tank Farm Rd to Aero Dr	NB	1.86	A	2.06	B
	SB	1.94	A	2.04	B
B. Aero Dr to Buckley Rd	NB	1.24	A	1.17	A
	SB	1.27	A	1.41	A
3. Tank Farm Rd: S Higuera St to Broad St (SR 227)					
A. S Higuera St to Long St	EB	3.37	C	2.22	B
	WB	2.02	B	1.99	A
B. Long St to Mindbody Entrance	EB	3.19	C	3.13	C
	WB	2.97	C	3.27	C
C. Mindbody Entrance to Broad Street	EB	1.81	A	2.04	B
	WB	2.45	B	2.36	B
4. Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	3.56	D	**4.53**	**E**
	WB	4.20	D	3.93	D

Notes: Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation

Transit Analysis

For the purposes of the analysis, the existing transit routes were assumed to remain the same under the cumulative scenario. Given the limited service to the area, transit facilities are expected to continue operating at unacceptable service levels. The transit service levels for those roadways with bus stops are summarized in Table 23.

Table 23 – Cumulative Peak Hour Roadway Segment Transit Levels of Service					
Study Roadway Segment	**Direction**	**AM Peak**		**PM Peak**	
		Score	**LOS**	**Score**	**LOS**
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd					
A. Orcutt Rd to Industrial Rd	NB	**4.66**	**E**	**4.73**	**E**
	SB	-	-	-	-
B. Industrial Rd to Tank Farm Rd	NB	**5.43**	**F**	**5.48**	**F**
	SB	-	-	-	-
2. Broad St (SR 227): Tank Farm Rd to Aero Dr	NB	-	-	-	-
	SB	**5.01**	**F**	**5.06**	**F**
4. Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	-	-	-	-
	WB	**5.19**	**F**	**5.17**	**F**

Notes: Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation; directions shown without results have no bus stops, so no analysis was performed.

Project Description

The proposed project entails two hotels totaling 218 rooms to be located at 950 Aero Drive in the City of San Luis Obispo. The hotels would be constructed in two phases. The first of the hotels to be constructed would have 100 guest rooms and include guest amenities like dining, meeting space, fitness room, breakfast area and bar. The second hotel would consist of 118 rooms and, in addition to the guest amenities listed above (except for the bar), would also include a pool. For both hotels, the guest amenities would be for patrons only and not open to the public. The hotels would be accessed from a single driveway on Aero Drive and the project site would include a total of 218 parking spaces. The proposed project site plan is shown in Figure 4.

Trip Generation

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 10th Edition, 2017 for a Hotel (Land Use #310), as this description most closely matches the proposed project. No reduction is proposed for either "pass-by" trips or internal capture trips. Based on the nature of a hotel, the trips generated by the land use are specific to the location and would not be pulled from the existing traffic on nearby streets. Similarly, while there are facilities on the site that may keep guests on-site, like a gym, pool, or dining options, these types of facilities are common to hotels and therefore already incorporated into ITE's trip generation rates.

Based on application of these assumptions, the proposed two hotel locations are expected to generate an average of 1,822 trips per day, including 102 a.m. peak hour trips and 131 trips during the p.m. peak hour. These results are summarized in Table 24.

Table 24 – Trip Generation Summary											
Land Use	**Units**	**Daily**		**AM Peak Hour**				**PM Peak Hour**			
		Rate	**Trips**	**Rate**	**Trips**	**In**	**Out**	**Rate**	**Trips**	**In**	**Out**
Hotel	218 rooms	8.36	1,822	0.47	102	60	42	0.60	131	67	64

PROPOSED SITE PLAN

North

Not to Scale

Source: Arris Studio Architects, 5/19

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Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Figure 4 – Site Plan

Trip Distribution

The pattern used to allocate new project trips to the street network was determined based on the City-Wide Travel Demand Model and engineering judgment as well as local knowledge. Under the cumulative conditions, it is expected that trip distributions would generally be the same as with the existing network, though some shifts would be expected to use the planned new street connections. The distribution assumptions and resulting trips are shown Table 25. Project added volumes under the existing roadway geometry are shown in Figure 5 and the volumes under the cumulative scenario are shown in Figure 6.

Table 25 – Existing and Cumulative Trip Distribution Assumptions

To/From Route	Percentages		Trips	
	AM	PM	AM	PM
To/From Broad St north of Capitolio Wy	50%	42%	51	54
To/From US 101 north of Los Osos Valley Rd	7%	8%	7	10
To/From Los Osos Valley Rd west of US 101	5%	3%	5	4
To/From the south via US 101 and Los Osos Valley Rd*	8%	8%	8	10
To/From S Higuera St north of Tank Farm Rd	5%	5%	5	7
To/From Tank Farm Rd east of Board St	7%	10%	7	14
To/From Edna Rd south of Buckley Rd	18%	24%	19	32
Total	**100%**	**100%**	**102**	**131**

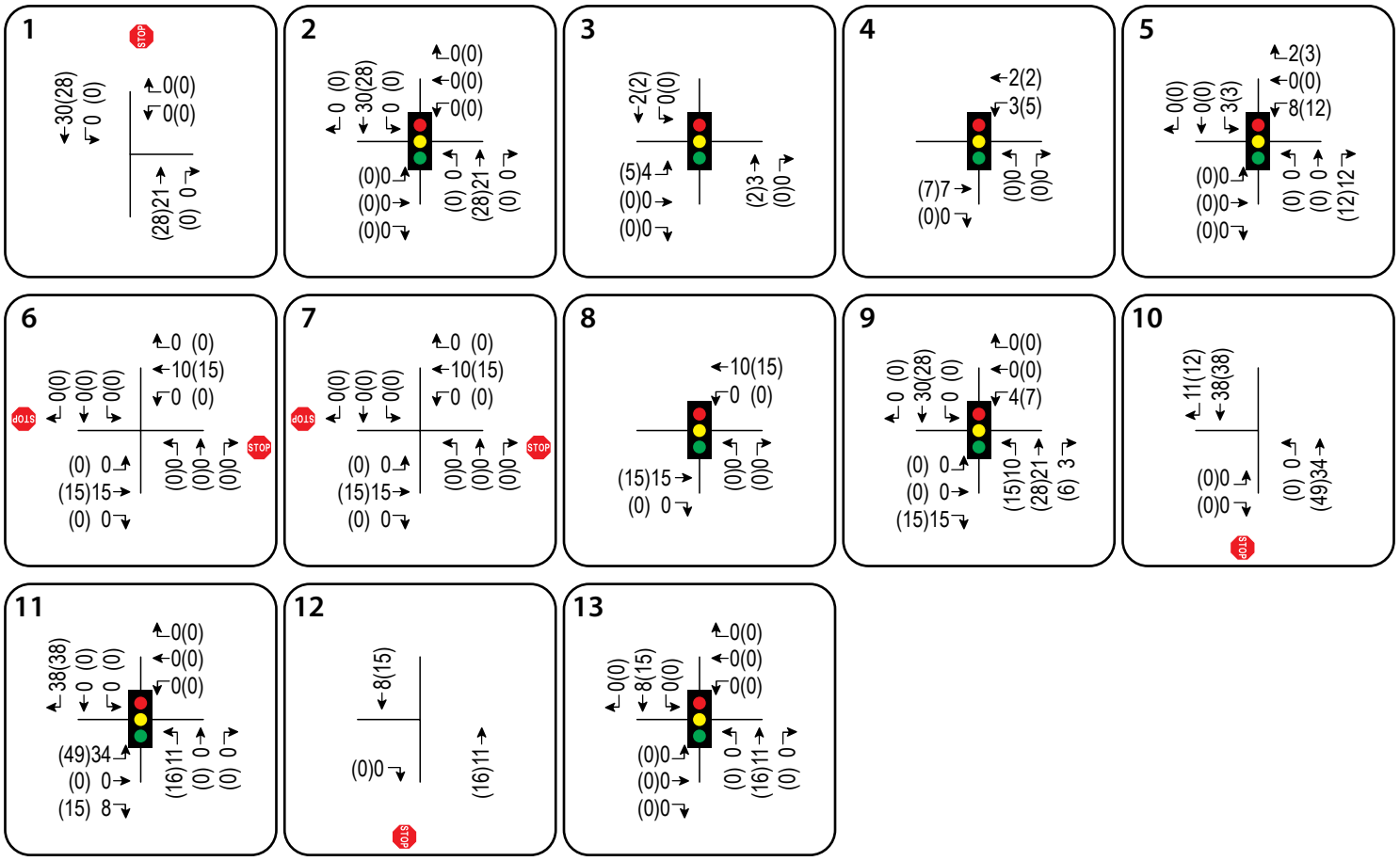
Note: * = Under the Cumulative conditions, with the Buckley Road extension to South Higuera Street, the trips would be routed on Buckley Road.

Intersection Operation

Existing plus Project Conditions

Automobile Operations Analysis

Upon the addition of project-related traffic to the Existing volumes, the study intersections are expected to continue operating acceptably if currently operating at LOS D or better, and at unacceptable service levels if operating at LOS E or F under existing volumes without the project. Project traffic volumes added to the existing volumes are shown in Figure 7. These results are summarized in Table 26.



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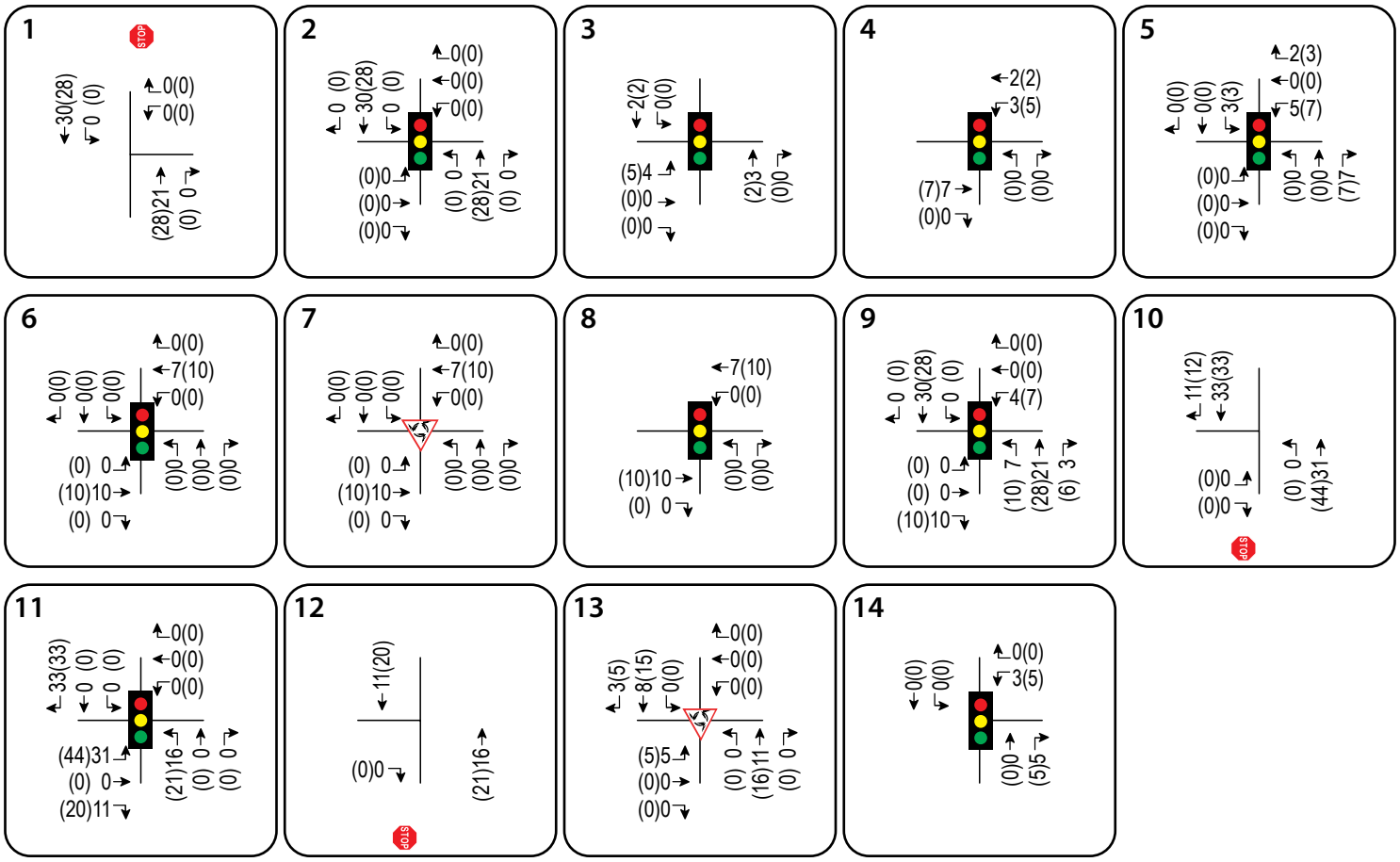
Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Figure 5 – Existing Project Traffic Volumes



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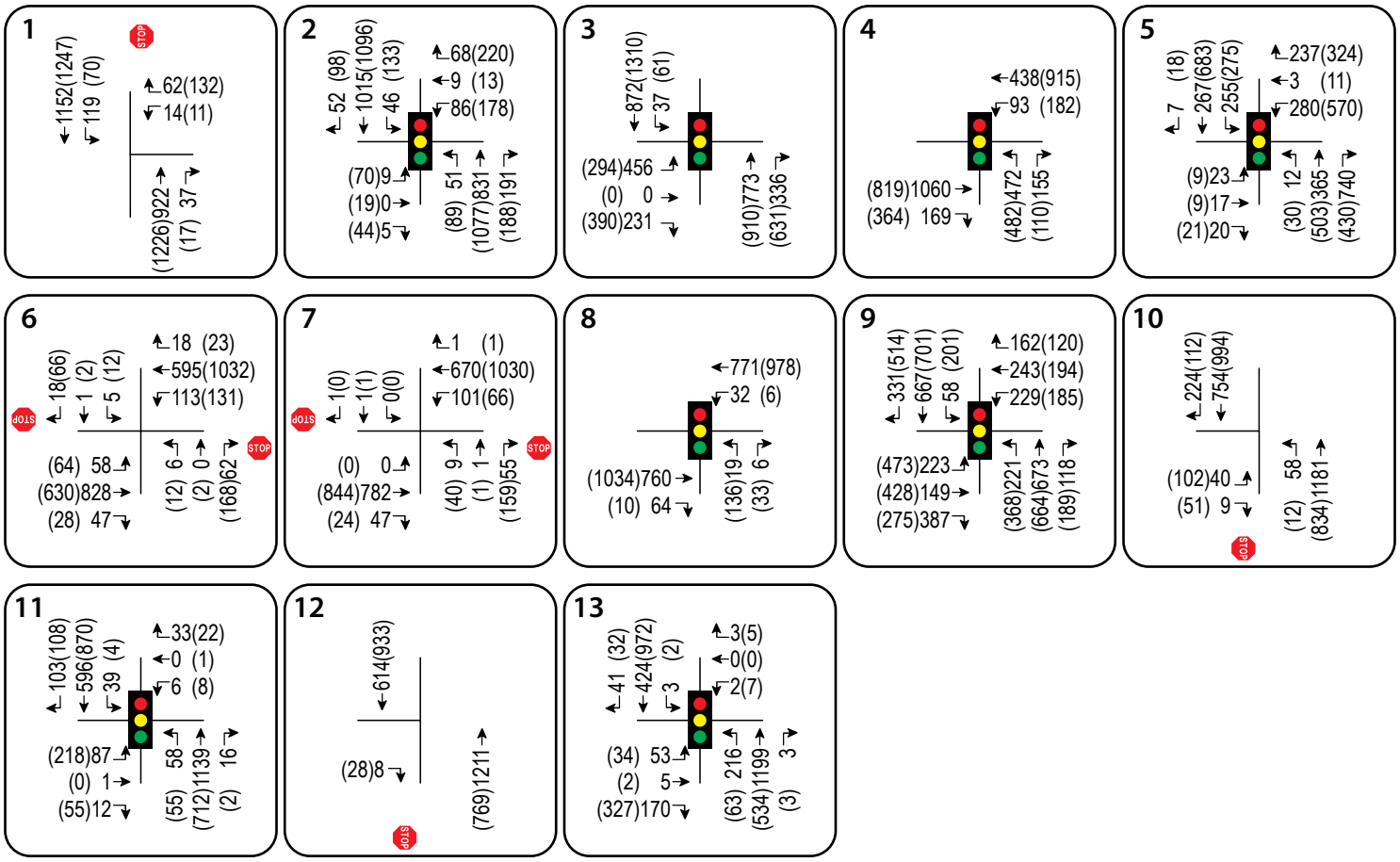
Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Figure 6 – Cumulative Project Traffic Volumes



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Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Figure 7 – Existing plus Project Traffic Volumes

Table 26 – Existing and Existing plus Project Peak Hour Intersection Auto Levels of Service

Study Intersection *Approach*	Existing Conditions				Existing plus Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	V/C	Delay/ LOS	V/C	LOS	V/C	Delay/ LOS	V/C	Delay/ LOS
1. Capitolio Wy/Broad St (SR 227)	0.20	1.3/A	0.15	1.8/A	0.20	1.3/A	0.16	1.8/A
WB (Capitolio Wy) Approach	*0.16*	*17.1/C*	*0.45*	*22.8/C*	*0.17*	*17.4/C*	*0.46*	*23.7/C*
2. Industrial Wy/Broad St (SR 227)	0.78	19.2/B	0.96	30.8/C	0.78	19.4/B	0.97	32.3/C
3. Los Osos Valley Rd/US 101 S Ramps	0.93	15.5/B	**1.06**	17.0/B	0.93	15.6/B	**1.05**	16.6/B
4. Los Osos Valley Rd/US 101 N Ramps	0.67	23.8/C	0.70	16.6/B	0.67	24.0/C	0.71	16.7/B
5. Tank Farm Rd/S Higuera St	0.93	31.5/C	0.94	31.5/C	0.95	32.8/C	0.95	44.0/D
6. Tank Farm Rd/Long St	0.16	2.5/A	0.16	16.3/C	0.16	2.5/A	0.16	17.4/C
NB (Long St) Approach	*0.30*	*21.3/C*	*0.74*	***45.5/E***	*0.31*	*21.6/C*	*0.76*	***50.3/F***
SB (Long St) Approach	*0.14*	*26.0/D*	***1.15***	*****/F***	*0.14*	*26.7/D*	***1.19***	*****/F***
7. Tank Farm Rd/Santa Fe Rd	0.14	2.1/A	0.10	18.8/C	0.14	2.1/A	0.10	20.5/C
NB (Santa Fe Rd) Approach	*0.23*	*28.2/D*	***1.85***	*****/F***	*0.24*	*29.2/D*	***2.00***	*****/F***
SB (Santa Fe Rd) Approach	*0.07*	***38.0/E***	*0.10*	***102/F***	*0.07*	***39.3/E***	*0.10*	***108/F***
8. Tank Farm Rd/Mindbody Entrance	0.83	7.3/A	0.85	13.4/B	0.83	7.3/A	0.86	13.7/B
9. Tank Farm Rd/Broad St (SR 227)	0.91	48.0/D	0.98	37.3/D	0.93	50.7/D	**1.02**	40.4/D
10. Aerovista Pl/Broad St (SR 227)	0.10	1.2/A	0.03	3.7/A	0.10	1.2/A	0.03	4.0/A
EB (Aerovista Pl) Approach	*0.33*	*28.2/D*	*0.68*	***41.6/E***	*0.35*	*30.2/D*	*0.73*	***47.2/E***
11. Aero Dr/Broad St (SR 227)	0.78	15.2/B	0.81	19.3/B	0.77	17.7/B	0.85	23.6/C
12. Airport Dr/Broad St (SR 227)	0.00	0.1/A	0.00	0.7/A	0.00	0.1/A	0.00	0.7/A
EB (Airport Dr) Approach	*0.03*	*14.0/B*	*0.23*	*21.0/C*	*0.03*	*14.1/B*	*0.23*	*21.5/C*
13. Buckley Rd/Edna Rd (SR 227)	0.90	27.7/C	0.94	**106/F**	0.94	32.7/C	0.94	**109/F**

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics;* ** = delay greater than 120 seconds; **Bold** text = deficient operation;

It should be noted that with the addition of project-related traffic volumes, average delay at the intersection of Los Osos Valley Road/US 101 South Ramps is projected to decrease during the p.m. peak hour. While this is counter-intuitive, this condition occurs when a project adds trips to movements that are currently underutilized or have delays that are below the intersection average, resulting in a better balance between approaches and lower overall average delay. The conclusion could incorrectly be drawn that the project actually improves operation based on this data alone; however, it is more appropriate to conclude that the project trips are expected to make use of excess capacity, so drivers will experience little, if any, change in conditions as a result of the project.

The approaches to the intersection of Tank Farm Road and Long Street would continue to operate unacceptably overall; however, the northbound approach would deteriorate from LOS E to F, and based on the peak hour volumes, a signal would be warranted which is considered an impact based on the City's standards. Because the intersection will be signalized as part of a new development in the area and that improvement would be complete by the time the proposed project is occupied, the intersection's operation is expected to be acceptable at the time project trips are added.

Similarly, at the intersection of Tank Farm Road/Santa Fe Road, the V/C for the northbound side-street movement would increase by more than 0.01 and the approach is expected to continue to operate at LOS F with the project. While a roundabout is planned for the intersection, to address the project-considered impact in the short-term, the striped median should be restriped to provide an acceleration lane.

With the addition of project-generated trips to the existing volumes, the V/C for the northbound through/right-turn lane at Tank Farm Road/Broad Street is expected to increase from 0.98 to 1.02. Because the intersection operates at LOS D overall, operation with the addition of project trips to the existing volumes would be considered acceptable.

While the eastbound Aerovista Place approach to Broad Street is expected to operate at LOS E with and without the project, the signalized intersection of Aero Drive is nearby if the delay is intolerable and individual drivers wish to change their route to avoid this approach. However, as the project causes the V/C ratio to increase more than 0.01, the eastbound approach would continue to operate at LOS E, and the peak hour signal warrant is met, the project is considered to have an adverse impact. Since there is an easily accessible signalized intersection from this area for drivers to make an eastbound left turn on to Broad Street, it is recommended that left turns be restricted at this intersection during the peak hours.

The intersection of Buckley Road/Edna Road operates at an unacceptable LOS F with and without the project; however, since the V/C ratio does not change as a result of adding project-generated traffic, the project is considered to have an acceptable impact based on the City's standards. It should be noted that this intersection is part of a regional route that is known to operate at unacceptable service levels. As discussed in the *State Route 227 Operation Study*, Kimley-Horn, 2016, installation of roundabouts is recommended for this intersection, as well as Farmhouse Lane, Crescent Drive, and Los Ranchos. The study sets forth short to long-term goals for the implementation of the improvements, as well as the general cost estimates of the improvements.

Finding – All of the study intersections, with the exception of the intersection of Buckley Road/Edna Road, are expected to operate acceptably overall with the addition of project traffic. While the addition of the project trips causes an increase in delay at the Buckley Road/Edna Road intersection, the project would be considered to have an acceptable impact since the highest V/C ratio at the intersection would not increase. While expected to operate acceptably overall, the two-way stop-controlled intersections of Tank Farm Road with Long Street and Santa Fe Road as well as Aerovista Place with Broad Street would be expected to experience an increase in the V/C of more than 0.01 for a movement that operates unacceptably, and a signal is warranted.

Pedestrian Facility Analysis

Under existing conditions with the addition of the project, the pedestrian facilities are expected to continue to operate at the same LOS as without the project. Given that the crossings that operate at unacceptable service levels are near locations that operate acceptably, no impact is identified. The results of the pedestrian analysis are summarized in Table 27.

Table 27 – Existing and Existing plus Project Peak Hour Intersection Pedestrian Levels of Service									
Study Intersection	**Direction**	**Existing Conditions**				**Existing plus Project**			
		AM Peak		**PM Peak**		**AM Peak**		**PM Peak**	
		Score	**LOS**	**Score**	**LOS**	**Score**	**LOS**	**Delay**	**LOS**
1. Capitolio Wy/Broad St (SR 227)	NB	**	**F**	**	**F**	**	**F**	**	**F**
	SB	**	**F**	**	**F**	**	**F**	**	**F**
2. Industrial Wy/Broad St (SR 227)	NB	3.19	C	3.31	C	3.20	C	3.32	C
	SB	3.07	C	3.18	C	3.08	C	3.19	C
	EB	2.01	B	2.25	C	2.01	B	2.09	C
	WB	2.27	B	2.53	B	2.27	B	2.53	B
5. Tank Farm Rd/S Higuera St	NB	3.27	C	3.57	D	3.28	C	3.58	D
	SB	2.68	C	2.93	C	2.69	C	2.93	C
	EB	2.00	B	2.04	B	2.00	B	2.04	B
	WB	3.02	C	3.32	C	3.03	C	3.33	C
6. Tank Farm Rd/Long St	EB	**	**F**	**	**F**	**	**F**	**	**F**
	WB	**	**F**	**	**F**	**	**F**	**	**F**
7. Tank Farm Rd/Santa Fe Rd	EB	**	**F**	**	**F**	**	**F**	**	**F**
	WB	**	**F**	**	**F**	**	**F**	**	**F**
8. Tank Farm Rd/Mindbody Entrance	NB	1.99	B	2.02	B	1.99	B	2.02	B
	EB	2.70	C	2.99	C	2.71	C	3.06	C
	WB	2.69	C	3.05	C	2.70	C	3.00	C
9. Tank Farm Rd/Broad St (SR 227)	NB	3.14	C	3.18	C	3.17	C	3.20	C
	SB	3.27	C	3.46	C	3.29	C	3.48	C
	EB	3.12	C	3.17	C	3.13	C	3.18	C
	WB	2.69	C	2.74	C	2.69	C	2.74	C
10. Aerovista Pl/Broad St (SR 227)	NB	**	**F**	**	**F**	**	**F**	**	**F**
	SB	**	**F**	**	**F**	**	**F**	**	**F**
11. Aero Dr/Broad St (SR 227)	NB	2.91	C	2.89	C	2.92	C	2.90	C
	SB	2.98	C	2.98	C	3.01	C	3.01	C
	EB	2.06	B	2.11	B	2.08	B	2.15	B
	WB	2.01	B	1.98	B	2.01	B	1.98	B
12. Airport Dr/Broad St (SR 227)	NB	**	**F**	**	**F**	**	**F**	**	**F**
	SB	**	**F**	**	**F**	**	**F**	**	**F**

Notes: LOS Score = Level of Service based on HCM 6th Edition pedestrian score. For TWSC intersections, LOS based on delay in seconds; ** = delay greater than 200 seconds; **Bold** text = deficient operation

Finding – The intersection pedestrian facilities that operate acceptably without the project would continue to do so with the addition of the project; similarly, the intersections that operate unacceptably without the project would still operate unacceptably with the project. Since the intersections that operate unacceptably are two-way

stop-controlled intersections located near study intersections with signalized crossings and acceptable service, no impact is identified.

Bicycle Facility Analysis

With the addition of the project to the existing conditions, the bicycle service level is expected to continue to operate at the same acceptable levels. The results of the bicycle analysis for those segments that were evaluated are summarized in Table 28.

Table 28 – Existing and Existing plus Project Peak Hour Intersection Bicycle Levels of Service

Study Intersection	Direction	Existing Conditions				Existing plus Project			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Score	LOS	Score	LOS	Score	LOS	Score	LOS
2. Industrial Wy/Broad St (SR 227)	NB	1.77	B	3.29	C	1.79	B	3.31	C
	SB	1.95	B	3.50	D	1.96	B	3.35	C
	EB	2.72	C	2.97	C	2.72	C	2.97	C
	WB	3.07	C	3.47	C	3.07	C	3.50	C
5. Tank Farm Rd/S Higuera St	NB	2.25	B	1.88	B	2.26	B	1.89	B
	SB	1.56	B	1.94	B	1.56	B	1.94	B
	EB	1.55	B	1.49	A	1.55	B	1.49	A
	WB	3.47	C	4.14	D	3.49	C	4.17	D
8. Tank Farm Rd/Mindbody Entrance	NB	1.08	A	1.40	A	1.08	A	1.40	A
	EB	1.53	B	1.82	B	1.55	B	1.83	B
	WB	3.76	D	4.07	D	3.78	D	4.10	D
9. Tank Farm Rd/Broad St (SR 227)	NB	2.28	B	2.58	C	2.31	B	2.62	C
	SB	2.85	C	3.05	C	2.88	C	3.07	C
	EB	2.29	B	2.62	C	2.30	B	2.64	C
	WB	3.05	C	2.68	C	3.06	C	2.69	C
11. Aero Dr/Broad St (SR 227)	NB	1.86	B	1.55	B	1.87	B	1.56	B
	SB	1.50	B	1.70	B	1.54	B	1.73	B
	EB	1.28	A	1.65	B	1.36	A	1.79	B
	WB	2.63	C	2.57	C	2.63	C	2.57	C

Notes: LOS Score = Level of Service based on HCM 6th Edition bicycle score

Finding – The study intersections that have bicycle facilities are expected to continue operating acceptably at the same Levels of Service upon the addition of project-generated traffic.

Queuing

Under the existing conditions with and without the project, the projected 95th percentile queues in left-turn and right-turn pockets at the study intersections were determined using Synchro. Summarized in Table 29 are the predicted queue lengths. Copies of the Synchro output for the signalized intersections are in Appendix F. Queuing for the unsignalized intersections are shown in Appendix C.

Table 29 – Existing 95th Percentile Queues Exceeding Available Storage

Study Intersection Approach	Available Storage	95th Percentile Queues			
		AM Peak Hour		PM Peak Hour	
		E	E+P	E	E+P
1. Capitolio Wy/Broad St					
WB Right-Turn	100	15	15	58	60
SB Left-Turn	200	18	18	13	15
2. Industrial Wy/Broad St					
EB Right-Turn	100	0	0	0	0
WB Right-Turn	180	21	21	50	50
NB Left-Turn	150*	96	96	113	113
NB Right-Turn	175	56	57	97	99
SB Left-Turn	150*	64	64	**250**	**250**
SB Right-Turn	440	13	13	36	39
3. LOVR/US 101 S Ramps					
EB Right-Turn	120	6	6	**195**	**195**
WB Left-Turn	225	55	55	73	73
SB Thru/Left-Turn	190	**446**	**451**	**242**	**247**
4. LOVR/US 101 N Ramps					
EB Right-Turn	135	13	13	17	17
WB Left-Turn	180	117	119	159	173
NB Left-Turn	615	251	251	202	203
5. Tank Farm Rd/S Higuera St					
WB Right-Turn	250	60	60	70	71
NB Left-Turn	140*	28	28	54	54
NB Right-Turn	100	**191**	**220**	70	74
SB Left-Turn	165*	**252**	**255**	**338**	**342**
6. Tank Farm Rd/Long St					
EB Left-Turn	225	5	5	10	10
WB Left-Turn	175	15	15	15	15
7. Tank Farm Rd/Santa Fe Rd					
WB Left-Turn	115	13	13	8	8
NB Right-Turn	50	18	18	**105**	**108**
8. Tank Farm Rd/Mindbody					
WB Left-Turn	210	32	32	15	15
NB Right-Turn	125	7	8	17	18

Table 29 – Existing 95th Percentile Queues Exceeding Available Storage

Study Intersection Approach	Available Storage	95th Percentile Queues			
		AM Peak Hour		PM Peak Hour	
		E	E+P	E	E+P
9. Tank Farm Rd/Broad St					
EB Left-Turn	300	137	137	181	181
EB Right-Turn	100	**308**	**335**	58	60
WB Left-Turn	150*	**328**	**338**	**205**	**217**
NB Left-Turn	250	173	185	152	159
SB Left-Turn	250*	115	115	228	228
SB Right-Turn	300	124	125	299	**301**
10. Aerovista Pl/Broad St					
EB Right-Turn	50	3	3	13	15
NB Left-Turn	200*	8	8	3	3
11. Aero Dr/Broad St					
EB Right-Turn	75	0	0	0	6
NB Left-Turn	200*	73	88	71	96
SB Left-Turn	200*	66	68	15	15
12. Airport Dr/Broad St					
EB Right-Turn	-	3	3	20	23
13. Buckley Rd/Edna Rd					
EB Right-Turn	145	30	30	**229**	**233**
NB Left-Turn	360	**428**	**428**	124	124
SB Left-Turn	400	17	17	12	12
SB Right-Turn	400	5	5	9	9
14. Buckley Rd/S Higuera St					
WB Left-Turn	150	-	-	-	-
NB Right-Turn	200	-	-	-	-
SB Left-Turn	150	-	-	-	-

Notes: All distances are measured in feet; E = existing conditions; E+P = existing plus project conditions; **Bold** text = queue length exceeds available storage; * = Extends into a two-way left-turn lane; LOVR = Los Osos Valley Road; Shaded Cell = Queuing Adverse Impact

At the intersection of Industrial Way/Broad Street, the p.m. peak the southbound left-turn lane storage is expected to be exceeded with and without the project. With the addition of the project, the queue length is not expected to increase by more than one vehicle length. It is further noted that the storage lane has additional stacking space as vehicles can queue into the two-way left-turn lane.

For the Los Osos Valley Road/US 101 South ramps intersection, the eastbound right-turn (p.m. peak) and the southbound approach (both peaks) are projected to exceed the available storage. For the eastbound right-turn lane on Los Osos Valley Road, with the project added volumes, the queue length is expected to remain the same. For the off-ramp, the 95th percentile queue is expected to increase by six feet or less. Since that leg of the

intersection is under the jurisdiction of Caltrans, the project is considered to result in a queuing impact if it extends past the gore point. The distance between the stop bar for the intersection and the gore point is about 800 feet so the queue is within the acceptable stacking length.

At the intersection of Tank Farm Road and South Higuera Street, the queues are expected to exceed the available storage length in the northbound right-turn lane during the morning peak and in the southbound left-turn lane during both peaks; these queues would increase as a result of the project, though by less than 25 feet except under Existing plus Project a.m. peak hour conditions for the northbound right-turn. As part of the nearby projects of Avila Ranch and San Luis Ranch, the intersection would need to be improved with a second southbound left-turn lane and an extended northbound right-turn lane. With this improvement, the timing would be updated to reflect the additional capacity for that movement. However, since these improvements are not guaranteed to be implemented by the occupancy of the hotel, an interim improvement would be to optimize the signal timing. Under the existing conditions with the project and optimized signal timing, the northbound right-turn queue during the morning peak would be accommodated in the storage lane at an expected length of 50 feet.

The northbound right-turn flare lane is expected to be exceeded at the intersection of Tank Farm Road/Santa Fe Road. While a roundabout is planned at this intersection in the long-term which would accommodate northbound queues, it is recommended that median on the west leg be restriped into an acceleration lane.

At the intersection of Tank Farm Road/Broad Street, the eastbound right-turn, westbound left-turn, and southbound right-turn lane storages are expected to be exceeded. With the addition of the project trips, the eastbound right-turn lane queue would increase by more than one vehicle length and the addition of the project trips would cause the southbound right-turn storage lane to be exceeded. While there are currently plans to add a southbound left-turn lane, new northbound right-turn lane, add a second westbound through lane, and prepare time of day plans, the queueing impact for the eastbound right-turn and southbound right-turn is project-specific and would need to be mitigated. The project's specific adverse queuing impact would be considered mitigated under the existing conditions if the westbound right-turn lane were converted to a shared through/right-movement lane and the signal timing splits optimized. With the additional capacity at the intersection and the optimized signal timing splits, while the eastbound right-turn lane queue would still exceed the available storage during the morning peak hour, the queue length with the addition of the project volumes and these mitigation improvements would increase by less than one car length. As such, the improvement would mitigate the project-specific adverse impact under the existing conditions. The mitigated queue lengths and resulting service level are summarized in Appendix G.

At Buckley Road/Edna Road, queues in the eastbound right-turn lane and the northbound left-turn lane are expected to exceed the available storage. Since a roundabout is planned at this intersection, the queues would become a non-issue.

Finding – The addition of the project trips to the study intersections under the existing conditions would cause the 95th percentile queues to exceed or exacerbate queues that exceed the available storage space at several intersections.

Intersection Operations Recommendations

Recommendation – To address the project-specific adverse impact under the existing conditions, the following actions are recommended:

- Tank Farm Road/South Higuera Street – Since the long-term improvements required to be built as part of other projects are not guaranteed to be completed before the hotel is occupied, an interim improvement would be to optimize the signal timing.
- Tank Farm Road/Santa Fe Road – to address the project specific adverse impact at the intersection, the City should consider restriping the existing median into an acceleration lane.

- Tank Farm Road/Broad Street – To address the project-specific impact, the westbound right-turn lane should be converted to a shared through/right-turn lane. This improvement is part planned improvements at the intersection, but a fee that covers this specific change should be allocated to the project.
- Aerovista Place/Broad Street – To address the project specific adverse impact at the intersection, the City should consider restricting left-turn movements from the stop-controlled Aerovista Place approach during the peak periods.

Cumulative plus Project Conditions

Automobile Operations Analysis

Upon the addition of project-related traffic to the Cumulative volumes, the study intersections are expected to operate at the same service levels as without the project, with exception of Tank Farm Road/South Higuera Street, Tank Farm Road/Broad Street, and Aero Drive/Broad Street. Consideration was given to the signal timing for the Aero Drive intersection and it was updated to reflect the increase in volumes on the minor approach; however, even with optimized splits, the project would cause the overall intersection delay to fall to an unacceptable Level of Service. These results are summarized in Table 26. Project traffic volumes added to the cumulative volumes are shown in Figure 8. The Cumulative plus Project operating conditions are summarized in Table 30.

Table 30 – Cumulative and Cumulative plus Project Peak Hour Intersection Auto Levels of Service

Study Intersection ***Approach***	**Cumulative Conditions**				**Cumulative plus Project**			
	AM Peak		**PM Peak**		**AM Peak**		**PM Peak**	
	V/C	**Delay/ LOS**	**V/C**	**LOS**	**V/C**	**Delay/ LOS**	**V/C**	**Delay/ LOS**
1. Capitolio Wy/Broad St (SR 227)	0.22	15.4/C	0.26	7.1/A	0.23	16.2/C	0.27	7.4/A
WB (Capitolio Wy) Approach	***1.35***	*****/F***	***1.08***	***100/F***	***1.39***	*****/F***	***1.11***	***105/F***
2. Industrial Wy/Broad St (SR 227)	0.84	22.2/C	**1.02**	45.0/D	0.85	22.6/C	**1.04**	47.5/D
3. Los Osos Valley Rd/101S Ramps	0.92	15.1/B	**1.08**	18.9/B	0.92	15.2/B	**1.07**	18.6/B
4. Los Osos Valley Rd/101N Ramps	0.66	23.7/C	0.70	16.3/B	0.67	23.9/C	0.70	16.5/B
5. Tank Farm Rd/S Higuera St	**1.05**	39.7/D	0.88	42.7/D	**1.06**	40.8/D	0.89	43.0/D
6. Tank Farm Rd/Long St	0.81	18.9/B	0.86	25.6/C	0.81	19.1/B	0.87	25.9/C
7. Tank Farm Rd/Santa Fe Rd	0.64	10.3/B	0.61	10.8/B	0.64	10.4/B	0.62	10.9/B
8. Tank Farm Rd/Mindbody Entrance	0.97	17.7/B	**1.03**	32.2/C	0.97	17.7/B	**1.03**	32.2/C
9. Tank Farm Rd/Broad St (SR 227)	**1.27**	**70.0/E**	0.90	36.1/D	**1.27**	**71.6/E**	0.90	37.8/D
10. Aerovista Pl/Broad St (SR 227)	0.16	1.2/A	0.19	7.6/A	0.17	1.2/A	0.20	8.3/A
EB (Aerovista Pl) Approach	*0.30*	*27.9/D*	***1.06***	*****/F***	*0.31*	*29.5/D*	***1.12***	*****/F***
11. Aero Dr/Broad St (SR 227)	0.79	21.8/C	**1.12**	43.3/D	0.80	24.2/C	**1.12**	45.7/D
12. Airport Dr/Broad St (SR 227)	0.00	0.1/A	0.00	0.3/A	0.00	0.1/A	0.00	0.3/A
EB (Airport Dr) Approach	*0.02*	*15.3/C*	*0.13*	*22.8/C*	*0.02*	*15.5/C*	*0.13*	*23.4/C*
13. Buckley Rd/Edna Rd (SR 227)	0.70	10.1/B	0.43	8.4/A	0.71	10.3/B	0.44	8.5/A
14. Buckley Rd/S Higuera St	0.76	9.3/A	0.79	15.6/B	0.76	9.3/A	0.79	15.6/B

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics;* ** = delay greater than 120 seconds; **Bold** text = deficient operation

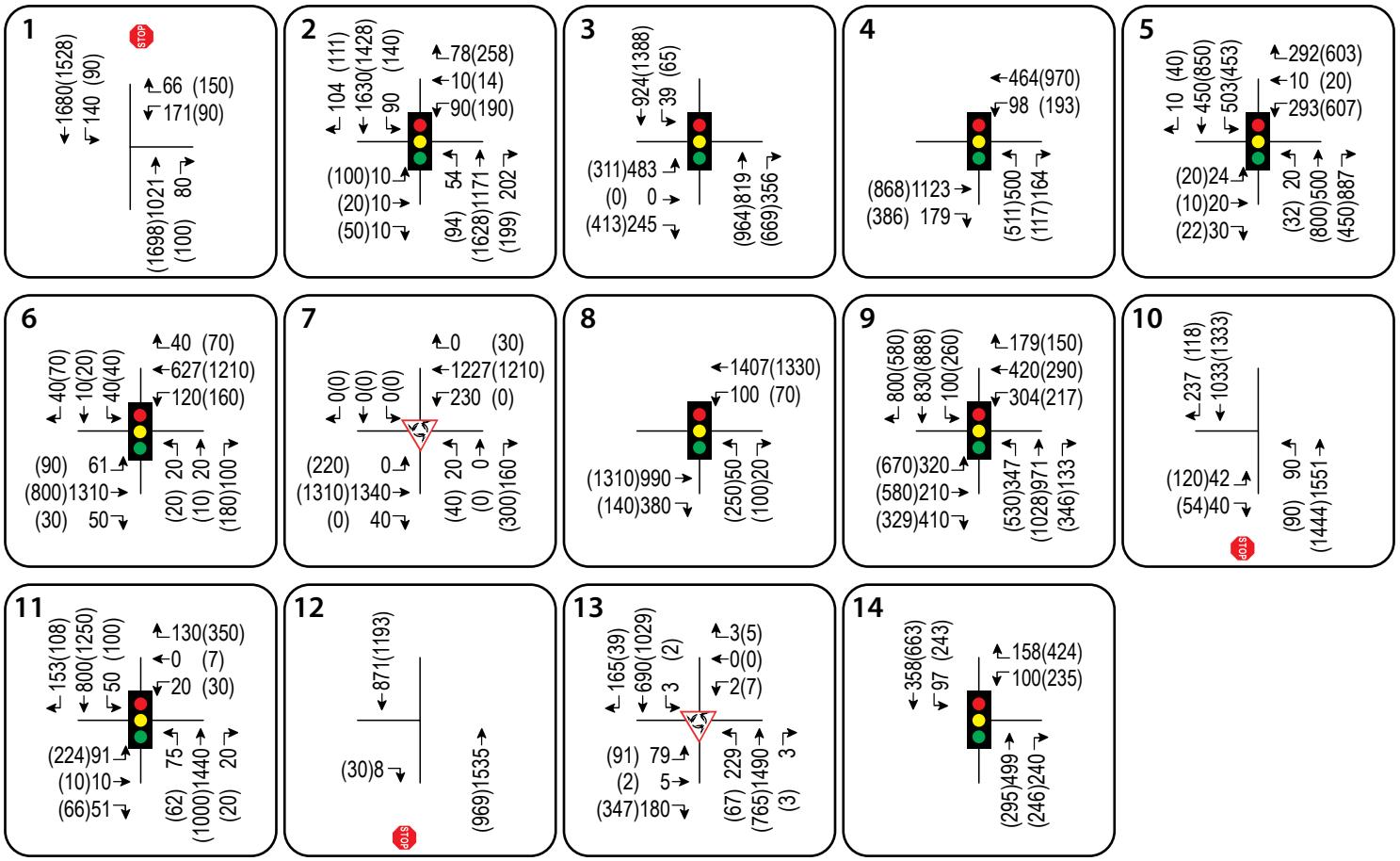

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Figure 8 – Cumulative plus Project Traffic Volumes

Based on the City's standards, the addition of the project to the cumulative volumes is considered to have an impact at the intersection of Capitolio Way/Broad Street and Aerovista Place/Broad Street. While the project is considered to have an adverse cumulatively considered impact at the intersections of Capitolio Way/Broad Street and Broad Street/Aerovista Place because the minor approaches operate at unacceptable service levels, increase the V/C ratio by more than 0.01, and a peak hour signal warrant is met, the intersections operate acceptably overall. With the planned signalization of the Prado Road/Broad Street intersection nearby, drivers would likely reroute to that intersection to access Broad Street. Similarly, this would occur at the Aerovista Lane intersection though with the left-turn movement restricted during the peak periods, there would be no impact.

Based on the City's standards, the following intersections are considered to operate unacceptably, though no project impact was identified:

- The V/C ratio for the northbound through movement at the intersection of Industrial Way/Broad Street intersection is greater than one during the p.m. peak hour and with the addition of the project volumes the v/c increase by 0.02; however, the intersection operates acceptably overall based on delay.
- During the p.m. peak hour, the southbound right-turn movement at Los Osos Valley Road/US 101 South Ramps intersection has a V/C ratio of more than one; however, the intersection is expected to operate at an acceptable LOS B overall.
- With and without the project, the westbound through movement at the intersection of Tank Farm Road/Mindbody entrance has a v/c ratio of more than one during the evening peak hour.
- During the p.m. peak hour, the westbound movement is expected to operate with a V/C of more than one.

Finding – The project would have a cumulatively considerable adverse vehicular intersection impact at the stop-controlled intersections of Broad Street with Capitolio Way and Aerovista Lane based on the City's standards.

Pedestrian Facility Analysis

Under the cumulative scenario, with the addition of the project trips, the pedestrian facilities at the study intersections are expected to operate at the same service levels as without the project. The two-way stop-controlled intersections of Capitolio Way/Broad Street, Aerovista Place/Broad Street, and Airport Drive/Broad Street would operate at unacceptable service levels. Since each of these crossings have a signalized crossing that operated acceptably nearby, no deficiencies are reported. As noted previously, the intersections not within the City's jurisdiction were not reviewed based on direction from the City. The results of the pedestrian analysis are summarized in Table 31.

Table 31 – Cumulative and Cumulative plus Project Peak Hour Intersection Pedestrian Levels of Service

Study Intersection	Direction	Cumulative Conditions				Cumulative plus Project			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Score	LOS	Score	LOS	Score	LOS	Delay	LOS
1. Capitolio Wy/Broad St (SR 227)	NB	**	F	**	F	**	F	**	F
	SB	**	F	**	F	**	F	**	F
2. Industrial Wy/Broad St (SR 227)	NB	3.34	C	3.47	C	3.36	C	3.49	C
	SB	3.24	C	3.35	C	3.26	C	3.36	C
	EB	2.02	B	2.08	B	2.02	B	2.08	B
	WB	2.26	B	2.51	C	2.26	B	2.51	C

Table 31 – Cumulative and Cumulative plus Project Peak Hour Intersection Pedestrian Levels of Service									
Study Intersection	**Direction**	**Cumulative Conditions**				**Cumulative plus Project**			
		AM Peak		**PM Peak**		**AM Peak**		**PM Peak**	
		Score	**LOS**	**Score**	**LOS**	**Score**	**LOS**	**Delay**	**LOS**
5. Tank Farm Rd/S Higuera St	NB	3.34	C	3.63	D	3.35	C	3.64	D
	SB	2.90	C	3.15	C	2.90	C	3.15	C
	EB	1.99	B	2.04	B	1.99	B	2.04	B
	WB	3.07	C	3.44	C	3.08	C	3.45	C
6. Tank Farm Rd/Long St	NB	1.85	B	1.89	B	1.85	B	1.89	B
	SB	1.81	B	1.84	B	1.81	B	1.84	B
	EB	2.92	C	2.95	C	2.93	C	2.95	C
	WB	2.92	C	3.02	C	2.96	C	3.02	C
8. Tank Farm Rd/Mindbody Entrance	NB	2.10	B	2.10	B	2.10	B	2.10	B
	EB	3.17	C	3.29	C	3.18	C	3.30	C
	WB	2.95	C	3.15	C	2.96	C	3.16	C
9. Tank Farm Rd/Broad St (SR 227)	NB	3.28	C	3.35	C	3.29	C	3.37	C
	SB	3.48	C	3.62	D	3.49	C	3.64	D
	EB	3.26	C	3.26	C	3.27	C	3.27	C
	WB	2.83	C	2.90	C	2.83	C	2.90	C
10. Aerovista Pl/Broad St (SR 227)	NB	**	**F**	**	**F**	**	**F**	**	**F**
	SB	**	**F**	**	**F**	**	**F**	**	**F**
11. Aero Dr/Broad St (SR 227)	NB	3.03	C	3.02	C	3.04	C	3.03	C
	SB	3.12	C	3.21	C	3.16	C	3.24	C
	EB	2.08	B	2.08	B	2.11	B	2.12	B
	WB	2.03	B	2.09	B	2.03	B	2.09	B
12. Airport Dr/Broad St (SR 227)	NB	**	**F**	**	**F**	**	**F**	**	**F**
	SB	**	**F**	**	**F**	**	**F**	**	**F**

Notes: LOS Score = Level of Service based on HCM 6th Edition pedestrian score. For TWSC intersections, LOS based on delay in seconds; ** = delay greater than 200 seconds; **Bold** text = deficient operation

Finding – The study intersections will continue operating acceptably with project traffic added, at the same Levels of Service as without it. At the two-way stop-controlled intersections, the service level is unacceptable with and without the project but since there are acceptable pedestrian facilities at nearby intersections, the impact is considered acceptable.

Bicycle Facility Analysis

Under the cumulative conditions, with the addition of the project volumes and the Tank Farm Road improvements expected to be complete under the cumulative conditions, the intersections are expected to operate at an unacceptable service level. The results of the bicycle analysis are summarized in Table 32.

Table 32 – Cumulative and Cumulative plus Project Peak Hour Intersection Bicycle Levels of Service									
Study Intersection	**Direction**	**Cumulative Conditions**				**Cumulative plus Project**			
		AM Peak		**PM Peak**		**AM Peak**		**PM Peak**	
		Score	**LOS**	**Score**	**LOS**	**Score**	**LOS**	**Score**	**LOS**
2. Industrial Wy/Broad St (SR 227)	NB	2.01	B	3.70	D	2.02	B	3.72	D
	SB	2.33	B	3.50	C	2.35	B	3.52	D
	EB	2.73	C	2.96	C	2.73	C	2.96	C
	WB	2.98	C	3.46	C	2.89	C	3.45	C
5. Tank Farm Rd/S Higuera St	NB	2.38	B	2.09	B	2.39	B	2.10	B
	SB	1.89	B	2.07	B	1.89	B	2.07	B
	EB	1.71	B	1.68	B	1.71	B	1.68	B
	WB	3.40	C	3.44	C	2.41	B	3.46	C
6. Tank Farm Rd/Long St	NB	2.71	C	2.82	C	2.71	C	2.82	C
	SB	2.63	C	2.69	C	2.63	C	2.69	C
	EB	1.81	B	1.39	A	1.82	B	1.40	A
	WB	1.29	A	1.82	B	1.29	A	1.83	B
8. Tank Farm Rd/Mindbody Entrance	NB	1.14	A	1.60	B	1.14	A	1.60	B
	EB	1.95	B	2.02	B	1.96	B	2.02	B
	WB	3.65	D	3.47	C	3.67	B	3.49	C
9. Tank Farm Rd/Broad St (SR 227)	NB	2.79	C	2.94	C	2.81	C	2.98	C
	SB	3.20	C	3.19	C	3.22	C	3.22	C
	EB	2.55	B	2.90	C	2.55	C	2.91	C
	WB	2.52	C	2.84	C	2.52	C	2.85	C
11. Aero Dr/Broad St (SR 227)	NB	2.08	B	1.71	B	2.09	B	1.72	B
	SB	1.62	B	2.00	B	1.69	B	2.06	B
	EB	1.35	A	1.58	B	1.42	A	1.69	B
	WB	2.76	C	3.14	C	2.95	C	3.32	C

Notes: LOS Score = Level of Service based on HCM 6th Edition bicycle score; **Bold** text = deficient operation

Finding – The study intersections will continue operating acceptably with project traffic added.

Queuing

The projected 95th percentile queues in left-turn and right-turn pockets at the study intersections under the cumulative conditions are summarized in Table 33. Copies of the output are included in the appendices.

Table 33 – Cumulative 95th Percentile Queues Exceeding Available Storage					
Study Intersection Approach	**Available Storage**	**95th Percentile Queues**			
		AM Peak Hour		**PM Peak Hour**	
		C	**C+P**	**C**	**C+P**
1. Capitolio Wy/Broad St					
WB Right-Turn	100	13	13	73	75
SB Left-Turn	200	20	23	25	28
2. Industrial Wy/Broad St					
EB Right-Turn	100	0	0	0	0
WB Right-Turn	180	39	39	73	73
NB Left-Turn	150*	93	93	**165**	**165**
NB Right-Turn	175	66	67	93	93
SB Left-Turn	150*	121	121	**226**	**226**
SB Right-Turn	440	25	25	33	33
3. LOVR/US 101 S Ramps					
EB Right-Turn	120	6	6	**207**	**207**
WB Left-Turn	225	54	54	75	75
SB Thru/Left-Turn	190	**437**	**443**	**242**	**246**
4. LOVR/US 101 N Ramps					
EB Right-Turn	135	12	12	17	17
WB Left-Turn	180	114	117	171	179
NB Left-Turn	615	257	257	197	198
5. Tank Farm Rd/S Higuera St					
WB Right-Turn	250	63	63	155	159
NB Left-Turn	140*	34	34	54	54
NB Right-Turn	200	113	131	60	61
SB Left-Turn	250*	250	**252**	233	235
6. Tank Farm Rd/Long St					
EB Left-Turn	225	66	66	115	115
WB Left-Turn	175	148	148	149	149
7. Tank Farm Rd/Santa Fe Rd					
NB Right Lane	115	50	50	100	100
8. Tank Farm Rd/Mindbody					
WB Left-Turn	210	97	98	78	78
NB Right-Turn	125	20	20	43	43

Table 33 – Cumulative 95th Percentile Queues Exceeding Available Storage					
Study Intersection Approach	**Available Storage**	**95th Percentile Queues**			
		AM Peak Hour		**PM Peak Hour**	
		C	**C+P**	**C**	**C+P**
9. Tank Farm Rd/Broad St					
EB Left-Turn	300	163	164	297	297
EB Right-Turn	100	**281**	**300**	98	98
WB Left-Turn	150*	**429**	**435**	224	233
NB Left-Turn	250	245	251	243	250
SB Left-Turn	250*	93	94	131	143
SB Right-Turn	300	**544**	**553**	303	303
10. Aerovista Pl/Broad St					
EB Right-Turn	50	8	8	13	13
NB Left-Turn	200*	15	15	18	18
11. Aero Dr/Broad St					
EB Right-Turn	75	0	8	0	1
NB Left-Turn	200*	87	133	68	110
SB Left-Turn	200*	78	97	196	192
SB Right-Turn	150	-	18	-	21
12. Airport Dr/Broad St					
EB Right-Turn	-	3	3	10	13
13. Buckley Rd/Edna Rd					
NB Left Lane	200	150	150	50	50
SB Left Lane	200	50	50	50	50
14. Buckley Rd/S Higuera St					
WB Left-Turn	150	74	76	**168**	**171**
NB Right-Turn	200	32	32	50	50
SB Left-Turn	150	76	77	**180**	**181**

Notes: All distances are measured in feet; C = cumulative conditions; C+P = cumulative plus project conditions; **Bold** text = queue length exceeds available storage; * = Extends into a two-way left-turn lane; LOVR = Los Osos Valley Road; Shaded Cell = Queuing Adverse Impact

Under the cumulative scenario, with and without the addition of the project trips, the following storage facilities are expected to be exceeded though no cumulatively considered impact would occur.

- Industrial Way/Broad Street during the p.m. peak hour for the northbound and southbound left-turn lanes.
- Los Osos valley Road and the US 101 South ramp intersection would have queues that exceed the available storage for the eastbound right-turn lane and the southbound approach. At most, these queues would be expected at 437 feet, within the available stacking area for the ramp.
- The southbound left-turn queue at the Tank Farm Road/South Higuera Street intersection, under the cumulative scenario, would extend into the two-way left-turn lane.

- While the increase in projected queues would be less than one car length at the intersection of Broad Street/Tank Farm Road, queues are expected to exceed the available storage for the eastbound right-turn, westbound left-turn, and southbound right-turn lanes.
- At the intersection of Buckley Road/South Higuera Street, the westbound southbound left-turn lanes would be expected to exceed the storage lanes with and without the proposed project.

Finding – The addition of the project trips to the study intersections would increase the projected 95th percentile queues, several of which are projected to exceed the storage capacity. At these intersections, the proposed project would add less than one vehicle length, making the impact acceptable under the criteria applied.

Intersection Operations Recommendations

Recommendation – Since there were no cumulatively adverse project impacts given that several improvement projects in the area were assumed completed in the cumulative analysis, the project should pay its share of the City's improvements assumed under the cumulative scenarios.

Roadway Segment Operation

Existing plus Project Conditions

Automobile Operations Analysis

Under Existing plus Project volumes, the study roadways segments that currently operate acceptably would continue to do so with the exception of southbound Broad Street between Tank Farm Road and Aero Drive, which would deteriorate to LOS E during the p.m. peak hour with the project. All other segments that currently operate at unacceptable service levels would continue to do so but the speed of the segment would decrease by one mile per hour or less. These results are summarized in Table 34.

Table 34 – Existing and Existing Plus Project Peak Hour Roadway Segment Auto Levels of Service

Study Roadway Segment	Direction	Existing Conditions				Existing Plus Project			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Speed	BFFS/ LOS	Speed	BFFS/ LOS	Speed	BFFS/ LOS	Speed	BFFS/ LOS
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd									
A. Orcutt Rd to Industrial Rd	NB	42.8	95/A	42.3	94/A	42.8	95/A	42.3	94/A
	SB	31.2	69/B	29.4	65/C	31.2	69/B	29.3	65/C
B. Industrial Rd to Tank Farm Rd	NB	18.9	41/D	14.8	**32/E**	18.9	41/D	14.6	**32/E**
	SB	13.4	**29/F**	13.5	**29/F**	12.9	**28/F**	13.2	**29/F**
2. Broad St (SR 227): Tank Farm Rd to City Limits									
A. Tank Farm Rd to Aero Dr	NB	13.0	**29/F**	14.3	**31/E**	12.2	**27/F**	13.7	**30/E**
	SB	19.3	42/D	18.4	41/D	19.0	42/D	18.0	**40/E**
B. Aero Dr to Buckley Rd	NB	36.2	78/B	38.0	82/A	35.9	77/B	37.6	81/A
	SB	31.8	69/B	21.2	**46/F**	31.9	69/B	21.1	**46/F**
3. Tank Farm Rd: S Higuera St to Broad St (SR 227)									
A. S Higuera St to Mindbody Entrance	EB	40.3	88/A	39.9	87/A	40.2	88/A	39.6	86/A
	WB	44.2	96/A	12.0	80/A	36.8	80/A	36.8	80/A
B. Mindbody Entrance to Broad St	EB	11.6	**28/F**	12.0	**29/F**	11.6	**28/F**	11.9	**29/F**
	WB	36.8	78/B	30.2	64/C	36.9	79/B	30.0	64/C
4. Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	39.6	98/A	38.1	94/A	39.6	98/A	38.1	94/A
	WB	31.0	72/B	28.8	67/C	31.0	72/B	28.9	67/C

Notes: BFFS = is the percent of "Base Free Flow Speed"; Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation

Under conditions with project volumes added to existing volumes, the southbound segment of Broad Street between Tank Farm Road and Aero Drive would fall to a service level considered unacceptable. Further south on the segment, Broad Street already operates at LOS F. Since this section of Broad Street and the intersection of Buckley Road operate as the choke point for the corridor, the speed and service level must decrease when trips are added. With the planned improvements on this section of Broad Street, including the roundabout at Buckley Road, the affected segments would be expected to have higher average speeds and the travel time through the network would be reduced by up to 74 percent as indicated in the *State Route 227 Operation Study,* prepared by Kimley-Horn, 2016.

To mitigate the project-specific adverse impact under the existing conditions, a dedicated southbound right-turn lane with a programed right-turn overlap should be installed at the intersection with Aero Drive as part of the project's off-site improvements. With this improvement, the service level for the segment would be LOS D. Mitigated results are summarized in Appendix G.

Other segments that have an unacceptable percent BFFS, but the addition of the project trips does not cause a significant impact as it would not decrease the speed by more than one mph are:

- Broad Street between Industrial Road to Tank Farm Road in both directions during the a.m. peak and only the northbound direction during the p.m.
- Northbound Broad Street between Tank Farm and Aero Drive during each peak period.
- Southbound Broad Street between Aero Drive and Buckley Road during the evening peak hour.
- Tank Farm Road between Mindbody entrance and Broad Street in the eastbound direction during both peak periods.

Finding – With the addition of project trips to the study segment of southbound Broad Street between Tank Farm Road and Aero Drive, the service level would deteriorate from acceptable to unacceptable. With the planned SR 227 improvements, operation of this facility would improve.

Recommendation – The proposed project should include installation of a dedicated southbound right-turn lane at the intersection of Broad Street/Aero Drive.

Pedestrian Analysis

Under Existing plus Project volumes, the study roadway segments are expected to operate acceptably with and without the project. These results are summarized in Table 35.

Table 35 – Existing and Existing Plus Project Peak Hour Roadway Segment Pedestrian Levels of Service

Study Roadway Segment	Direction	Existing Conditions				Existing Plus Project			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Score	LOS	Score	LOS	Score	LOS	Score	LOS
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd									
A. Orcutt Rd to Industrial Rd	NB	3.22	C	3.81	D	3.24	C	3.85	D
	SB	-	-	-	-	-	-	-	-
B. Industrial Rd to Tank Farm Rd	NB	4.11	D	4.00	D	4.12	D	4.03	D
	SB	3.79	D	4.23	D	3.79	D	4.25	D
2. Broad St (SR 227): Tank Farm Rd to City Limits									
A. Tank Farm Rd to Aero Dr	NB	2.99	C	2.63	B	3.05	C	2.76	C
	SB	3.48	D	3.30	C	3.53	D	3.37	C
A. Mindbody Entrance to Broad St	EB	3.00	C	3.19	C	3.02	C	3.22	C
	WB	-	-	-	-	-	-	-	-
4. Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	3.39	C	4.12	D	3.40	C	4.12	D
	WB	4.12	D	3.87	D	4.12	D	3.87	D

Notes: BFFS = is the percent of "Base Free Flow Speed"; Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation

Finding – The pedestrian facilities on study roadways are expected to continue to operate acceptably.

Bicycle Analysis

Under Existing plus Project volumes, bicycle segments on the study roadway are expected to operate at acceptable service levels with the addition of the project volumes. These results are summarized in Table 36.

Table 36 – Existing and Existing Plus Project Peak Hour Roadway Segment Bicycle Levels of Service

Study Roadway Segment	Direction	Existing Conditions				Existing Plus Project			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Score	LOS	Score	LOS	Score	LOS	Score	LOS
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd									
A. Orcutt Rd to Industrial Rd	NB	2.62	B	2.74	B	2.63	B	2.75	B
	SB	1.96	A	1.97	A	1.96	A	1.97	A
B. Industrial Rd to Tank Farm Rd	NB	2.27	B	2.40	B	2.30	B	2.42	B
	SB	2.01	B	2.24	B	2.02	B	2.25	B
2. Broad St (SR 227): Tank Farm Rd to City Limits									
A. Tank Farm Rd to Aero Dr	NB	1.77	A	1.67	A	1.78	A	1.71	A
	SB	1.86	A	1.90	A	1.88	A	1.92	A
B. Aero Dr to Buckley Rd	NB	1.22	A	1.08	A	1.22	A	1.08	A
	SB	1.15	A	1.32	A	1.15	A	1.33	A
3. Tank Farm Rd: S Higuera St to Broad St (SR 227)									
A. S Higuera St to Mindbody Entrance	EB	2.20	B	2.11	B	2.21	B	2.12	B
	WB	2.07	B	2.24	B	2.07	B	2.25	B
B. Mindbody Entrance to Broad St	EB	1.77	A	1.88	A	1.77	A	1.88	A
	WB	1.89	A	2.07	B	1.90	A	2.08	B
4. Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	3.39	C	4.12	D	3.40	C	4.12	D
	WB	4.12	D	3.87	D	4.12	D	3.87	D

Notes: BFFS = is the percent of "Base Free Flow Speed"; Speed is measured in miles per hour; LOS = Level of Service

Finding – The bicycle facilities on the study segments are expected to continue operating acceptably upon the addition of project-generated traffic.

Transit Analysis

Under Existing plus Project volumes, the study roadways with transit facilities are expected to continue to operate at unacceptable service levels. With the addition of the volumes, the transit score is expected to degrade more; however, it is likely that the difference in volumes would be imperceptible to transit riders. These results are summarized in Table 37.

Table 37 – Existing and Existing plus Project Peak Hour Roadway Segment Transit Levels of Service						
Study Roadway Segment		**Direction**	**Existing**		**Existing plus Project**	
			AM Peak Score/LOS	**PM Peak Score/LOS**	**AM Peak Score/LOS**	**PM Peak Score/LOS**
1.	Broad St (SR 227): Orcutt Rd to Tank Farm Rd					
	A. Orcutt Rd to Industrial Rd	NB	**4.60/E**	**4.68/E**	**4.60/E**	**4.69/E**
		SB	-	-	-	-
	B. Industrial Rd to Tank Farm Rd	NB	**5.36/F**	**5.45/F**	**5.36/F**	**5.46/F**
		SB	-	-	-	-
2.	Broad St (SR 227): Tank Farm Rd to City Limits					
	A. Tank Farm Rd to Aero Dr	NB	-	-	-	-
		SB	**4.97/E**	**4.96/E**	**4.98/E**	**4.98/E**
4.	Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	-	-	-	-
		WB	**5.15/F**	**5.13/F**	**5.15/F**	**5.13/F**

Notes: Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation

Finding – The transit facilities in the study area are expected to continue to operate at the same unacceptable service level with the project as without it.

Cumulative plus Project Conditions

Automobile Operations Analysis

Under the Cumulative scenario, with the addition of the project volumes, the study roadway segments are expected to operate at the same service levels. For the segments that operate at unacceptable service levels, the speed is not expected to decrease by more than one mph, indicating an acceptable impact. These results are summarized in Table 38.

Table 38 – Cumulative and Cumulative Plus Project Roadway Segment Auto Levels of Service

Study Roadway Segment	Direction	Cumulative Conditions				Cumulative Plus Project			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Speed	BFFS/ LOS	Speed	BFFS/ LOS	Speed	BFFS/ LOS	Speed	BFFS/ LOS
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd									
A. Orcutt Rd to Industrial Rd	NB	42.3	94/A	41.6	92/A	42.3	94/A	41.6	92/A
	SB	31.1	69/B	30.4	67/C	31.1	69/B	30.3	67/C
B. Industrial Rd to Tank Farm Rd	NB	17.1	**37/E**	10.4	**23/E**	17.0	**37/E**	9.7	**22/E**
	SB	13.0	**28/F**	12.1	**26/F**	12.8	**28/F**	11.9	**26/F**
2. Broad St (SR 227): Tank Farm Rd to City Limits									
A. Tank Farm Rd to Aero Dr	NB	11.0	**24/F**	5.9	**13/F**	10.6	**23/F**	5.6	**12/F**
	SB	18.6	41/D	15.5	**34/E**	18.3	40/D	15.0	**33/E**
B. Aero Dr to Buckley Rd	NB	34.8	75/B	29.3	63/C	34.6	75/B	28.4	61/C
	SB	31.1	67/B	18.0	**39/F**	31.1	67/B	18.6	**40/F**
3. Tank Farm Rd: S Higuera St to Broad St (SR 227)									
A. S Higuera St to Long St	EB	13.6	**30/F**	11.7	**25/F**	13.6	**30/F**	11.6	**25/F**
	WB	10.1	**22/F**	11.3	**25/F**	10.1	**22/F**	11.3	**25/F**
B. Long St to Mindbody Entrance	EB	39.7	86/A	30.9	67/C	39.7	86/A	30.4	66/D
	WB	40.3	87/A	10.5	**23/F**	40.3	87/A	10.4	**22/F**
C. Mindbody Entrance to Broad St	EB	10.8	**26/F**	11.8	**28/F**	10.8	**26/F**	11.8	**28/F**
	WB	33.3	71/B	22.1	47/D	33.6	72/B	24.6	53/C
4. Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	39.4	97/A	37.6	93/A	39.4	97/A	37.6	93/A
	WB	28.0	65/C	25.7	60/C	28.1	65/C	25.8	60/C

Notes: BFFS = is the percent of "Base Free Flow Speed"; Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation

Finding – With the addition of the project trips to the study segments under cumulative conditions, service levels are expected remain the same as without the project and the decrease in speed of 1 mph or less is considered an acceptable impact.

Pedestrian Analysis

Under Cumulative plus Project volumes, the study roadway segments are expected to operate at the same service levels as without the project. These results are summarized in Table 39.

Table 39 – Cumulative and Cumulative Plus Project Roadway Segment Pedestrian Levels of Service

Study Roadway Segment	Direction	Cumulative Conditions				Cumulative Plus Project			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Score	LOS	Score	LOS	Score	LOS	Score	LOS
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd									
A. Orcutt Rd to Industrial Rd	NB	3.59	D	**4.55**	**E**	3.61	D	**4.55**	**E**
	SB	-	-	-	-	-	-	-	-
B. Industrial Rd to Tank Farm Rd	NB	4.05	D	**4.44**	**E**	4.07	D	**4.46**	**E**
	SB	3.98	D	**4.62**	**E**	3.98	D	**4.62**	**E**
2. Broad St (SR 227): Tank Farm Rd to City Limits									
A. Tank Farm Rd to Aero Dr	NB	3.33	C	3.46	C	3.37	C	3.50	D
	SB	3.63	D	3.42	C	3.67	D	3.42	C
B. Aero Dr to Buckley Rd	NB	-	-	-	-	-	-	-	-
	SB	-	-	-	-	-	-	-	-
3. Tank Farm Rd: S Higuera St to Broad St (SR 227)									
A. S Higuera St to Long St	EB	3.37	C	3.20	C	3.37	C	3.21	C
	WB	3.41	C	3.31	C	3.41	C	3.31	C
B. Long St to Mindbody Entrance	EB	-	-	-	-	-	-	-	-
	WB	-	-	-	-	-	-	-	-
C. Mindbody Entrance to Broad St	EB	3.12	C	3.50	D	3.13	C	3.60	D
	WB	-	-	-	-	-	-	-	-
4. Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	3.56	D	4.20	D	3.56	D	4.20	D
	WB	**4.53**	**E**	3.93	D	**4.53**	**E**	3.93	D

Notes: BFFS = is the percent of "Base Free Flow Speed"; Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation

For the pedestrian facilities that were operating at unacceptable service levels without the project, the same condition would continue to with the project. For some of the approaches, the addition of the project would degrade the LOS score further, specifically Broad Street between Industrial Road and Tank Farm Road in the northbound direction. Installing of a striped bicycle buffer would increase the distance between the vehicles and the pedestrians and result in an improved LOS Score; therefore, it is recommended that a striped buffer be installed between on Broad Street between Industrial Road and Capitolio Way. Mitigated results are summarized in Appendix G.

Finding – With the addition of project trips to the study segments under the cumulative conditions, service levels for the pedestrian facilities are expected remain the same as without the project and with the exception of Broad Street between Orcutt Road and Tank Farm Road, there would be no adverse impact.

Recommendation – A stiped bicycle buffer in the northbound direction on Broad Street between Industrial Road and Tank Farm should be considered to mitigate the pedestrian impact.

Bicycle Analysis

Upon the addition of project trips to the cumulative scenario, the bicycle facilities on the study segments are expected to operate acceptably with the exception of eastbound Tank Farm Road between Broad Street and Orcutt Road, which is expected to operate at LOS E without or with the project. These results are summarized in Table 40.

Table 40 – Cumulative and Cumulative Plus Project Roadway Segment Bicycle Levels of Service

Study Roadway Segment	Direction	Cumulative Conditions				Cumulative Plus Project			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Score	LOS	Score	LOS	Score	LOS	Score	LOS
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd									
A. Orcutt Rd to Industrial Rd	NB	2.72	B	2.85	C	2.73	B	2.85	C
	SB	1.93	A	1.94	A	1.93	A	1.94	A
B. Industrial Rd to Tank Farm Rd	NB	2.45	B	2.69	B	2.46	B	2.71	B
	SB	2.21	B	2.29	B	2.22	B	2.30	B
2. Broad St (SR 227): Tank Farm Rd to City Limits									
A. Tank Farm Rd to Aero Dr	NB	1.86	A	2.06	B	1.87	A	2.10	B
	SB	1.94	A	2.04	B	1.95	A	2.05	B
B. Aero Dr to Buckley Rd	NB	1.24	A	1.17	A	1.25	A	1.18	A
	SB	1.27	A	1.41	A	1.27	A	1.44	A
3. Tank Farm Rd: S Higuera St to Broad St (SR 227)									
A. S Higuera St to Long St	EB	3.37	C	2.22	B	3.37	C	2.23	B
	WB	2.02	B	1.99	A	2.02	B	2.00	B
B. Long St to Mindbody Entrance	EB	3.19	C	3.13	C	3.19	C	3.14	C
	WB	2.97	C	3.27	C	2.97	C	3.27	C
C. Mindbody Entrance to Broad St	EB	1.81	A	2.04	B	1.81	A	2.05	B
	WB	2.45	B	2.36	B	2.45	B	2.38	B
4. Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	3.56	D	**4.53**	**E**	3.56	D	**4.53**	**E**
	WB	4.20	D	3.93	D	4.20	D	3.93	D

Notes: BFFS = is the percent of "Base Free Flow Speed"; Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation

Finding – Upon the addition of project trips to cumulative volumes on the study segments, the bicycle facilities are expected to operate acceptably, excluding the segment of Tank Farm Road between Broad Street and Orcutt Road. Because the score for that segment would not be expected to change as a result of adding project-generated traffic, the project is considered to have an acceptable impact.

Transit Analysis

With the addition of the project volumes to cumulative volumes, the transit facilities are expected to continue to operate at unacceptable Levels of Service. While the transit score is expected to further degrade more it is likely that the difference in volumes would be imperceptible to transit riders. These results are summarized in Table 41.

Table 41 – Cumulative and Cumulative Plus Project Roadway Segment Transit Levels of Service

Study Roadway Segment	Direction	Cumulative		Cumulative plus Project	
		AM Peak Score/LOS	PM Peak Score/LOS	AM Peak Score/LOS	PM Peak Score/LOS
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd					
A. Orcutt Rd to Industrial Rd	NB	**4.66/E**	**4.77/E**	**4.66/E**	**4.77/E**
	SB	-	-	-	-
B. Industrial Rd to Tank Farm Rd	NB	**5.38/F**	**5.48/F**	**5.38/F**	**5.48/F**
	SB	-	-	-	-
2. Broad St (SR 227): Tank Farm Rd to City Limits					
A. Tank Farm Rd to Aero Dr	NB	-	-	-	-
	SB	**5.01/F**	**5.06/F**	**5.02/F**	**5.07/F**
4. Tank Farm Rd: Broad St (SR 227) to Orcutt Rd	EB	-	-	-	-
	WB	**5.19/F**	**5.17/F**	**5.19/F**	**5.17/F**

Notes: Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation

Finding – The transit facilities on the study roadways are expected to continue to operate at the same service levels as without the project, making the project's impact acceptable.

Access and Circulation

Site Access

Access to the site would be via a new driveway located on the north side of Aero Drive, about 300 feet west of the signalized intersection with Broad Street.

Sight Distance

Sight distance along Aero Drive at the proposed project driveway location was evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distance for minor street approaches that are a driveway are based on stopping sight distance which uses the approach travel speeds as the basis for determining the recommended sight distance.

Based on a design speed of 25 mph, the minimum stopping sight distance needed is 150 feet. Sight distance at the proposed driveway was field reviewed as well as reviewed with available aerials. At the time of the site visit, sight lines were clear for more than 150 feet in both directions. However, to maintain a clear line of sight, any proposed landscaping along the Aero Drive frontage should be low-lying vegetation with a height of not more than three feet about the elevation of the roadway and any trees should have canopies trimmed to be no less than seven feet above the roadway elevation. Similarly, any signage or landmarks relating to the hotel project should be at an adequate setback so not to obstruct sight lines. Along the frontage of the site, there is currently a bike lane where airport patrons are permitted to park. With the project, parking should be restricted for 30 feet on either side of the driveway. While it is understood that the Airport has an agreement with the City for overflow parking to use the bike lanes, it is not a desirable condition for bicyclist and may conflict with State law. The City may want to revisit this issue and implement parking restrictions to keep the bike lane clear for cyclists.

Conclusions and Recommendations

Conclusions

- The proposed project is expected to generation an average of 1,822 daily trips; of which 102 would occur during the morning peak hour and 131 during the p.m. peak hour.
- Sight lines at the proposed driveway location are expected to be adequate.
- Parking is currently allowed in the bike lane on Aero Drive.
- Based on the collision history for the intersection of Aerovista Place/Broad Street, it was identified that drivers may not be using the two-way left-turn lane.

Intersection Operations

- For automobile operations, under the existing conditions, all of the study intersection except for Buckley Road/Edna Road, are expected to operate acceptably overall with the addition of project traffic. There are project specific adverse impacts at the two-way stop-controlled intersections of Tank Farm Road/Long Street, Tank Farm Road/Santa Fe Road, Broad Street/Aerovista Way.
- Under the cumulative conditions, with the addition of the project trips, the proposed project is expected to have a cumulatively adverse automobile operation impacts at the intersections of Capitolio Way/Broad Street, Aerovista Place/Broad Street, and Aero Drive/Broad Street.
- For the pedestrian facilities under the existing and cumulative conditions, the service level at signalized intersections are expected to operate acceptably with the addition of the project trips. For the two-way stop-controlled intersections, the intersections would continue to operate a LOS F.
- Under the existing conditions and cumulative conditions which includes the planned improvements in the area, with the addition of the project, the bicycle facilities at intersection are expected to operate acceptably.
- Under the existing and cumulative conditions, with and without the proposed project, the transit service level is expected to operate at LOS F.
- The projected queuing at several of the study intersections is expected to exceed the available storage during the existing and cumulative scenarios, with and without the project. Under the existing conditions, with the addition of the project, there would be a project-specific adverse impact at the intersections of Tank Farm Road/South Higuera Street and Tank Farm Road/Broad Street. Under the cumulative conditions, the addition of the project trips to the study intersections would not increase the expected 95th percentile queue length by more than one vehicle, making the impact acceptable.

Roadway Operations

- For automobile operations, under the existing conditions, with the addition of project trips to the study segment of southbound Broad Street between Tank Farm Road and Aero Drive, the service level would deteriorate from acceptable to unacceptable.

- The pedestrian segment facilities are expected to operate at the same service level as without the project under both the existing and cumulative scenarios; however, under the cumulative scenario, the already unacceptable pedestrian score decreases for an adverse impact on Broad Street north of Tank Farm Road

- For the bicycle roadway operations, the study segments are expected to operate acceptably with the addition of the project trips. Under the cumulative scenarios, with and without the project, the segment of Tank Farm Road between Broad Street and Orcutt Road would operate at unacceptable service levels, but the addition of project-generated traffic is considered to have an acceptable impact.

- Under the existing and cumulative scenarios, with and without the project would be expected to operate at unacceptable service levels.

Recommendations

- It is recommended that the City monitor the reported collisions at the intersection of Aerovista Place/Broad Street. At the time of the site visit, the two-way left-turn lane on Broad Street was recently re-striped which potentially could have addressed a visibility issue with drivers.

- The City should revisit the practice of allowing parking in the bike lane on Aero Drive to determine if this is consistent with the City's policies on bicycle access.

- In order to maintain sight lines at the proposed project driveway, any landscaping along the Aero Drive frontage should be low-lying vegetation with a height of not more than three feet about the elevation of the roadway and any trees should have canopies trimmed to be no less than seven feet above the roadway elevation. Any signage should be placed out of the line of sight. Parking should be restricted for 30 feet on either side of the driveway.

Intersection Operations

- Under the Existing plus Project conditions, to address the project-specific impacts, the following actions are recommended:

    - The project's specific adverse impact at the intersection of Tank Farm Road/Long Street could be addressed through payment of the City's fees since the improvement would be completed as part of another project and would be complete prior to the occupation of the proposed hotel.

    - At the intersection of Tank Farm Road/Santa Fe Road, while there are plans to install a roundabout at the intersection that the project should ultimately pay fees towards, to address the project-specific adverse impact, the City could consider having project applicant pay to restripe the existing striped median on the west leg to provide an acceleration lane.

    - The project's adverse impact at the intersection of Broad Street/Aerovista Way would be mitigated by restricting left-turn movements during the peak hours if the City concurs with this improvement.

    - Payment towards the City's TIF would mitigate the project's queuing impact at the intersection of Tank Farm Road/South Higuera Street. This improvement is expected to be completed before the occupancy of the proposed Airport Hotels.

    - The project-specific queuing impact at Tank Farm Road/Broad Street would be mitigated by converting the westbound right-turn lane to a shared through/right-turn lane. This improvement is part of several

planned improvements at the intersection and the project should be conditioned to contribute toward the cost of this improvement.

- For the cumulatively considerable project impacts on automobile operations, the following actions are recommended:

    - While there is a cumulatively considerable impact at the intersection of Broad Street/Capitolio Way, under the cumulative scenario, there is planned to be a new signalized intersection nearby that drivers could reroute to in order to access broad Street.

    - Payment towards the Citywide TIF would include the project's share of the cost of improvements to the intersections of Tank Farm Road/South Higuera Street and Tank Farm Road/Broad Street and mitigate the project's impacts.

Roadway Operations

- Participation in the San Luis Obispo County's TIF Program for the SR 227 Corridor will mitigate impacts to the Broad Street (SR 227) segment

- Under Existing plus Project conditions, to mitigate the project-specific impact to automobile operations on southbound Broad Street between Tank Farm Road and Aero Drive, the project should include installation of a dedicated southbound right-turn lane with a right-turn overlap as part of its off-site improvements.
- To mitigate the project's cumulative adverse impacts to pedestrians on northbound Broad Street between Tank Farm Road and Industrial Road, a striped bicycle buffer should be installed in the northbound direction between Industrial Road and Capitolio Way to increase the distance between pedestrians and vehicles.

Study Participants and References

Study Participants

Principal in Charge	Mark E. Spencer, TE
Associate Engineer	Briana Byrne, EIT
Assistant Planner	Andre Huff
Graphics	Katia Wolfe
Editing/Formatting	Hannah Yung-Boxdell
Quality Control	Dalene J. Whitlock, PE, PTOE

References

2014 Collision Data on California State Highways, California Department of Transportation, 2017
City of San Luis Obispo Bicycle Transportation Plan, City of San Luis Obispo Public Works Department, 2013
Highway Capacity Manual, 6th Edition, Transportation Research Board, 2018
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Multimodal Transportation Impact Study Guidelines, City of San Luis Obispo, 2015
Northwest Corner Tank Farm/Broad Mixed-Use Project Traffic Study, Central Coast Transportation Consulting, 2018
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San Luis Obispo Municipal Code, Code Publishing Company, 2017
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SLO011-1

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Appendix A

Traffic Turning Movement Counts

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National Data & Surveying Services

Intersection Turning Movement Count

Location: Santa Fe Rd & Tank Farm Rd
City: San Luis Obispo
Control: 1-Way Stop(NB)

Project ID: 19-02080-001
Date: 10/9/2019

Total

NS/EW Streets:	Santa Fe Rd				Santa Fe Rd				Tank Farm Rd				Tank Farm Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	1	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	3	0	0	0	0	0	0	102	8	0	23	80	0	0	218
7:15 AM	1	1	16	0	0	2	0	0	0	105	11	0	22	92	0	0	250
7:30 AM	0	0	20	0	0	0	0	0	0	128	7	0	27	133	1	0	316
7:45 AM	2	0	18	0	0	0	0	0	0	187	14	0	31	179	0	0	431
8:00 AM	0	1	9	0	0	1	1	0	0	203	12	0	29	169	1	0	426
8:15 AM	5	0	13	0	0	0	0	0	0	188	10	0	20	175	0	0	411
8:30 AM	2	0	15	0	0	0	0	0	0	189	11	0	21	137	0	0	375
8:45 AM	6	0	15	0	0	0	0	0	0	185	3	0	22	123	0	1	355
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	18	2	109	0	0	3	1	0	0	1287	76	0	195	1088	2	1	2782
APPROACH %'s :	13.95%	1.55%	84.50%	0.00%	0.00%	75.00%	25.00%	0.00%	0.00%	94.42%	5.58%	0.00%	15.16%	84.60%	0.16%	0.08%	
PEAK HR :	**07:45 AM - 08:45 AM**																TOTAL
PEAK HR VOL :	9	1	55	0	0	1	1	0	0	767	47	0	101	660	1	0	1643
PEAK HR FACTOR :	0.450	0.250	0.764	0.000	0.000	0.250	0.250	0.000	0.000	0.945	0.839	0.000	0.815	0.922	0.250	0.000	0.953
	0.813				0.250				0.947				0.907				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	1	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	10	0	28	0	0	0	0	0	0	199	7	0	12	237	0	0	493
4:15 PM	11	0	30	0	0	0	0	0	0	169	4	0	16	215	0	0	445
4:30 PM	12	0	38	0	0	0	0	0	0	216	6	0	16	239	0	0	527
4:45 PM	10	0	31	0	0	0	0	0	0	178	3	0	17	236	1	1	477
5:00 PM	9	0	54	0	0	0	0	0	0	236	6	0	13	275	0	0	593
5:15 PM	9	1	36	0	0	1	0	0	0	199	9	0	19	265	0	0	539
5:30 PM	12	0	20	0	0	0	0	0	0	176	5	0	17	210	0	0	440
5:45 PM	17	0	23	0	0	0	1	0	0	138	5	0	12	189	0	0	385
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	90	1	260	0	0	1	1	0	0	1511	45	0	122	1866	1	1	3899
APPROACH %'s :	25.64%	0.28%	74.07%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	97.11%	2.89%	0.00%	6.13%	93.77%	0.05%	0.05%	
PEAK HR :	**04:30 PM - 05:30 PM**																TOTAL
PEAK HR VOL :	40	1	159	0	0	1	0	0	0	829	24	0	65	1015	1	1	2136
PEAK HR FACTOR :	0.833	0.250	0.736	0.000	0.000	0.250	0.000	0.000	0.000	0.878	0.667	0.000	0.855	0.923	0.250	0.250	0.901
	0.794				0.250				0.881				0.939				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Santa Fe Rd & Tank Farm Rd
City: San Luis Obispo
Control: 1-Way Stop(NB)

Project ID: 19-02080-001
Date: 10/9/2019

Bikes

NS/EW Streets:	Santa Fe Rd				Santa Fe Rd				Tank Farm Rd				Tank Farm Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	1	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	3	0	0	1	9	0	0	13
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	10.00%	90.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	1	7	0	0	10
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.250	0.875	0.000	0.000	0.833
									0.500				1.000				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	1	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
4:45 PM	0	0	2	0	0	0	0	0	0	2	0	0	0	1	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	2	0	0	0	0	0	0	6	1	0	0	3	0	0	12
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	85.71%	14.29%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	2	0	0	0	0	0	0	5	0	0	0	3	0	0	10
PEAK HR FACTOR :	0.00	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.750	0.000	0.000	0.500
			0.250						0.625				0.750				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Santa Fe Rd & Tank Farm Rd
City: San Luis Obispo
Project ID: 19-02080-001
Date: 10/9/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Santa Fe Rd		Santa Fe Rd		Tank Farm Rd		Tank Farm Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**07:45 AM - 08:45 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	0	1	0	0	0	0	0	2
APPROACH %'s :	100.00%	0.00%	100.00%	0.00%					
PEAK HR :	**04:30 PM - 05:30 PM**								TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.250								0.250
	0.250								

Prepared by National Data & Surveying Services

Santa Fe Rd & Tank Farm Rd

Peak Hour Turning Movement Count

ID: 19-02080-001
City: San Luis Obispo

Day: Wednesday
Date: 10/09/2019

PEAK HOURS

AM	07:45 AM - 08:45 AM
NOON	NONE
PM	04:30 PM - 05:30 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

SOUTHBOUND — Santa Fe Rd

AM	1	1	0	0	2	AM
NOON	0	0	0	0	0	NOON
PM	0	1	0	0	2	PM

EASTBOUND — Tank Farm Rd

AM	NOON	PM		
670	0	1055	⇦	
0	0	0	↶	0
0	0	0	↱	0
767	0	829	→	1
47	0	24	↴	0
AM	NOON	PM		

WESTBOUND — Tank Farm Rd

PM	NOON	AM		
1	0	1	↰	0
1015	0	660	←	1
65	0	101	↰	1
1	0	0	↰	0
989	0	822	⇨	
PM	NOON	AM		

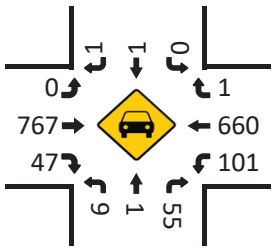
NORTHBOUND — Santa Fe Rd

PM	90	0	40	1	159	PM
NOON	0	0	0	0	0	NOON
AM	149	0	9	1	55	AM

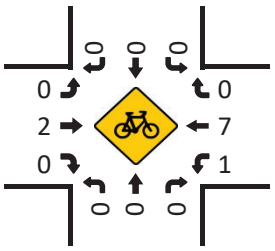
⇩	0	0	0.5	0.5

CONTROL			
1-Way Stop(NB)			
TEV	1643 AM	0 NOON	2136 PM
PHF	0.95		0.90

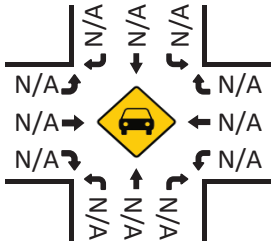
Total Vehicles (AM)



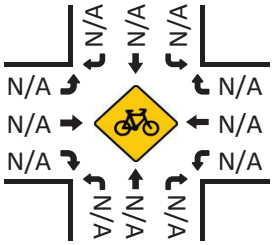
Bikes (AM)



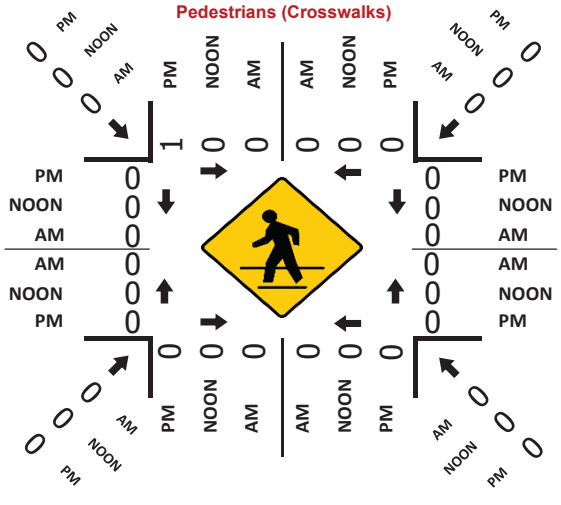
Total Vehicles (Noon)



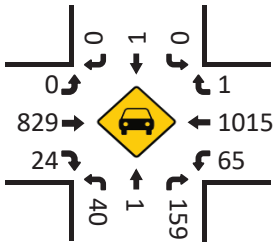
Bikes (NOON)



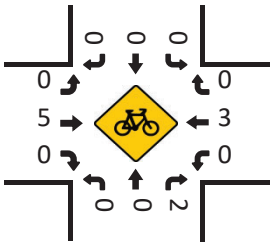
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Long St & Tank Farm Rd
City: San Luis Obispo
Control: 2-Way Stop(NB/SB)

Project ID: 19-02080-002
Date: 10/9/2019

Total

NS/EW Streets:	Long St				Long St				Tank Farm Rd				Tank Farm Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	13	0	3	1	2	0	3	112	4	0	10	64	2	5	220
7:15 AM	1	0	9	0	0	0	3	0	3	127	4	0	16	81	0	5	249
7:30 AM	2	0	13	0	3	0	2	0	8	150	4	0	12	109	4	1	308
7:45 AM	1	0	10	0	3	0	4	0	13	216	14	0	29	154	3	3	450
8:00 AM	2	0	15	0	1	1	5	0	18	200	13	0	23	144	6	9	437
8:15 AM	1	0	15	0	0	0	5	0	17	211	10	0	24	155	6	3	447
8:30 AM	2	0	22	0	1	0	4	0	10	186	10	0	19	132	3	3	392
8:45 AM	3	0	10	0	2	0	3	0	16	191	15	1	28	112	1	4	386
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	12	1	107	0	13	2	28	0	88	1393	74	1	161	951	25	33	2889
APPROACH %'s :	10.00%	0.83%	89.17%	0.00%	30.23%	4.65%	65.12%	0.00%	5.66%	89.52%	4.76%	0.06%	13.76%	81.28%	2.14%	2.82%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	6	0	62	0	5	1	18	0	58	813	47	0	95	585	18	18	1726
PEAK HR FACTOR :	0.750	0.000	0.705	0.000	0.417	0.250	0.900	0.000	0.806	0.941	0.839	0.000	0.819	0.944	0.750	0.500	0.959
	0.708				0.857				0.944				0.947				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	1	55	0	3	0	6	0	26	153	5	0	32	229	5	1	518
4:15 PM	3	0	34	0	4	0	6	0	17	157	5	0	18	230	4	5	483
4:30 PM	6	0	44	0	2	0	14	0	12	162	9	2	24	247	7	5	534
4:45 PM	1	0	44	1	4	2	15	0	9	140	7	0	28	232	6	6	495
5:00 PM	3	2	48	0	2	0	8	0	19	154	6	0	26	274	7	11	560
5:15 PM	1	0	32	0	4	0	29	0	22	159	6	0	23	264	3	8	551
5:30 PM	2	3	52	0	1	0	18	0	12	124	7	0	26	209	6	5	465
5:45 PM	2	0	23	0	0	0	9	0	21	120	8	1	22	191	8	4	409
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	20	6	332	1	20	2	105	0	138	1169	53	3	199	1876	46	45	4015
APPROACH %'s :	5.57%	1.67%	92.48%	0.28%	15.75%	1.57%	82.68%	0.00%	10.12%	85.77%	3.89%	0.22%	9.19%	86.61%	2.12%	2.08%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	11	2	168	1	12	2	66	0	62	615	28	2	101	1017	23	30	2140
PEAK HR FACTOR :	0.458	0.250	0.875	0.250	0.750	0.250	0.569	0.000	0.705	0.949	0.778	0.250	0.902	0.928	0.821	0.682	0.955
	0.858				0.606				0.945				0.921				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Long St & Tank Farm Rd
City: San Luis Obispo
Control: 2-Way Stop(NB/SB)

Project ID: 19-02080-002
Date: 10/9/2019

Bikes

NS/EW Streets:	Long St				Long St				Tank Farm Rd				Tank Farm Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	1	0	2	5	0	0	10
APPROACH %'s :									0.00%	66.67%	33.33%	0.00%	28.57%	71.43%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	1	0	1	2	0	0	5
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.250	0.500	0.000	0.000	0.625
										0.500				0.750			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	1	0	0	0	0	0	0	0	4	0	0	0	5	1	0	12
APPROACH %'s :	50.00%	50.00%	0.00%	0.00%					0.00%	100.00%	0.00%	0.00%	0.00%	83.33%	16.67%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	6
PEAK HR FACTOR :	0.25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.750	0.000	0.000	0.750
		0.250								0.500				0.750			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Long St & Tank Farm Rd
City: San Luis Obispo
Project ID: 19-02080-002
Date: 10/9/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Long St		Long St		Tank Farm Rd		Tank Farm Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	2	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	0	0	0	1	0	2
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	0	0	3	0	0	1	0	6
APPROACH %'s :	100.00%	0.00%	0.00%	100.00%			100.00%	0.00%	
PEAK HR :	**07:45 AM - 08:45 AM**								TOTAL
PEAK HR VOL :	1	0	0	0	0	0	1	0	2
PEAK HR FACTOR :	0.250						0.250		0.250
	0.250						0.250		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	2	1	0	0	0	0	1	0	4
4:15 PM	2	1	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	2	0	3
5:45 PM	1	0	0	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	5	3	1	0	0	0	3	0	12
APPROACH %'s :	62.50%	37.50%	100.00%	0.00%			100.00%	0.00%	
PEAK HR :	**04:30 PM - 05:30 PM**								TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :		0.250							0.250
	0.250								

Prepared by National Data & Surveying Services

Long St & Tank Farm Rd

Peak Hour Turning Movement Count

ID: 19-02080-002
City: San Luis Obispo

Day: Wednesday
Date: 10/09/2019

PEAK HOURS		COUNT PERIODS
AM	07:45 AM - 08:45 AM	07:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

Long St — SOUTHBOUND

	↲	↓	↳	U-turn	⇧ (departing)
AM	18	1	5	0	76
NOON	0	0	0	0	0
PM	66	2	12	0	87
	0	1	0	0	

Tank Farm Rd — EASTBOUND

	AM	NOON	PM	
⇦ (departing)	609	0	1096	
U-turn	0	0	2	0
Left	58	0	62	1
Through	813	0	615	2
Right	47	0	28	0

Tank Farm Rd — WESTBOUND

		PM	NOON	AM
↰	0	23	0	18
←	2	1017	0	585
↱	1	101	0	95
U-turn	0	30	0	18
⇨ (departing)		825	0	898

Long St — NORTHBOUND

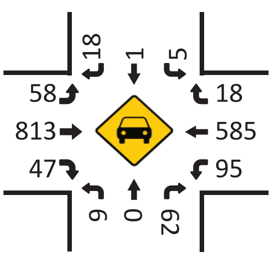
	⇩ (departing)	U-turn	↰	↑	↱
		0	0	0.5	0.5
PM	132	1	11	2	168
NOON	0	0	0	0	0
AM	143	0	6	0	62

CONTROL

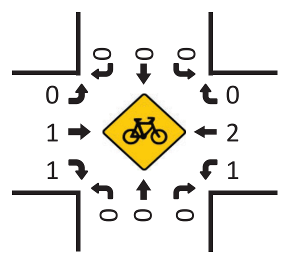
2-Way Stop(NB/SB)

	AM	NOON	PM
TEV	1726	0	2140
PHF	0.96		0.96

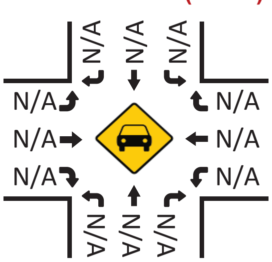
Total Vehicles (AM)



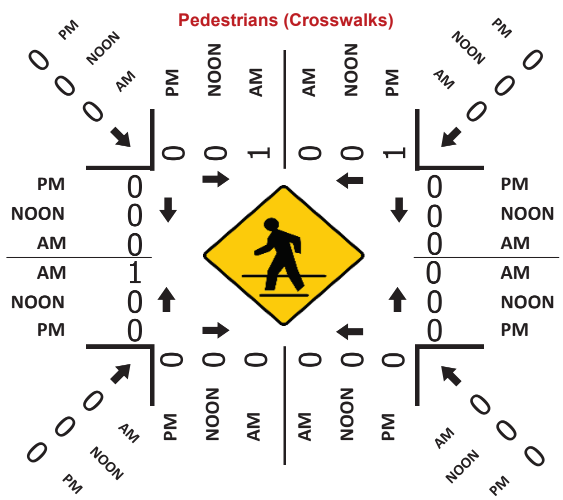
Bikes (AM)



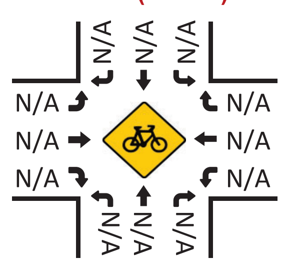
Total Vehicles (Noon)



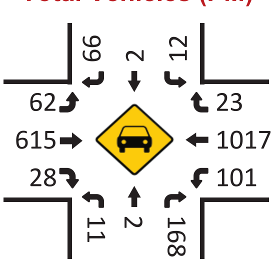
Pedestrians (Crosswalks)



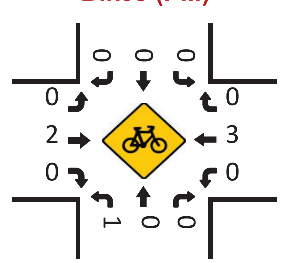
Bikes (NOON)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Mindbody Dwy & Tank Farm Rd
City: San Luis Obispo
Control: Signalized

Project ID: 19-02080-003
Date: 10/9/2019

Total

NS/EW Streets:	Mindbody Dwy				Mindbody Dwy				Tank Farm Rd				Tank Farm Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	0	0	0	0	0	0	0	108	2	0	5	105	0	0	222
7:15 AM	2	0	0	0	0	0	0	0	0	119	12	0	3	114	0	0	250
7:30 AM	1	0	3	0	0	0	0	0	0	144	6	0	7	164	0	0	325
7:45 AM	4	0	2	0	0	0	0	0	0	183	17	0	12	211	0	0	429
8:00 AM	4	0	2	0	0	0	0	0	0	199	14	0	4	201	0	0	424
8:15 AM	3	0	1	0	0	0	0	0	0	186	11	0	6	186	0	0	393
8:30 AM	8	0	1	0	0	0	0	0	0	177	22	0	10	163	0	0	381
8:45 AM	4	0	1	0	0	0	0	0	0	198	11	0	9	141	0	0	364
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	28	0	10	0	0	0	0	0	0	1314	95	0	56	1285	0	0	2788
APPROACH %'s :	73.68%	0.00%	26.32%	0.00%					0.00%	93.26%	6.74%	0.00%	4.18%	95.82%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	19	0	6	0	0	0	0	0	0	745	64	0	32	761	0	0	1627
PEAK HR FACTOR :	0.594	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.936	0.727	0.000	0.667	0.902	0.000	0.000	0.948
	0.694								0.950				0.889				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	24	0	17	0	0	0	0	0	0	231	1	0	3	245	0	0	521
4:15 PM	35	0	8	0	0	0	0	0	0	194	4	0	1	198	0	0	440
4:30 PM	41	0	4	0	0	0	0	0	0	251	2	0	3	212	0	0	513
4:45 PM	24	0	9	0	0	0	0	0	0	229	1	0	0	226	0	0	489
5:00 PM	47	0	10	0	0	0	0	0	0	298	3	0	1	259	0	0	618
5:15 PM	24	0	10	0	0	0	0	0	0	241	4	0	2	266	0	0	547
5:30 PM	23	0	6	0	0	0	0	0	0	201	2	0	1	235	0	0	468
5:45 PM	16	0	8	0	0	0	0	0	0	150	7	0	0	172	0	0	353
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	234	0	72	0	0	0	0	0	0	1795	24	0	11	1813	0	0	3949
APPROACH %'s :	76.47%	0.00%	23.53%	0.00%					0.00%	98.68%	1.32%	0.00%	0.60%	99.40%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	136	0	33	0	0	0	0	0	0	1019	10	0	6	963	0	0	2167
PEAK HR FACTOR :	0.723	0.000	0.825	0.000	0.000	0.000	0.000	0.000	0.000	0.855	0.625	0.000	0.500	0.905	0.000	0.000	0.877
	0.741								0.855				0.904				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mindbody Dwy & Tank Farm Rd
City: San Luis Obispo
Control: Signalized

Project ID: 19-02080-003
Date: 10/9/2019

RTOR

NS/EW Streets:	Mindbody Dwy				Mindbody Dwy				Tank Farm Rd				Tank Farm Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%													
PEAK HR :	**07:45 AM - 08:45 AM**																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
			0.250														

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	6	0	0	0	0	0	0	0	1	0	0	0	0	0	7
4:15 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:15 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	27	0	0	0	0	0	0	0	1	0	0	0	0	0	28
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	0.00%	100.00%	0.00%					
PEAK HR :	**04:30 PM - 05:30 PM**																TOTAL
PEAK HR VOL :	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
PEAK HR FACTOR :	0.00	0.000	0.650	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.650
			0.650														

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mindbody Dwy & Tank Farm Rd
City: San Luis Obispo
Control: Signalized

Project ID: 19-02080-003
Date: 10/9/2019

Bikes

NS/EW Streets:	Mindbody Dwy				Mindbody Dwy				Tank Farm Rd				Tank Farm Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	4	1	0	0	10	0	0	15
APPROACH %'s :									0.00%	80.00%	20.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	1	0	0	8	0	0	11
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.500	0.000	0.000	0.688
									0.375				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	0	0	0	0	0	0	0	8	0	0	0	2	0	0	12
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	7	0	0	0	2	0	0	10
PEAK HR FACTOR :	0.25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.438	0.000	0.000	0.000	0.500	0.000	0.000	0.500
		0.250							0.438				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mindbody Dwy & Tank Farm Rd
City: San Luis Obispo
Project ID: 19-02080-003
Date: 10/9/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Mindbody Dwy		Mindbody Dwy		Tank Farm Rd		Tank Farm Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	2	0	0	0	0	2
8:45 AM	0	0	2	0	0	0	0	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	2	2	0	0	0	0	4
APPROACH %'s :			50.00%	50.00%					
PEAK HR :	**07:45 AM - 08:45 AM**								TOTAL
PEAK HR VOL :	0	0	0	2	0	0	0	0	2
PEAK HR FACTOR :				0.250					0.250
			0.250						

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	1
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	**04:30 PM - 05:30 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Mindbody Dwy & Tank Farm Rd

Peak Hour Turning Movement Count

ID: 19-02080-003
City: San Luis Obispo

Day: Wednesday
Date: 10/09/2019

	PEAK HOURS	COUNT PERIODS
AM	07:45 AM - 08:45 AM	07:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

Mindbody Dwy — SOUTHBOUND

	Right	Through	Left	U-Turn	Departing
AM	0	0	0	0	0
NOON	0	0	0	0	0
PM	0	0	0	0	0
Lanes	0	0	0	0	

Tank Farm Rd — EASTBOUND

	AM	NOON	PM	Lanes
Departing	780	0	1099	
U-Turn	0	0	0	0
Left	0	0	0	0
Through	745	0	1019	2
Right	64	0	10	0

Tank Farm Rd — WESTBOUND

	PM	NOON	AM	Lanes
Right	0	0	0	0
Through	963	0	761	1
Left	6	0	32	1
U-Turn	0	0	0	0
Departing	1052	0	751	

Mindbody Dwy — NORTHBOUND

	Departing	U-Turn	Left	Through	Right
Lanes		0	1	0	1
PM	16	0	136	0	33
NOON	0	0	0	0	0
AM	96	0	19	0	6

CONTROL: Signalized

	AM	NOON	PM
TEV	1627	0	2167
PHF	0.95		0.88

Total Vehicles (AM)

Approach	U-Turn	Left	Through	Right
Southbound	0	0	0	0
Eastbound	0	0	745	64
Westbound	0	32	761	0
Northbound		19	0	6

Total Vehicles (Noon)

All movements: N/A

Total Vehicles (PM)

Approach	U-Turn	Left	Through	Right
Southbound	0	0	0	0
Eastbound	0	0	1019	10
Westbound	0	6	963	0
Northbound		136	0	33

Bikes (AM)

Approach	Left	Through	Right
Southbound	0	0	0
Eastbound	0	2	1
Westbound	0	8	0
Northbound	0	0	0

Bikes (NOON)

All movements: N/A

Bikes (PM)

Approach	Left	Through	Right
Southbound	0	0	0
Eastbound	0	7	0
Westbound	0	2	0
Northbound	1	0	0

Pedestrians (Crosswalks)

Crosswalk	AM	NOON	PM
North leg (westbound)	0	0	0
North leg (eastbound)	0	0	0
West leg (southbound)	0	0	0
West leg (northbound)	0	0	0
East leg (southbound)	0	0	0
East leg (northbound)	0	0	0
South leg (eastbound)	0	0	0
South leg (westbound)	2	0	0
Diagonal (all corners)	0	0	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Edna Rd/SR 227 & Buckley Rd
City: San Luis Obispo
Control: Signalized

Project ID: 19-02080-004
Date: 10/9/2019

Total

NS/EW Streets:	Edna Rd/SR 227				Edna Rd/SR 227				Buckley Rd				Buckley Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	1	0	0.5	0.5	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	27	186	0	0	1	79	7	0	5	2	14	0	0	0	0	0	321
7:15 AM	33	207	4	0	0	74	6	0	5	1	18	0	0	0	1	0	349
7:30 AM	60	267	0	0	0	85	15	0	2	1	25	0	0	0	0	0	455
7:45 AM	46	316	0	0	0	79	5	0	12	0	40	0	0	0	1	0	499
8:00 AM	64	289	2	0	1	137	8	0	9	2	45	0	0	0	1	0	558
8:15 AM	48	293	0	0	1	125	18	0	16	0	57	0	2	0	0	0	560
8:30 AM	58	290	1	0	1	75	10	0	16	3	28	0	0	0	1	0	483
8:45 AM	46	267	3	0	7	76	12	0	15	2	24	0	0	1	0	0	453
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	382	2115	10	0	11	730	81	0	80	11	251	0	2	1	4	0	3678
APPROACH %'s :	15.24%	84.36%	0.40%	0.00%	1.34%	88.81%	9.85%	0.00%	23.39%	3.22%	73.39%	0.00%	28.57%	14.29%	57.14%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	216	1188	3	0	3	416	41	0	53	5	170	0	2	0	3	0	2100
PEAK HR FACTOR :	0.844	0.940	0.375	0.000	0.750	0.759	0.569	0.000	0.828	0.417	0.746	0.000	0.250	0.000	0.750	0.000	0.938
	0.972				0.788				0.781				0.625				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	1	0	0.5	0.5	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	20	151	1	0	2	235	11	0	12	2	73	0	2	0	1	0	510
4:15 PM	11	133	0	0	0	249	11	0	7	0	74	0	0	0	2	0	487
4:30 PM	20	107	1	0	0	246	3	0	6	0	85	0	2	0	1	0	471
4:45 PM	12	127	1	0	0	227	7	0	9	0	95	0	3	0	1	0	482
5:00 PM	22	104	0	0	0	229	5	0	11	2	113	0	6	2	5	0	499
5:15 PM	13	104	1	0	0	229	6	0	9	1	85	0	2	0	3	0	453
5:30 PM	9	113	1	0	2	256	11	0	13	0	81	0	1	0	2	0	489
5:45 PM	17	97	0	0	0	191	4	0	6	0	67	0	2	1	4	0	389
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	124	936	5	0	4	1862	58	0	73	5	673	0	18	3	19	0	3780
APPROACH %'s :	11.64%	87.89%	0.47%	0.00%	0.21%	96.78%	3.01%	0.00%	9.72%	0.67%	89.61%	0.00%	45.00%	7.50%	47.50%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	63	518	3	0	2	957	32	0	34	2	327	0	7	0	5	0	1950
PEAK HR FACTOR :	0.788	0.858	0.750	0.000	0.250	0.961	0.727	0.000	0.708	0.250	0.861	0.000	0.583	0.000	0.625	0.000	0.956
	0.849				0.953				0.873				0.750				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Edna Rd/SR 227 & Buckley Rd
City: San Luis Obispo
Control: Signalized

Project ID: 19-02080-004
Date: 10/9/2019

RTOR

NS/EW Streets:	Edna Rd/SR 227				Edna Rd/SR 227				Buckley Rd				Buckley Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	1	0	0.5	0.5	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	1	0	9
7:30 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	1	0	11
8:00 AM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11
8:15 AM	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12
8:30 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
8:45 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	57	0	0	0	2	0	59
APPROACH %'s :									0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	38	0	0	0	1	0	39
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.792	0.000	0.000	0.000	0.250	0.000	0.813
											0.792				0.250		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	1	0	0.5	0.5	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	0	6
4:15 PM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	1	0	11
4:30 PM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	1	0	9
4:45 PM	0	0	0	0	0	0	0	0	0	0	15	0	0	0	1	0	16
5:00 PM	0	0	0	0	0	0	0	0	0	0	18	0	0	0	2	0	20
5:15 PM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	1	0	10
5:30 PM	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	15
5:45 PM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	2	0	13
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	91	0	0	0	9	0	100
APPROACH %'s :									0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	38	0	0	0	4	0	42
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.633	0.000	0.000	0.000	1.000	0.000	0.656
											0.633				1.000		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Edna Rd/SR 227 & Buckley Rd
City: San Luis Obispo
Control: Signalized

Project ID: 19-02080-004
Date: 10/9/2019

Bikes

NS/EW Streets:	Edna Rd/SR 227				Edna Rd/SR 227				Buckley Rd				Buckley Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	1	0	0.5	0.5	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	1	0	0	0	10	0	0	0	0	0	0	0	0	0	0	11
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	11	0	0	0	12	0	0	0	0	0	0	0	0	0	0	23
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	**07:45 AM - 08:45 AM**																TOTAL
PEAK HR VOL :	0	4	0	0	0	12	0	0	0	0	0	0	0	0	0	0	16
PEAK HR FACTOR :	0.000	0.333	0.000	0.000	0.000	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.364
		0.333				0.300											

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	1	0	0.5	0.5	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	4
5:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	9	0	0	1	0	0	0	0	0	0	0	11
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	**04:00 PM - 05:00 PM**																TOTAL
PEAK HR VOL :	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
		0.250				0.250											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Edna Rd/SR 227 & Buckley Rd
City: San Luis Obispo
Project ID: 19-02080-004
Date: 10/9/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Edna Rd/SR 227		Edna Rd/SR 227		Buckley Rd		Buckley Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**07:45 AM - 08:45 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	1	1
APPROACH %'s :							0.00%	100.00%	
PEAK HR :	**04:00 PM - 05:00 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Edna Rd/SR 227 & Buckley Rd

Peak Hour Turning Movement Count

ID: 19-02080-004
City: San Luis Obispo

Day: Wednesday
Date: 10/09/2019

PEAK HOURS		COUNT PERIODS
AM	07:45 AM - 08:45 AM	07:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:00 PM - 05:00 PM	04:00 PM - 06:00 PM

SOUTHBOUND — Edna Rd/SR 227

AM	41	416	3	0	1244	AM
NOON	0	0	0	0	0	NOON
PM	32	957	2	0	557	PM

EASTBOUND — Buckley Rd

AM	NOON	PM		
257	0	95		
0	0	0	0	
53	0	34	0.5	
5	0	2	0.5	
170	0	327	1	
AM	NOON	PM		

WESTBOUND — Buckley Rd

PM	NOON	AM	
5	0	3	0
0	0	0	1
7	0	2	0
0	0	0	0
7	0	11	
PM	NOON	AM	

NORTHBOUND — Edna Rd/SR 227

PM	1291	0	63	518	3	PM
NOON	0	0	0	0	0	NOON
AM	588	0	216	1188	3	AM

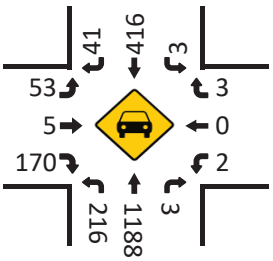
1	1	1	0
0	1	1	0

CONTROL

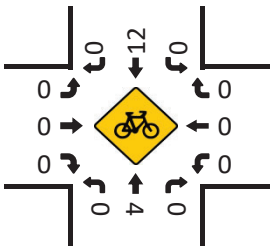
Signalized

TEV	2100 AM	0 NOON	1950 PM
PHF	0.94		0.96

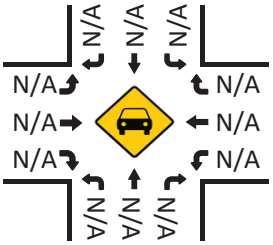
Total Vehicles (AM)



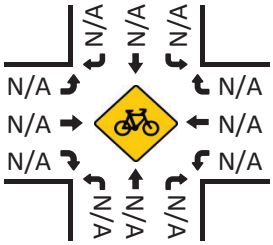
Bikes (AM)



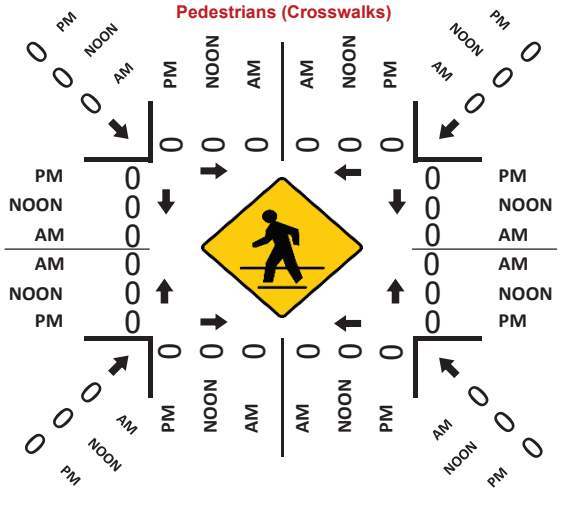
Total Vehicles (Noon)



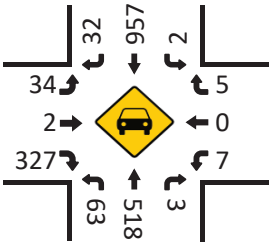
Bikes (NOON)



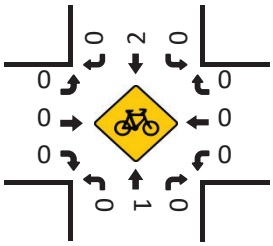
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



Appendix B

Collision Rate Calculations

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Intersection Collision Rate Calculations

Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Intersection # 1: Capitolio Way & Broad St (SR 227)

Date of Count: Wednesday, November 14, 2018

Number of Collisions: 2
Number of Injuries: 0
Number of Fatalities: 0
ADT: 26500
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Intersection Type: Tee
Control Type: Stop & Yield Controls
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times 365 \text{ Days per Year} \times \text{Number of Years}}$$

$$\text{collision rate} = \frac{2 \times 1{,}000{,}000}{26{,}500 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.04 c/mve**	**0.0%**	**0.0%**
Statewide Average*	**0.14 c/mve**	**1.2%**	**38.2%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 2: Industrial Way & Broad St (SR 227)

Date of Count: Wednesday, October 24, 2018

Number of Collisions: 17
Number of Injuries: 8
Number of Fatalities: 0
ADT: 31700
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times 365 \text{ Days per Year} \times \text{Number of Years}}$$

$$\text{collision rate} = \frac{17 \times 1{,}000{,}000}{31{,}700 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.29 c/mve**	**0.0%**	**47.1%**
Statewide Average*	**0.43 c/mve**	**0.4%**	**36.1%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Calculaions

Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Intersection # 3: Los Osos Valley Rd & US 101 South Ramps

Date of Count: Tuesday, October 9, 2018

Number of Collisions: 9
Number of Injuries: 4
Number of Fatalities: 0
ADT: 35100
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Intersection Type: Tee
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{9 \times 1{,}000{,}000}{35{,}100 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.14 c/mve**	**0.0%**	**44.4%**
Statewide Average*	**0.28 c/mve**	**0.4%**	**37.2%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 4: Los Osos Valley Rd & US 101 North Ramps

Date of Count: Tuesday, October 9, 2018

Number of Collisions: 7
Number of Injuries: 0
Number of Fatalities: 0
ADT: 28600
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Intersection Type: Tee
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{7 \times 1{,}000{,}000}{28{,}600 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.13 c/mve**	**0.0%**	**0.0%**
Statewide Average*	**0.28 c/mve**	**0.4%**	**37.2%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Calculaions

Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Intersection # 5: Tank Farm Rd & South Higuera St

Date of Count: Tuesday, October 30, 2018

Number of Collisions: 11
Number of Injuries: 6
Number of Fatalities: 0
ADT: 28500
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{11 \times 1{,}000{,}000}{28{,}500 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.21 c/mve**	**0.0%**	**54.5%**
Statewide Average*	**0.43 c/mve**	**0.4%**	**36.1%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 6: Tank Farm Rd & Long St

Date of Count: Wednesday, October 9, 2019

Number of Collisions: 6
Number of Injuries: 3
Number of Fatalities: 0
ADT: 21400
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Stop & Yield Controls
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{6 \times 1{,}000{,}000}{21{,}400 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.15 c/mve**	**0.0%**	**50.0%**
Statewide Average*	**0.23 c/mve**	**1.9%**	**39.0%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Calculaions

Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Intersection # 7: Tank Farm Rd & Sante Fe Rd

Date of Count: Wednesday, October 9, 2019

Number of Collisions: 4
Number of Injuries: 3
Number of Fatalities: 0
ADT: 21400
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Stop & Yield Controls
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{4 \times 1{,}000{,}000}{21{,}400 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.10 c/mve**	**0.0%**	**75.0%**
Statewide Average*	**0.23 c/mve**	**1.9%**	**39.0%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 8: Tank Farm Rd & Mind Body Entrance

Date of Count: Wednesday, October 9, 2019

Number of Collisions: 4
Number of Injuries: 0
Number of Fatalities: 0
ADT: 21700
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Intersection Type: Tee
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{4 \times 1{,}000{,}000}{21{,}700 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.10 c/mve**	**0.0%**	**0.0%**
Statewide Average*	**0.28 c/mve**	**0.4%**	**37.2%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Calculaions

Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Intersection # 9: Tank Farm Rd & Broad St (SR 227)

Date of Count: Tuesday, October 23, 2018

Number of Collisions: 26
Number of Injuries: 14
Number of Fatalities: 0
ADT: 42100
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{26 \times 1{,}000{,}000}{42{,}100 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.34 c/mve**	**0.0%**	**53.8%**
Statewide Average*	**0.43 c/mve**	**0.4%**	**36.1%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 10: Aerovista Pl & Broad St (SR 227)

Date of Count: Wednesday, November 14, 2018

Number of Collisions: 6
Number of Injuries: 3
Number of Fatalities: 0
ADT: 20100
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Intersection Type: Tee
Control Type: Stop & Yield Controls
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{6 \times 1{,}000{,}000}{20{,}100 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.16 c/mve**	**0.0%**	**50.0%**
Statewide Average*	**0.14 c/mve**	**1.2%**	**38.2%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Calculaions

Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Intersection # 11: Aero Dr & Broad St (SR 227)

Date of Count: Tuesday, October 23, 2018

Number of Collisions: 5
Number of Injuries: 0
Number of Fatalities: 0
ADT: 19400
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{5 \times 1{,}000{,}000}{19{,}400 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.14 c/mve**	**0.0%**	**0.0%**
Statewide Average*	**0.43 c/mve**	**0.4%**	**36.1%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 12: Airport Dr & Broad St

Date of Count: Tuesday, October 23, 2018

Number of Collisions: 2
Number of Injuries: 1
Number of Fatalities: 0
ADT: 17000
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Intersection Type: Tee
Control Type: Stop & Yield Controls
Area: Rural

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{2 \times 1{,}000{,}000}{17{,}000 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.06 c/mve**	**0.0%**	**50.0%**
Statewide Average*	**0.16 c/mve**	**1.8%**	**39.5%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Calculaions

Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Intersection # 13: Buckley Rd & Edna Rd (SR 227)

Date of Count: Wednesday, October 9, 2019

Number of Collisions: 23
Number of Injuries: 9
Number of Fatalities: 0
ADT: 19500
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Rural

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{23 \times 1{,}000{,}000}{19{,}500 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.65 c/mve**	**0.0%**	**39.1%**
Statewide Average*	**0.58 c/mve**	**1.0%**	**38.0%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

SEGMENT COLLISION RATE CALCULATIONS

Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Location: Broad St (SR 227) between Orcutt Rd and Tank Farm

Date of Count: Wednesday, November 14, 2018
ADT: 26,500

Number of Collisions: 48
Number of Injuries: 23
Number of Fatalities: 0
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Highway Type: Undivided 4 lanes
Area: Suburban
Design Speed: ≤55

Segment Length: 1.0 miles
Direction: North/South

$$\frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times 365 \text{ Days per Year} \times \text{Segment Length} \times \text{Number of Years}}$$

$$\frac{48 \times 1{,}000{,}000}{26{,}500 \times 365 \times 1 \times 5}$$

	Collision Rate		Fatality Rate	Injury Rate
Study Segment	**0.99**	**c/mvm**	**0.0%**	**47.9%**
Statewide Average*	**1.67**	**c/mvm**	**1.3%**	**31.8%**

ADT = average daily traffic volume
c/mvm = collisions per million vehicle miles
* 2013 Collision Data on California State Highways, Caltrans

Location: Broad St (SR 227) between Tank Farm Rd and City Li

Date of Count: Wednesday, November 14, 2018
ADT: 20,100

Number of Collisions: 26
Number of Injuries: 16
Number of Fatalities: 0
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Highway Type: Undivided 4 lanes
Area: Suburban
Design Speed: ≤55

Segment Length: 1.5 miles
Direction: North/South

$$\frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times 365 \text{ Days per Year} \times \text{Segment Length} \times \text{Number of Years}}$$

$$\frac{26 \times 1{,}000{,}000}{20{,}100 \times 365 \times 1.46 \times 5}$$

	Collision Rate		Fatality Rate	Injury Rate
Study Segment	**0.49**	**c/mvm**	**0.0%**	**61.5%**
Statewide Average*	**1.67**	**c/mvm**	**1.3%**	**31.8%**

ADT = average daily traffic volume
c/mvm = collisions per million vehicle miles
* 2013 Collision Data on California State Highways, Caltrans

SEGMENT COLLISION RATE CALCULATIONS

Multimodal Transportation Impact Study for the SLO Airport Hotels Project

Location: Tank Farm Rd between Broad St (SR227) and South

Date of Count: Tuesday, October 30, 2018
ADT: 15,900

Number of Collisions: 42
Number of Injuries: 16
Number of Fatalities: 0
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Highway Type: Conventional 3 lanes
Area: Suburban

Segment Length: 1.7 miles
Direction: East/West

$$\frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times 365 \text{ Days per Year} \times \text{Segment Length} \times \text{Number of Years}}$$

$$\frac{42 \times 1{,}000{,}000}{15{,}900 \times 365 \times 1.7 \times 5}$$

	Collision Rate		Fatality Rate	Injury Rate
Study Segment	**0.85**	**c/mvm**	**0.0%**	**38.1%**
Statewide Average*	**1.03**	**c/mvm**	**1.0%**	**39.0%**

ADT = average daily traffic volume
c/mvm = collisions per million vehicle miles
* 2013 Collision Data on California State Highways, Caltrans

Location: Tank Farm Rd between Broad St (SR 227) and Orcutt

Date of Count: Tuesday, October 23, 2018
ADT: 13,000

Number of Collisions: 19
Number of Injuries: 7
Number of Fatalities: 0
Start Date: March 1, 2014
End Date: February 28, 2019
Number of Years: 5

Highway Type: Divided 4 lanes
Area: Suburban
Design Speed: <=55

Segment Length: 1.0 miles
Direction: East/West

$$\frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times 365 \text{ Days per Year} \times \text{Segment Length} \times \text{Number of Years}}$$

$$\frac{19 \times 1{,}000{,}000}{13{,}000 \times 365 \times 1 \times 5}$$

	Collision Rate		Fatality Rate	Injury Rate
Study Segment	**0.80**	**c/mvm**	**0.0%**	**36.8%**
Statewide Average*	**1.42**	**c/mvm**	**0.6%**	**40.4%**

ADT = average daily traffic volume
c/mvm = collisions per million vehicle miles
* 2013 Collision Data on California State Highways, Caltrans

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Appendix C

Automobile Intersection Level of Service Calculations

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HCM 6th TWSC
1: Broad Street (SR 227) & Capitolio Way 02/05/2020

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	62	901	37	119	1122
Future Vol, veh/h	14	62	901	37	119	1122
Conflicting Peds, #/hr	9	9	0	9	9	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	79	79	90	90	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	78	1001	41	128	1206

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1899	539	0	0	1051	0
Stage 1	1031	-	-	-	-	-
Stage 2	868	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	61	487	-	-	658	-
Stage 1	305	-	-	-	-	-
Stage 2	371	-	-	-	-	-
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	48	479	-	-	652	-
Mov Cap-2 Maneuver	158	-	-	-	-	-
Stage 1	302	-	-	-	-	-
Stage 2	296	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.1	0	1.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	158	479	652	-
HCM Lane V/C Ratio	-	-	0.112	0.164	0.196	-
HCM Control Delay (s)	-	-	30.6	14	11.9	-
HCM Lane LOS	-	-	D	B	B	-
HCM 95th %tile Q(veh)	-	-	0.4	0.6	0.7	-

HCM 6th Signalized Intersection Summary
2: Broad Street (SR 227) & Industrial 02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	5	86	9	68	51	810	191	46	985	52
Future Volume (veh/h)	9	0	5	86	9	68	51	810	191	46	985	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.94	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	0	10	123	13	60	54	862	164	57	1216	53
Peak Hour Factor	0.50	0.50	0.50	0.70	0.70	0.70	0.94	0.94	0.94	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	0	113	299	32	274	69	1840	779	73	1848	791
Arrive On Green	0.07	0.00	0.07	0.18	0.18	0.18	0.04	0.52	0.52	0.04	0.52	0.52
Sat Flow, veh/h	1781	0	1509	1618	171	1486	1781	3554	1505	1781	3554	1522
Grp Volume(v), veh/h	18	0	10	136	0	60	54	862	164	57	1216	53
Grp Sat Flow(s),veh/h/ln	1781	0	1509	1789	0	1486	1781	1777	1505	1781	1777	1522
Q Serve(g_s), s	0.8	0.0	0.5	5.9	0.0	3.0	2.6	13.6	5.2	2.8	21.9	1.5
Cycle Q Clear(g_c), s	0.8	0.0	0.5	5.9	0.0	3.0	2.6	13.6	5.2	2.8	21.9	1.5
Prop In Lane	1.00		1.00	0.90		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	0	113	330	0	274	69	1840	779	73	1848	791
V/C Ratio(X)	0.14	0.00	0.09	0.41	0.00	0.22	0.78	0.47	0.21	0.78	0.66	0.07
Avail Cap(c_a), veh/h	709	0	601	652	0	541	81	1840	779	142	1848	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	0.0	37.9	31.6	0.0	30.5	41.9	13.5	11.5	41.7	15.4	10.5
Incr Delay (d2), s/veh	0.5	0.0	0.3	0.8	0.0	0.4	33.6	0.9	0.6	16.1	1.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.2	2.5	0.0	1.1	1.8	4.9	1.6	1.5	8.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.5	0.0	38.2	32.5	0.0	30.9	75.4	14.4	12.1	57.9	17.2	10.6
LnGrp LOS	D	A	D	C	A	C	E	B	B	E	B	B
Approach Vol, veh/h		28			196			1080			1326	
Approach Delay, s/veh		38.4			32.0			17.1			18.7	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	7.6	49.5	10.6	7.4	49.7	20.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	45.5	35.0	4.0	28.0	32.0
Max Q Clear Time (g_c+I1), s	4.8	15.6	2.8	4.6	23.9	7.9
Green Ext Time (p_c), s	0.0	7.3	0.1	0.0	2.8	1.0

Intersection Summary	
HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
3: LOVR & 101 SB

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	770	336	37	870	0	0	0	0	452	0	231
Future Volume (veh/h)	0	770	336	37	870	0	0	0	0	452	0	231
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	802	302	43	1012	0				486	0	143
Peak Hour Factor	0.96	0.96	0.96	0.86	0.86	0.86				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1925	838	54	2171	0				525	0	463
Arrive On Green	0.00	1.00	1.00	0.03	0.61	0.00				0.29	0.00	0.29
Sat Flow, veh/h	0	3647	1548	1781	3647	0				1781	0	1571
Grp Volume(v), veh/h	0	802	302	43	1012	0				486	0	143
Grp Sat Flow(s),veh/h/ln	0	1777	1548	1781	1777	0				1781	0	1571
Q Serve(g_s), s	0.0	0.0	0.0	2.2	13.9	0.0				23.8	0.0	6.4
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.2	13.9	0.0				23.8	0.0	6.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1925	838	54	2171	0				525	0	463
V/C Ratio(X)	0.00	0.42	0.36	0.79	0.47	0.00				0.93	0.00	0.31
Avail Cap(c_a), veh/h	0	1925	838	109	2171	0				544	0	480
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.96	0.96	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	43.3	9.5	0.0				30.8	0.0	24.6
Incr Delay (d2), s/veh	0.0	0.6	1.2	22.0	0.7	0.0				21.7	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.3	1.3	4.9	0.0				13.0	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.6	1.2	65.4	10.2	0.0				52.5	0.0	25.0
LnGrp LOS	A	A	A	E	B	A				D	A	C
Approach Vol, veh/h		1104			1055						629	
Approach Delay, s/veh		0.8			12.5						46.2	
Approach LOS		A			B						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	6.2	53.7				60.0		30.0				
Change Period (Y+Rc), s	3.5	5.0				5.0		3.5				
Max Green Setting (Gmax), s	5.5	45.0				54.0		27.5				
Max Q Clear Time (g_c+I1), s	4.2	2.0				15.9		25.8				
Green Ext Time (p_c), s	0.0	8.9				9.1		0.7				

Intersection Summary			
HCM 6th Ctrl Delay	15.5		
HCM 6th LOS	B		

HCM Signalized Intersection Capacity Analysis
4: 101 NB & LOVR

01/31/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1053	169	90	436	472	155
Future Volume (vph)	1053	169	90	436	472	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	4.0	3.5	6.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.96	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3539	1560	1770	3539	3353	
Flt Permitted	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (perm)	3539	1560	1770	3539	3353	
Peak-hour factor, PHF	0.93	0.93	0.85	0.85	0.97	0.97
Adj. Flow (vph)	1132	182	106	513	487	160
RTOR Reduction (vph)	0	46	0	0	31	0
Lane Group Flow (vph)	1132	136	106	513	616	0
Confl. Bikes (#/hr)		3				
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	2	8	1	6	8	
Permitted Phases		2				
Actuated Green, G (s)	56.1	82.2	14.3	73.9	26.1	
Effective Green, g (s)	56.1	82.2	14.3	73.9	26.1	
Actuated g/C Ratio	0.51	0.75	0.13	0.67	0.24	
Clearance Time (s)	6.0	4.0	3.5	6.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1804	1165	230	2377	795	
v/s Ratio Prot	c0.32	0.03	c0.06	0.14	c0.18	
v/s Ratio Perm		0.06				
v/c Ratio	0.63	0.12	0.46	0.22	0.77	
Uniform Delay, d1	19.4	3.8	44.3	6.9	39.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	0.0	1.5	0.2	4.7	
Delay (s)	21.1	3.9	45.7	7.1	43.9	
Level of Service	C	A	D	A	D	
Approach Delay (s)	18.7			13.7	43.9	
Approach LOS	B			B	D	

Intersection Summary					
HCM 2000 Control Delay	23.8	HCM 2000 Level of Service	C		
HCM 2000 Volume to Capacity ratio	0.67				
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	17.5		
Intersection Capacity Utilization	64.1%	ICU Level of Service	C		
Analysis Period (min)	15				
c Critical Lane Group					

HCM 6th Signalized Intersection Summary
5: S. Higuera Street & Tank Farm

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	17	20	272	3	235	12	365	728	252	267	7
Future Volume (veh/h)	23	17	20	272	3	235	12	365	728	252	267	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		1.00	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	25	26	311	0	0	13	410	618	260	275	7
Peak Hour Factor	0.68	0.68	0.68	0.88	0.88	0.88	0.89	0.89	0.89	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	85	162	493	0		28	1045	664	313	1607	41
Arrive On Green	0.11	0.11	0.11	0.14	0.00	0.00	0.02	0.29	0.29	0.18	0.45	0.45
Sat Flow, veh/h	1048	770	1478	3563	0	1585	1781	3554	1512	1781	3537	90
Grp Volume(v), veh/h	59	0	26	311	0	0	13	410	618	260	138	144
Grp Sat Flow(s),veh/h/ln	1818	0	1478	1781	0	1585	1781	1777	1512	1781	1777	1850
Q Serve(g_s), s	2.4	0.0	1.3	6.7	0.0	0.0	0.6	7.5	24.0	11.5	3.7	3.8
Cycle Q Clear(g_c), s	2.4	0.0	1.3	6.7	0.0	0.0	0.6	7.5	24.0	11.5	3.7	3.8
Prop In Lane	0.58		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	200	0	162	493	0		28	1045	664	313	807	840
V/C Ratio(X)	0.30	0.00	0.16	0.63	0.00		0.47	0.39	0.93	0.83	0.17	0.17
Avail Cap(c_a), veh/h	602	0	489	1092	0		175	1045	664	546	807	840
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.4	0.0	32.9	33.2	0.0	0.0	39.8	23.0	19.9	32.5	13.2	13.2
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.5	0.0	0.0	4.5	0.5	20.4	6.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.4	2.8	0.0	0.0	0.3	3.0	15.6	5.2	1.4	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	0.0	33.1	33.7	0.0	0.0	44.3	23.5	40.3	39.2	13.4	13.4
LnGrp LOS	C	A	C	C	A		D	C	D	D	B	B
Approach Vol, veh/h		85			311	A		1041			542	
Approach Delay, s/veh		33.5			33.7			33.8			25.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	30.0		15.0	6.3	43.1		17.3
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0
Max Green Setting (Gmax), s	25.0	24.0		27.0	8.0	36.0		25.0
Max Q Clear Time (g_c+I1), s	3.5	26.0		4.4	2.6	5.8		8.7
Green Ext Time (p_c), s	0.9	0.0		0.2	0.0	3.0		0.7

Intersection Summary	
HCM 6th Ctrl Delay	31.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
6: Long Street & Tank Farm

02/05/2020

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	813	47	113	585	18	6	0	62	5	1	18
Future Vol, veh/h	58	813	47	113	585	18	6	0	62	5	1	18
Conflicting Peds, #/hr	2	0	1	0	0	1	2	0	0	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	225	-	-	175	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	95	95	95	71	71	71	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	62	865	50	119	616	19	8	0	87	6	1	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	637	0	0	916	0	0	1564	1890	460	1424	1906	322
Stage 1	-	-	-	-	-	-	1015	1015	-	866	866	-
Stage 2	-	-	-	-	-	-	549	875	-	558	1040	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	943	-	-	740	-	-	75	69	548	96	68	674
Stage 1	-	-	-	-	-	-	255	314	-	314	369	-
Stage 2	-	-	-	-	-	-	488	365	-	482	306	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	941	-	-	739	-	-	59	54	547	67	53	671
Mov Cap-2 Maneuver	-	-	-	-	-	-	59	54	-	67	53	-
Stage 1	-	-	-	-	-	-	238	293	-	293	309	-
Stage 2	-	-	-	-	-	-	394	306	-	378	285	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.7	21.3	26
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	316	941	-	-	739	-	-	199
HCM Lane V/C Ratio	0.303	0.066	-	-	0.161	-	-	0.14
HCM Control Delay (s)	21.3	9.1	-	-	10.8	-	-	26
HCM Lane LOS	C	A	-	-	B	-	-	D
HCM 95th %tile Q(veh)	1.2	0.2	-	-	0.6	-	-	0.5

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	767	47	101	660	1	9	1	55	0	1	1
Future Vol, veh/h	0	767	47	101	660	1	9	1	55	0	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	115	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	91	91	91	81	81	81	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	807	49	111	725	1	11	1	68	0	4	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	726	0	0	856	0	0	1784	1780	832	1814	1804	726
Stage 1	-	-	-	-	-	-	832	832	-	948	948	-
Stage 2	-	-	-	-	-	-	952	948	-	866	856	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	877	-	-	784	-	-	63	82	369	60	79	425
Stage 1	-	-	-	-	-	-	363	384	-	313	339	-
Stage 2	-	-	-	-	-	-	312	339	-	348	374	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	877	-	-	784	-	-	53	70	369	43	68	425
Mov Cap-2 Maneuver	-	-	-	-	-	-	53	70	-	43	68	-
Stage 1	-	-	-	-	-	-	363	384	-	313	291	-
Stage 2	-	-	-	-	-	-	262	291	-	283	374	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.4	28.2	38
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	54	369	877	-	-	784	-	-	117
HCM Lane V/C Ratio	0.229	0.184	-	-	-	0.142	-	-	0.068
HCM Control Delay (s)	90.4	16.9	0	-	-	10.3	-	-	38
HCM Lane LOS	F	C	A	-	-	B	-	-	E
HCM 95th %tile Q(veh)	0.8	0.7	0	-	-	0.5	-	-	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	745	64	32	761	19	6
Future Volume (veh/h)	745	64	32	761	19	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	784	67	36	855	28	9
Peak Hour Factor	0.95	0.95	0.89	0.89	0.69	0.69
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1839	157	43	1298	59	52
Arrive On Green	0.56	0.56	0.02	0.69	0.03	0.03
Sat Flow, veh/h	3399	282	1781	1870	1781	1585
Grp Volume(v), veh/h	421	430	36	855	28	9
Grp Sat Flow(s),veh/h/ln	1777	1811	1781	1870	1781	1585
Q Serve(g_s), s	6.1	6.1	0.9	11.3	0.7	0.2
Cycle Q Clear(g_c), s	6.1	6.1	0.9	11.3	0.7	0.2
Prop In Lane		0.16	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	989	1008	43	1298	59	52
V/C Ratio(X)	0.43	0.43	0.83	0.66	0.48	0.17
Avail Cap(c_a), veh/h	1938	1976	445	1298	567	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.7	5.7	21.4	3.8	20.9	20.7
Incr Delay (d2), s/veh	1.1	1.0	14.0	2.2	2.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.5	0.5	1.4	0.3	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.7	6.7	35.4	6.0	23.1	21.3
LnGrp LOS	A	A	D	A	C	C
Approach Vol, veh/h	851			891	37	
Approach Delay, s/veh	6.7			7.2	22.6	
Approach LOS	A			A	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.1	31.5			37.6	6.5
Change Period (Y+Rc), s	5.0	7.0			7.0	5.0
Max Green Setting (Gmax), s	11.0	48.0			30.0	14.0
Max Q Clear Time (g_c+I1), s	2.9	8.1			13.3	2.7
Green Ext Time (p_c), s	0.0	16.4			11.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

HCM 6th Signalized Intersection Summary
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	149	372	225	243	162	211	652	115	58	637	331
Future Volume (veh/h)	223	149	372	225	243	162	211	652	115	58	637	331
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	251	167	333	278	300	51	227	701	106	72	796	340
Peak Hour Factor	0.89	0.89	0.89	0.81	0.81	0.81	0.93	0.93	0.93	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	324	892	392	304	614	516	261	1006	152	92	1072	615
Arrive On Green	0.09	0.25	0.25	0.17	0.33	0.33	0.08	0.33	0.33	0.05	0.30	0.30
Sat Flow, veh/h	3456	3554	1562	1781	1870	1573	3456	3089	467	1781	3554	1548
Grp Volume(v), veh/h	251	167	333	278	300	51	227	403	404	72	796	340
Grp Sat Flow(s),veh/h/ln	1728	1777	1562	1781	1870	1573	1728	1777	1779	1781	1777	1548
Q Serve(g_s), s	8.5	4.4	24.2	18.3	15.3	2.7	7.8	23.6	23.7	4.8	24.1	20.3
Cycle Q Clear(g_c), s	8.5	4.4	24.2	18.3	15.3	2.7	7.8	23.6	23.7	4.8	24.1	20.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	324	892	392	304	614	516	261	579	579	92	1072	615
V/C Ratio(X)	0.78	0.19	0.85	0.91	0.49	0.10	0.87	0.70	0.70	0.78	0.74	0.55
Avail Cap(c_a), veh/h	579	1042	458	313	614	516	261	579	579	104	1072	615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	35.1	42.5	48.6	32.1	27.8	54.6	35.1	35.1	55.9	37.5	28.0
Incr Delay (d2), s/veh	4.0	0.1	12.5	29.4	0.6	0.1	25.8	6.8	6.8	28.3	4.7	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	1.9	10.4	10.4	6.9	1.0	4.2	10.9	10.9	2.8	10.7	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	35.2	55.0	78.0	32.7	27.9	80.3	41.9	41.9	84.3	42.1	31.5
LnGrp LOS	E	D	E	E	C	C	F	D	D	F	D	C
Approach Vol, veh/h		751			629			1034			1208	
Approach Delay, s/veh		51.2			52.3			50.4			41.7	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	45.4	25.9	36.5	14.5	42.5	16.7	45.7
Change Period (Y+Rc), s	5.5	6.5	5.5	6.5	5.5	6.5	5.5	* 6.5
Max Green Setting (Gmax), s	7.0	38.0	21.0	35.0	9.0	36.0	20.0	* 33
Max Q Clear Time (g_c+I1), s	10.8	25.7	20.3	26.2	9.8	26.1	10.5	17.3
Green Ext Time (p_c), s	0.0	3.8	0.1	1.7	0.0	4.7	0.7	1.7

Intersection Summary	
HCM 6th Ctrl Delay	48.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
10: Broad Street (SR 227) & Aerovista Place

02/05/2020

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	9	58	1147	716	213
Future Vol, veh/h	40	9	58	1147	716	213
Conflicting Peds, #/hr	5	1	1	0	0	5
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	61	61	92	92	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	15	63	1247	796	237

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1675	523	1038	0	-	0
Stage 1	920	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	86	499	665	-	-	-
Stage 1	349	-	-	-	-	-
Stage 2	425	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	77	496	662	-	-	-
Mov Cap-2 Maneuver	199	-	-	-	-	-
Stage 1	314	-	-	-	-	-
Stage 2	423	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.2	0.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	662	-	199	496	-	-
HCM Lane V/C Ratio	0.095	-	0.33	0.03	-	-
HCM Control Delay (s)	11	-	31.7	12.5	-	-
HCM Lane LOS	B	-	D	B	-	-
HCM 95th %tile Q(veh)	0.3	-	1.4	0.1	-	-

HCM 6th Signalized Intersection Summary
11: Broad Street (SR 227) & Aero Drive

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	1	4	6	0	33	47	1139	16	39	596	65
Future Volume (veh/h)	53	1	4	6	0	33	47	1139	16	39	596	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	1	5	11	0	58	49	1186	17	46	701	61
Peak Hour Factor	0.85	0.85	0.85	0.57	0.57	0.57	0.96	0.96	0.96	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	1	83	90	0	79	63	2300	33	59	2111	184
Arrive On Green	0.05	0.05	0.05	0.05	0.00	0.05	0.04	0.64	0.64	0.03	0.64	0.64
Sat Flow, veh/h	1754	28	1576	1781	0	1566	1781	3585	51	1781	3301	287
Grp Volume(v), veh/h	63	0	5	11	0	58	49	588	615	46	377	385
Grp Sat Flow(s),veh/h/ln	1783	0	1576	1781	0	1566	1781	1777	1860	1781	1777	1811
Q Serve(g_s), s	3.4	0.0	0.3	0.6	0.0	3.5	2.6	17.2	17.2	2.5	9.4	9.4
Cycle Q Clear(g_c), s	3.4	0.0	0.3	0.6	0.0	3.5	2.6	17.2	17.2	2.5	9.4	9.4
Prop In Lane	0.98		1.00	1.00		1.00	1.00		0.03	1.00		0.16
Lane Grp Cap(c), veh/h	94	0	83	90	0	79	63	1140	1193	59	1136	1158
V/C Ratio(X)	0.67	0.00	0.06	0.12	0.00	0.73	0.77	0.52	0.52	0.78	0.33	0.33
Avail Cap(c_a), veh/h	643	0	569	643	0	565	239	1140	1193	239	1136	1158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	0.0	43.6	44.0	0.0	45.4	46.4	9.3	9.3	46.5	8.0	8.0
Incr Delay (d2), s/veh	7.9	0.0	0.3	0.6	0.0	12.2	18.0	1.7	1.6	19.3	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.1	0.3	0.0	1.6	1.4	5.9	6.1	1.4	3.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.0	0.0	43.9	44.6	0.0	57.6	64.4	11.0	10.9	65.8	8.8	8.8
LnGrp LOS	D	A	D	D	A	E	E	B	B	E	A	A
Approach Vol, veh/h		68			69			1252			808	
Approach Delay, s/veh		52.3			55.5			13.0			12.0	
Approach LOS		D			E			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	68.7		10.1	8.4	68.5		9.9				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	13.0	62.0		35.0	13.0	62.0		35.0				
Max Q Clear Time (g_c+I1), s	4.5	19.2		5.4	4.6	11.4		5.5				
Green Ext Time (p_c), s	0.0	9.6		0.3	0.1	5.1		0.3				

Intersection Summary		
HCM 6th Ctrl Delay		15.2
HCM 6th LOS		B

HCM 6th TWSC
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive

02/05/2020

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	0	1200	606	0
Future Vol, veh/h	0	8	0	1200	606	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	96	96	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	12	0	1250	748	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	748	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	412	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	412	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	412	-
HCM Lane V/C Ratio	-	0.029	-
HCM Control Delay (s)	-	14	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.1	-

HCM 6th Signalized Intersection Summary
13: Edna Road (SR 227) & Buckley Road

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	5	170	2	0	3	216	1188	3	3	416	41
Future Volume (veh/h)	53	5	170	2	0	3	216	1188	3	3	416	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	5	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	6	169	3	0	5	223	1225	3	4	527	52
Peak Hour Factor	0.78	0.78	0.78	0.63	0.63	0.63	0.97	0.97	0.97	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	16	402	5	0	8	250	1357	3	11	1108	913
Arrive On Green	0.11	0.11	0.11	0.01	0.00	0.01	0.14	0.72	0.72	0.01	0.59	0.59
Sat Flow, veh/h	1643	145	1585	620	0	1033	1781	1865	5	1781	1870	1541
Grp Volume(v), veh/h	74	0	169	8	0	0	223	0	1228	4	527	52
Grp Sat Flow(s),veh/h/ln	1788	0	1585	1653	0	0	1781	0	1869	1781	1870	1541
Q Serve(g_s), s	4.6	0.0	10.8	0.6	0.0	0.0	14.9	0.0	63.9	0.3	19.6	1.7
Cycle Q Clear(g_c), s	4.6	0.0	10.8	0.6	0.0	0.0	14.9	0.0	63.9	0.3	19.6	1.7
Prop In Lane	0.92		1.00	0.37		0.62	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	203	0	402	13	0	0	250	0	1360	11	1108	913
V/C Ratio(X)	0.37	0.00	0.42	0.62	0.00	0.00	0.89	0.00	0.90	0.36	0.48	0.06
Avail Cap(c_a), veh/h	387	0	565	218	0	0	294	0	1681	235	1101	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	0.0	38.6	61.2	0.0	0.0	52.3	0.0	13.9	61.3	14.3	10.6
Incr Delay (d2), s/veh	1.3	0.0	0.8	47.2	0.0	0.0	22.8	0.0	6.7	18.6	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	4.4	0.4	0.0	0.0	8.1	0.0	23.4	0.2	7.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.1	0.0	39.5	108.4	0.0	0.0	75.1	0.0	21.6	79.8	14.8	10.7
LnGrp LOS	D	A	D	F	A	A	E	A	C	E	B	B
Approach Vol, veh/h		243			8			1451			583	
Approach Delay, s/veh		43.3			108.4			29.8			14.8	
Approach LOS		D			F			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.3	94.2		17.8	20.7	77.7		4.9				
Change Period (Y+Rc), s	3.5	6.4		4.0	3.7	6.4		4.0				
Max Green Setting (Gmax), s	16.0	109.0		26.2	20.0	58.0		16.0				
Max Q Clear Time (g_c+I1), s	2.3	65.9		12.8	16.9	21.6		2.6				
Green Ext Time (p_c), s	0.0	21.9		1.0	0.1	5.3		0.0				

Intersection Summary			
HCM 6th Ctrl Delay			27.7
HCM 6th LOS			C

HCM 6th TWSC
1: Broad Street (SR 227) & Capitolio Way

02/05/2020

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	132	1198	17	70	1219
Future Vol, veh/h	11	132	1198	17	70	1219
Conflicting Peds, #/hr	4	4	0	4	4	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	176	1331	19	77	1340

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2173	683	0	0	1354	0
Stage 1	1345	-	-	-	-	-
Stage 2	828	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	40	392	-	-	504	-
Stage 1	207	-	-	-	-	-
Stage 2	389	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	34	389	-	-	502	-
Mov Cap-2 Maneuver	130	-	-	-	-	-
Stage 1	206	-	-	-	-	-
Stage 2	328	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.8	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	130	389	502	-
HCM Lane V/C Ratio	-	-	0.113	0.452	0.153	-
HCM Control Delay (s)	-	-	36.2	21.7	13.5	-
HCM Lane LOS	-	-	E	C	B	-
HCM 95th %tile Q(veh)	-	-	0.4	2.3	0.5	-

HCM 6th Signalized Intersection Summary
2: Broad Street (SR 227) & Industrial Way

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	19	44	178	13	220	89	1049	188	133	1068	98
Future Volume (veh/h)	70	19	44	178	13	220	89	1049	188	133	1068	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.93	1.00		0.93	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	25	49	212	15	170	94	1104	146	148	1187	79
Peak Hour Factor	0.76	0.76	0.76	0.84	0.84	0.84	0.95	0.95	0.95	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	147	40	164	286	20	253	122	1324	551	154	1462	605
Arrive On Green	0.10	0.10	0.10	0.17	0.17	0.17	0.07	0.37	0.37	0.09	0.39	0.39
Sat Flow, veh/h	1415	385	1576	1669	118	1477	1781	3554	1479	1781	3741	1548
Grp Volume(v), veh/h	117	0	49	227	0	170	94	1104	146	148	1187	79
Grp Sat Flow(s),veh/h/ln	1800	0	1576	1787	0	1477	1781	1777	1479	1781	1870	1548
Q Serve(g_s), s	5.0	0.0	2.3	9.8	0.0	8.7	4.2	22.9	5.6	6.7	22.9	2.6
Cycle Q Clear(g_c), s	5.0	0.0	2.3	9.8	0.0	8.7	4.2	22.9	5.6	6.7	22.9	2.6
Prop In Lane	0.79		1.00	0.93		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	0	164	306	0	253	122	1324	551	154	1462	605
V/C Ratio(X)	0.63	0.00	0.30	0.74	0.00	0.67	0.77	0.83	0.26	0.96	0.81	0.13
Avail Cap(c_a), veh/h	779	0	682	508	0	420	242	1604	668	154	1462	605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	0.0	33.5	31.8	0.0	31.4	37.0	23.1	17.7	36.8	22.0	15.8
Incr Delay (d2), s/veh	3.4	0.0	1.0	3.6	0.0	3.1	9.9	3.3	0.3	60.2	3.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.9	4.3	0.0	3.1	2.1	9.0	1.7	5.3	9.5	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.1	0.0	34.5	35.4	0.0	34.5	46.9	26.4	17.9	97.0	25.6	15.9
LnGrp LOS	D	A	C	D	A	C	D	C	B	F	C	B
Approach Vol, veh/h		166			397			1344			1414	
Approach Delay, s/veh		37.1			35.0			26.9			32.5	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	36.6		13.4	10.5	38.1		18.8				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	7.0	36.5		35.0	11.0	26.5		23.0				
Max Q Clear Time (g_c+I1), s	8.7	24.9		7.0	6.2	24.9		11.8				
Green Ext Time (p_c), s	0.0	5.3		0.9	0.1	1.1		1.6				

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
3: LOVR & 101 SB

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	908	631	61	1308	0	0	0	0	289	0	390
Future Volume (veh/h)	0	908	631	61	1308	0	0	0	0	289	0	390
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	936	569	63	1348	0				307	0	322
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2219	967	82	2520	0				350	0	302
Arrive On Green	0.00	1.00	1.00	0.05	0.71	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3647	1548	1781	3647	0				1781	0	1539
Grp Volume(v), veh/h	0	936	569	63	1348	0				307	0	322
Grp Sat Flow(s),veh/h/ln	0	1777	1548	1781	1777	0				1781	0	1539
Q Serve(g_s), s	0.0	0.0	0.0	3.1	16.0	0.0				15.1	0.0	17.7
Cycle Q Clear(g_c), s	0.0	0.0	0.0	3.1	16.0	0.0				15.1	0.0	17.7
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2219	967	82	2520	0				350	0	302
V/C Ratio(X)	0.00	0.42	0.59	0.77	0.53	0.00				0.88	0.00	1.06
Avail Cap(c_a), veh/h	0	2219	967	188	2520	0				485	0	419
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.85	0.85	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	42.5	6.1	0.0				35.1	0.0	36.2
Incr Delay (d2), s/veh	0.0	0.5	2.2	14.2	0.8	0.0				12.7	0.0	59.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.6	1.7	4.8	0.0				7.6	0.0	11.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.5	2.2	56.7	7.0	0.0				47.8	0.0	95.8
LnGrp LOS	A	A	A	E	A	A				D	A	F
Approach Vol, veh/h		1505			1411						629	
Approach Delay, s/veh		1.2			9.2						72.4	
Approach LOS		A			A						E	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	7.6	61.2				68.8		21.2				
Change Period (Y+Rc), s	3.5	5.0				5.0		3.5				
Max Green Setting (Gmax), s	4.1	44.0				57.0		24.5				
Max Q Clear Time (g_c+I1), s	5.1	2.0				18.0		17.1				
Green Ext Time (p_c), s	0.0	13.4				14.0		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	17.0
HCM 6th LOS	B

HCM Signalized Intersection Capacity Analysis
4: 101 NB & LOVR

01/31/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	812	364	177	913	482	110
Future Volume (vph)	812	364	177	913	482	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	3.5	3.5	6.0	3.5	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.97	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3539	1564	1770	3539	3376	
Flt Permitted	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (perm)	3539	1564	1770	3539	3376	
Peak-hour factor, PHF	0.97	0.97	0.94	0.94	0.90	0.90
Adj. Flow (vph)	837	375	188	971	536	122
RTOR Reduction (vph)	0	138	0	0	16	0
Lane Group Flow (vph)	837	237	188	971	642	0
Confl. Bikes (#/hr)		5				
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	2	8	1	6	8	
Permitted Phases		2				
Actuated Green, G (s)	23.8	44.7	12.9	40.2	20.9	
Effective Green, g (s)	23.8	44.7	12.9	40.2	20.9	
Actuated g/C Ratio	0.34	0.63	0.18	0.57	0.30	
Clearance Time (s)	6.0	3.5	3.5	6.0	3.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1193	990	323	2015	999	
v/s Ratio Prot	c0.24	0.07	c0.11	0.27	c0.19	
v/s Ratio Perm		0.08				
v/c Ratio	0.70	0.24	0.58	0.48	0.64	
Uniform Delay, d1	20.3	5.6	26.4	9.0	21.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.9	0.1	2.7	0.2	1.4	
Delay (s)	22.2	5.7	29.0	9.2	23.0	
Level of Service	C	A	C	A	C	
Approach Delay (s)	17.1			12.4	23.0	
Approach LOS	B			B	C	

Intersection Summary				
HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	70.6	Sum of lost time (s)	17.0	
Intersection Capacity Utilization	61.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

HCM 6th Signalized Intersection Summary
5: S. Higuera Street & Tank Farm Road

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	9	21	558	11	321	30	503	418	272	683	18
Future Volume (veh/h)	9	9	21	558	11	321	30	503	418	272	683	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		1.00	1.00		0.86	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	12	5	629	0	0	32	541	247	328	823	21
Peak Hour Factor	0.75	0.75	0.75	0.90	0.90	0.90	0.93	0.93	0.93	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	166	246	734	0		40	750	616	349	1356	35
Arrive On Green	0.18	0.18	0.18	0.21	0.00	0.00	0.02	0.21	0.21	0.20	0.38	0.38
Sat Flow, veh/h	912	912	1352	3563	0	1585	1781	3554	1370	1781	3528	90
Grp Volume(v), veh/h	24	0	5	629	0	0	32	541	247	328	414	430
Grp Sat Flow(s),veh/h/ln	1825	0	1352	1781	0	1585	1781	1777	1370	1781	1777	1841
Q Serve(g_s), s	1.2	0.0	0.3	19.1	0.0	0.0	2.0	15.9	14.4	20.4	21.0	21.0
Cycle Q Clear(g_c), s	1.2	0.0	0.3	19.1	0.0	0.0	2.0	15.9	14.4	20.4	21.0	21.0
Prop In Lane	0.50		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	332	0	246	734	0		40	750	616	349	683	708
V/C Ratio(X)	0.07	0.00	0.02	0.86	0.00		0.80	0.72	0.40	0.94	0.61	0.61
Avail Cap(c_a), veh/h	488	0	361	952	0		79	760	620	349	683	708
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	0.0	37.7	43.0	0.0	0.0	54.6	41.2	23.3	44.4	27.7	27.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	6.3	0.0	0.0	28.8	3.3	0.4	32.8	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	8.7	0.0	0.0	1.2	7.1	6.4	11.8	8.7	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.1	0.0	37.7	49.2	0.0	0.0	83.4	44.5	23.7	77.2	29.3	29.2
LnGrp LOS	D	A	D	D	A		F	D	C	E	C	C
Approach Vol, veh/h		29			629	A		820			1172	
Approach Delay, s/veh		38.1			49.2			39.8			42.7	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	29.7		26.4	7.5	49.1		29.1				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	22.6	24.0		30.0	5.0	41.0		30.0				
Max Q Clear Time (g_c+I1), s	2.0	17.9		3.2	4.0	23.0		21.1				
Green Ext Time (p_c), s	0.0	2.4		0.1	0.0	4.7		2.0				

Intersection Summary	
HCM 6th Ctrl Delay	43.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	16.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	615	28	131	1017	23	12	2	168	12	2	66
Future Vol, veh/h	64	615	28	131	1017	23	12	2	168	12	2	66
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	225	-	-	175	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	92	92	92	86	86	86	61	61	61
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	647	29	142	1105	25	14	2	195	20	3	108

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1131	0	0	676	0	0	1635	2211	339	1863	2213	567
Stage 1	-	-	-	-	-	-	796	796	-	1403	1403	-
Stage 2	-	-	-	-	-	-	839	1415	-	460	810	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	613	-	-	911	-	-	67	44	657	45	43	467
Stage 1	-	-	-	-	-	-	347	397	-	147	205	-
Stage 2	-	-	-	-	-	-	326	202	-	551	391	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	612	-	-	911	-	-	38	33	656	24	32	466
Mov Cap-2 Maneuver	-	-	-	-	-	-	38	33	-	24	32	-
Stage 1	-	-	-	-	-	-	309	354	-	131	173	-
Stage 2	-	-	-	-	-	-	207	170	-	342	348	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	1.1	45.5	202.7
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	288	612	-	-	911	-	-	114
HCM Lane V/C Ratio	0.735	0.11	-	-	0.156	-	-	1.15
HCM Control Delay (s)	45.5	11.6	-	-	9.7	-	-	202.7
HCM Lane LOS	E	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	5.3	0.4	-	-	0.6	-	-	8.2

Intersection	
Int Delay, s/veh	18.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	829	24	66	1015	1	40	1	159	0	1	0
Future Vol, veh/h	0	829	24	66	1015	1	40	1	159	0	1	0
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	115	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	94	94	94	79	79	79	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	942	27	70	1080	1	51	1	201	0	4	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1082	0	0	969	0	0	2180	2178	957	2280	2191	1083
Stage 1	-	-	-	-	-	-	956	956	-	1222	1222	-
Stage 2	-	-	-	-	-	-	1224	1222	-	1058	969	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	645	-	-	711	-	-	~ 33	46	313	28	45	264
Stage 1	-	-	-	-	-	-	310	336	-	220	252	-
Stage 2	-	-	-	-	-	-	219	252	-	272	332	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	644	-	-	711	-	-	~ 28	41	313	9	41	263
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 28	41	-	9	41	-
Stage 1	-	-	-	-	-	-	310	336	-	220	227	-
Stage 2	-	-	-	-	-	-	194	227	-	97	332	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.6	172.5	102.1
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	28	313	644	-	-	711	-	-	41
HCM Lane V/C Ratio	1.854	0.643	-	-	-	0.099	-	-	0.098
HCM Control Delay (s)	$ 705.2	35.1	0	-	-	10.6	-	-	102.1
HCM Lane LOS	F	E	A	-	-	B	-	-	F
HCM 95th %tile Q(veh)	6.2	4.2	0	-	-	0.3	-	-	0.3

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
8: Mindbody Entrance & Tank Farm Road

02/05/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1019	10	6	963	136	33
Future Volume (veh/h)	1019	10	6	963	136	33
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1185	12	7	1070	184	45
Peak Hour Factor	0.86	0.86	0.90	0.90	0.74	0.74
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2122	21	10	1262	235	209
Arrive On Green	0.59	0.59	0.01	0.67	0.13	0.13
Sat Flow, veh/h	3697	36	1781	1870	1781	1585
Grp Volume(v), veh/h	584	613	7	1070	184	45
Grp Sat Flow(s),veh/h/ln	1777	1863	1781	1870	1781	1585
Q Serve(g_s), s	12.5	12.5	0.2	27.0	6.2	1.6
Cycle Q Clear(g_c), s	12.5	12.5	0.2	27.0	6.2	1.6
Prop In Lane		0.02	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1047	1097	10	1262	235	209
V/C Ratio(X)	0.56	0.56	0.72	0.85	0.78	0.21
Avail Cap(c_a), veh/h	1371	1438	315	1262	401	357
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.8	7.8	30.9	7.7	26.1	24.1
Incr Delay (d2), s/veh	1.7	1.6	30.0	6.7	2.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	3.9	0.2	8.1	2.7	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.5	9.4	60.8	14.4	28.3	24.3
LnGrp LOS	A	A	E	B	C	C
Approach Vol, veh/h	1197			1077	229	
Approach Delay, s/veh	9.5			14.7	27.5	
Approach LOS	A			B	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.3	43.6				49.0	13.2
Change Period (Y+Rc), s	5.0	7.0				7.0	5.0
Max Green Setting (Gmax), s	11.0	48.0				30.0	14.0
Max Q Clear Time (g_c+I1), s	2.2	14.5				29.0	8.2
Green Ext Time (p_c), s	0.0	22.1				0.9	0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	473	428	260	178	194	120	353	636	183	201	673	514
Future Volume (veh/h)	473	428	260	178	194	120	353	636	183	201	673	514
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	503	455	225	200	218	111	430	776	185	221	740	443
Peak Hour Factor	0.94	0.94	0.94	0.89	0.89	0.89	0.82	0.82	0.82	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	648	777	334	244	314	257	547	793	189	266	967	721
Arrive On Green	0.19	0.22	0.22	0.14	0.17	0.17	0.16	0.28	0.28	0.15	0.27	0.27
Sat Flow, veh/h	3456	3554	1529	1781	1870	1531	3456	2823	673	1781	3554	1559
Grp Volume(v), veh/h	503	455	225	200	218	111	430	488	473	221	740	443
Grp Sat Flow(s),veh/h/ln	1728	1777	1529	1781	1870	1531	1728	1777	1720	1781	1777	1559
Q Serve(g_s), s	10.3	8.6	10.1	8.2	8.2	4.9	8.9	20.4	20.4	9.0	14.3	16.0
Cycle Q Clear(g_c), s	10.3	8.6	10.1	8.2	8.2	4.9	8.9	20.4	20.4	9.0	14.3	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	648	777	334	244	314	257	547	499	483	266	967	721
V/C Ratio(X)	0.78	0.59	0.67	0.82	0.69	0.43	0.79	0.98	0.98	0.83	0.76	0.61
Avail Cap(c_a), veh/h	1017	1141	491	334	400	328	740	499	483	358	967	721
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	26.2	26.8	31.4	29.3	27.9	30.2	26.6	26.6	30.9	25.0	15.2
Incr Delay (d2), s/veh	2.0	0.7	2.4	11.0	3.6	1.1	4.0	35.2	35.8	11.5	5.7	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.4	3.6	4.0	3.7	1.7	3.7	12.5	12.2	4.4	6.2	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.9	26.9	29.1	42.4	32.9	29.0	34.2	61.8	62.5	42.4	30.7	19.1
LnGrp LOS	C	C	C	D	C	C	C	E	E	D	C	B
Approach Vol, veh/h		1183			529			1391			1404	
Approach Delay, s/veh		29.0			35.7			53.5			28.9	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	25.0	14.2	20.3	15.8	24.3	18.0	16.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	21.0	14.0	24.0	16.0	20.0	22.0	16.0
Max Q Clear Time (g_c+I1), s	11.0	22.4	10.2	12.1	10.9	18.0	12.3	10.2
Green Ext Time (p_c), s	0.3	0.0	0.2	3.1	0.9	1.3	1.7	0.8

Intersection Summary	
HCM 6th Ctrl Delay	37.3
HCM 6th LOS	D

HCM 6th TWSC
10: Broad Street (SR 227) & Aerovista Place 02/05/2020

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	102	51	12	785	956	100
Future Vol, veh/h	102	51	12	785	956	100
Conflicting Peds, #/hr	9	9	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	83	83	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	136	68	14	946	1051	110

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1625	599	1170	0	-	0
Stage 1	1115	-	-	-	-	-
Stage 2	510	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 93	445	593	-	-	-
Stage 1	275	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	~ 89	437	588	-	-	-
Mov Cap-2 Maneuver	199	-	-	-	-	-
Stage 1	266	-	-	-	-	-
Stage 2	563	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	41.6	0.2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	588	-	199	437	-	-
HCM Lane V/C Ratio	0.025	-	0.683	0.156	-	-
HCM Control Delay (s)	11.3	-	55	14.8	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	4.2	0.5	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
11: Broad Street (SR 227) & Aero Drive 02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	0	40	8	1	22	39	712	2	4	870	70
Future Volume (veh/h)	169	0	40	8	1	22	39	712	2	4	870	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	225	0	33	11	1	30	45	818	0	4	978	66
Peak Hour Factor	0.75	0.75	0.75	0.71	0.71	0.71	0.87	0.87	0.87	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	278	0	246	55	5	52	58	2093	0	7	1892	128
Arrive On Green	0.16	0.00	0.16	0.03	0.03	0.03	0.03	0.59	0.00	0.00	0.56	0.56
Sat Flow, veh/h	1781	0	1579	1639	149	1550	1781	3647	0	1781	3373	228
Grp Volume(v), veh/h	225	0	33	12	0	30	45	818	0	4	515	529
Grp Sat Flow(s),veh/h/ln	1781	0	1579	1788	0	1550	1781	1777	0	1781	1777	1823
Q Serve(g_s), s	12.1	0.0	1.8	0.6	0.0	1.9	2.5	12.2	0.0	0.2	17.7	17.7
Cycle Q Clear(g_c), s	12.1	0.0	1.8	0.6	0.0	1.9	2.5	12.2	0.0	0.2	17.7	17.7
Prop In Lane	1.00		1.00	0.92		1.00	1.00		0.00	1.00		0.12
Lane Grp Cap(c), veh/h	278	0	246	60	0	52	58	2093	0	7	997	1023
V/C Ratio(X)	0.81	0.00	0.13	0.20	0.00	0.58	0.78	0.39	0.00	0.53	0.52	0.52
Avail Cap(c_a), veh/h	540	0	479	542	0	470	144	2093	0	144	997	1023
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.3	0.0	36.0	46.5	0.0	47.1	47.5	10.9	0.0	49.2	13.4	13.4
Incr Delay (d2), s/veh	5.6	0.0	0.2	1.6	0.0	9.9	20.1	0.6	0.0	48.2	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	0.7	0.3	0.0	0.9	1.4	4.3	0.0	0.2	6.7	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.9	0.0	36.2	48.2	0.0	57.0	67.7	11.4	0.0	97.4	15.3	15.3
LnGrp LOS	D	A	D	D	A	E	E	B	A	F	B	B
Approach Vol, veh/h		258			42			863			1048	
Approach Delay, s/veh		44.7			54.5			14.3			15.6	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	64.8		20.4	8.2	62.0		8.3				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	8.0	55.5		30.0	8.0	55.5		30.0				
Max Q Clear Time (g_c+I1), s	2.2	14.2		14.1	4.5	19.7		3.9				
Green Ext Time (p_c), s	0.0	6.3		1.4	0.0	7.6		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

HCM 6th TWSC
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive 02/05/2020

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	28	0	753	918	0
Future Vol, veh/h	0	28	0	753	918	0
Conflicting Peds, #/hr	0	3	0	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	43	43	87	87	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	65	0	866	1009	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1012	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	290	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	-	289	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	289	-
HCM Lane V/C Ratio	-	0.225	-
HCM Control Delay (s)	-	21	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.8	-

HCM 6th Signalized Intersection Summary
13: Edna Rd (SR 227)/Edna Road (SR 227) & Buckley Road 02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	2	327	7	0	5	63	518	3	2	957	32
Future Volume (veh/h)	34	2	327	7	0	5	63	518	3	2	957	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	75	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	2	332	9	0	2	74	609	4	2	1007	34
Peak Hour Factor	0.87	0.87	0.87	0.75	0.75	0.75	0.85	0.85	0.85	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	291	15	355	14	0	3	93	1296	9	6	1212	1005
Arrive On Green	0.20	0.20	0.20	0.01	0.00	0.01	0.05	0.65	0.65	0.00	0.59	0.59
Sat Flow, veh/h	1698	87	1585	1425	0	317	1781	1856	12	1781	1870	1551
Grp Volume(v), veh/h	41	0	332	11	0	0	74	0	613	2	1007	34
Grp Sat Flow(s),veh/h/ln	1785	0	1585	1742	0	0	1781	0	1868	1781	1870	1551
Q Serve(g_s), s	2.4	0.0	25.5	0.8	0.0	0.0	5.3	0.0	22.4	0.1	61.2	1.2
Cycle Q Clear(g_c), s	2.4	0.0	25.5	0.8	0.0	0.0	5.3	0.0	22.4	0.1	61.2	1.2
Prop In Lane	0.95		1.00	0.82		0.18	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	306	0	355	17	0	0	93	0	1304	6	1212	1005
V/C Ratio(X)	0.13	0.00	0.94	0.65	0.00	0.00	0.80	0.00	0.47	0.35	0.83	0.03
Avail Cap(c_a), veh/h	361	0	405	215	0	0	275	0	1573	427	1430	1186
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	0.0	58.2	75.4	0.0	0.0	71.6	0.0	10.3	76.0	26.9	9.7
Incr Delay (d2), s/veh	0.2	0.0	27.8	40.3	0.0	0.0	5.7	0.0	0.4	33.2	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	146.6	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	15.4	0.6	0.0	0.0	2.9	0.0	8.1	0.1	88.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.9	0.0	86.0	115.7	0.0	0.0	77.3	0.0	10.7	109.2	177.6	9.7
LnGrp LOS	D	A	F	F	A	A	E	A	B	F	F	A
Approach Vol, veh/h		373			11			687			1043	
Approach Delay, s/veh		82.5			115.7			17.9			172.0	
Approach LOS		F			F			B			F	

Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	3.9	90.0	30.2	10.6	83.4	5.3
Change Period (Y+Rc), s	3.5	6.4	4.0	3.7	6.4	4.0
Max Green Setting (Gmax), s	31.0	109.0	26.2	20.0	99.0	16.0
Max Q Clear Time (g_c+I1), s	2.1	24.4	27.5	7.3	63.2	2.8
Green Ext Time (p_c), s	0.0	6.4	0.0	0.1	13.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay	105.8
HCM 6th LOS	F

HCM 6th TWSC
1: Broad Street (SR 227) & Capitolio Way 02/05/2020

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	62	922	37	119	1152
Future Vol, veh/h	14	62	922	37	119	1152
Conflicting Peds, #/hr	9	9	0	9	9	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	79	79	90	90	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	78	1024	41	128	1239

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1939	551	0	0	1074	0
Stage 1	1054	-	-	-	-	-
Stage 2	885	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	57	478	-	-	645	-
Stage 1	296	-	-	-	-	-
Stage 2	364	-	-	-	-	-
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	45	470	-	-	639	-
Mov Cap-2 Maneuver	153	-	-	-	-	-
Stage 1	293	-	-	-	-	-
Stage 2	289	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.4	0	1.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	153	470	639	-
HCM Lane V/C Ratio	-	-	0.116	0.167	0.2	-
HCM Control Delay (s)	-	-	31.6	14.2	12	-
HCM Lane LOS	-	-	D	B	B	-
HCM 95th %tile Q(veh)	-	-	0.4	0.6	0.7	-

HCM 6th Signalized Intersection Summary
2: Broad Street (SR 227) & Industrial 02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	5	86	9	68	51	831	191	46	1015	52
Future Volume (veh/h)	9	0	5	86	9	68	51	831	191	46	1015	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.94	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	0	10	123	13	60	54	884	164	57	1253	53
Peak Hour Factor	0.50	0.50	0.50	0.70	0.70	0.70	0.94	0.94	0.94	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	0	113	299	32	274	69	1840	779	73	1848	791
Arrive On Green	0.07	0.00	0.07	0.18	0.18	0.18	0.04	0.52	0.52	0.04	0.52	0.52
Sat Flow, veh/h	1781	0	1509	1618	171	1486	1781	3554	1505	1781	3554	1522
Grp Volume(v), veh/h	18	0	10	136	0	60	54	884	164	57	1253	53
Grp Sat Flow(s),veh/h/ln	1781	0	1509	1789	0	1486	1781	1777	1505	1781	1777	1522
Q Serve(g_s), s	0.8	0.0	0.5	5.9	0.0	3.0	2.6	14.0	5.2	2.8	23.0	1.5
Cycle Q Clear(g_c), s	0.8	0.0	0.5	5.9	0.0	3.0	2.6	14.0	5.2	2.8	23.0	1.5
Prop In Lane	1.00		1.00	0.90		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	0	113	330	0	274	69	1840	779	73	1848	791
V/C Ratio(X)	0.14	0.00	0.09	0.41	0.00	0.22	0.78	0.48	0.21	0.78	0.68	0.07
Avail Cap(c_a), veh/h	709	0	601	652	0	541	81	1840	779	142	1848	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	0.0	37.9	31.6	0.0	30.5	41.9	13.6	11.5	41.7	15.6	10.5
Incr Delay (d2), s/veh	0.5	0.0	0.3	0.8	0.0	0.4	33.6	0.9	0.6	16.1	2.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.2	2.5	0.0	1.1	1.8	5.1	1.6	1.5	8.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.5	0.0	38.2	32.5	0.0	30.9	75.4	14.5	12.1	57.9	17.7	10.6
LnGrp LOS	D	A	D	C	A	C	E	B	B	E	B	B
Approach Vol, veh/h		28			196			1102			1363	
Approach Delay, s/veh		38.4			32.0			17.1			19.1	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	49.5		10.6	7.4	49.7		20.2				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	45.5		35.0	4.0	28.0		32.0				
Max Q Clear Time (g_c+I1), s	4.8	16.0		2.8	4.6	25.0		7.9				
Green Ext Time (p_c), s	0.0	7.5		0.1	0.0	2.2		1.0				

Intersection Summary	
HCM 6th Ctrl Delay	19.4
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
3: LOVR & 101 SB

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	773	336	37	872	0	0	0	0	456	0	231
Future Volume (veh/h)	0	773	336	37	872	0	0	0	0	456	0	231
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	805	302	43	1014	0				490	0	143
Peak Hour Factor	0.96	0.96	0.96	0.86	0.86	0.86				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1919	836	54	2166	0				527	0	465
Arrive On Green	0.00	1.00	1.00	0.03	0.61	0.00				0.30	0.00	0.30
Sat Flow, veh/h	0	3647	1548	1781	3647	0				1781	0	1571
Grp Volume(v), veh/h	0	805	302	43	1014	0				490	0	143
Grp Sat Flow(s),veh/h/ln	0	1777	1548	1781	1777	0				1781	0	1571
Q Serve(g_s), s	0.0	0.0	0.0	2.2	14.0	0.0				24.0	0.0	6.3
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.2	14.0	0.0				24.0	0.0	6.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1919	836	54	2166	0				527	0	465
V/C Ratio(X)	0.00	0.42	0.36	0.79	0.47	0.00				0.93	0.00	0.31
Avail Cap(c_a), veh/h	0	1919	836	109	2166	0				544	0	480
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.96	0.96	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	43.3	9.6	0.0				30.8	0.0	24.5
Incr Delay (d2), s/veh	0.0	0.6	1.2	22.0	0.7	0.0				22.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.3	1.3	4.9	0.0				13.2	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.6	1.2	65.4	10.3	0.0				53.0	0.0	24.9
LnGrp LOS	A	A	A	E	B	A				D	A	C
Approach Vol, veh/h		1107			1057						633	
Approach Delay, s/veh		0.8			12.6						46.6	
Approach LOS		A			B						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	6.2	53.6				59.9		30.1				
Change Period (Y+Rc), s	3.5	5.0				5.0		3.5				
Max Green Setting (Gmax), s	5.5	45.0				54.0		27.5				
Max Q Clear Time (g_c+I1), s	4.2	2.0				16.0		26.0				
Green Ext Time (p_c), s	0.0	8.9				9.1		0.6				

Intersection Summary			
HCM 6th Ctrl Delay	15.6		
HCM 6th LOS	B		

HCM Signalized Intersection Capacity Analysis
4: 101 NB & LOVR

01/31/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1060	169	93	438	472	155
Future Volume (vph)	1060	169	93	438	472	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	4.0	3.5	6.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.96	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3539	1560	1770	3539	3353	
Flt Permitted	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (perm)	3539	1560	1770	3539	3353	
Peak-hour factor, PHF	0.93	0.93	0.85	0.85	0.97	0.97
Adj. Flow (vph)	1140	182	109	515	487	160
RTOR Reduction (vph)	0	47	0	0	31	0
Lane Group Flow (vph)	1140	135	109	515	616	0
Confl. Bikes (#/hr)		3				
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	2	8	1	6	8	
Permitted Phases		2				
Actuated Green, G (s)	55.7	81.8	14.7	73.9	26.1	
Effective Green, g (s)	55.7	81.8	14.7	73.9	26.1	
Actuated g/C Ratio	0.51	0.74	0.13	0.67	0.24	
Clearance Time (s)	6.0	4.0	3.5	6.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1792	1160	236	2377	795	
v/s Ratio Prot	c0.32	0.03	c0.06	0.15	c0.18	
v/s Ratio Perm		0.06				
v/c Ratio	0.64	0.12	0.46	0.22	0.77	
Uniform Delay, d1	19.8	4.0	44.0	6.9	39.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	0.0	1.4	0.2	4.7	
Delay (s)	21.5	4.0	45.4	7.1	43.9	
Level of Service	C	A	D	A	D	
Approach Delay (s)	19.1			13.8	43.9	
Approach LOS	B			B	D	

Intersection Summary					
HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C		
HCM 2000 Volume to Capacity ratio	0.67				
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	17.5		
Intersection Capacity Utilization	64.5%	ICU Level of Service	C		
Analysis Period (min)	15				
c Critical Lane Group					

HCM 6th Signalized Intersection Summary
5: S. Higuera Street & Tank Farm

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	17	20	280	3	237	12	365	740	255	267	7
Future Volume (veh/h)	23	17	20	280	3	237	12	365	740	255	267	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		1.00	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	25	26	320	0	0	13	410	631	263	275	7
Peak Hour Factor	0.68	0.68	0.68	0.88	0.88	0.88	0.89	0.89	0.89	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	84	162	500	0		28	1039	665	316	1606	41
Arrive On Green	0.11	0.11	0.11	0.14	0.00	0.00	0.02	0.29	0.29	0.18	0.45	0.45
Sat Flow, veh/h	1048	770	1478	3563	0	1585	1781	3554	1511	1781	3537	90
Grp Volume(v), veh/h	59	0	26	320	0	0	13	410	631	263	138	144
Grp Sat Flow(s),veh/h/ln	1818	0	1478	1781	0	1585	1781	1777	1511	1781	1777	1850
Q Serve(g_s), s	2.5	0.0	1.3	7.0	0.0	0.0	0.6	7.6	24.0	11.7	3.8	3.8
Cycle Q Clear(g_c), s	2.5	0.0	1.3	7.0	0.0	0.0	0.6	7.6	24.0	11.7	3.8	3.8
Prop In Lane	0.58		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	199	0	162	500	0		28	1039	665	316	807	840
V/C Ratio(X)	0.30	0.00	0.16	0.64	0.00		0.47	0.39	0.95	0.83	0.17	0.17
Avail Cap(c_a), veh/h	598	0	486	1085	0		174	1039	665	543	807	840
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	0.0	33.1	33.3	0.0	0.0	40.0	23.2	20.0	32.6	13.3	13.3
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.5	0.0	0.0	4.5	0.5	23.6	6.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.4	2.9	0.0	0.0	0.3	3.0	16.5	5.3	1.4	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	0.0	33.3	33.8	0.0	0.0	44.5	23.7	43.6	39.4	13.5	13.5
LnGrp LOS	C	A	C	C	A		D	C	D	D	B	B
Approach Vol, veh/h		85			320	A		1054			545	
Approach Delay, s/veh		33.7			33.8			35.9			26.0	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	30.0		15.0	6.3	43.3		17.5
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0
Max Green Setting (Gmax), s	25.0	24.0		27.0	8.0	36.0		25.0
Max Q Clear Time (g_c+I1), s	13.7	26.0		4.5	2.6	5.8		9.0
Green Ext Time (p_c), s	0.9	0.0		0.2	0.0	3.0		0.7

Intersection Summary	
HCM 6th Ctrl Delay	32.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
6: Long Street & Tank Farm Road

02/05/2020

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	828	47	113	595	18	6	0	62	5	1	18
Future Vol, veh/h	58	828	47	113	595	18	6	0	62	5	1	18
Conflicting Peds, #/hr	2	0	1	0	0	1	2	0	0	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	225	-	-	175	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	95	95	95	71	71	71	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	62	881	50	119	626	19	8	0	87	6	1	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	647	0	0	932	0	0	1585	1916	468	1442	1932	327
Stage 1	-	-	-	-	-	-	1031	1031	-	876	876	-
Stage 2	-	-	-	-	-	-	554	885	-	566	1056	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	934	-	-	730	-	-	73	67	542	93	65	669
Stage 1	-	-	-	-	-	-	249	309	-	310	365	-
Stage 2	-	-	-	-	-	-	484	361	-	476	300	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	932	-	-	729	-	-	58	52	541	65	51	666
Mov Cap-2 Maneuver	-	-	-	-	-	-	58	52	-	65	51	-
Stage 1	-	-	-	-	-	-	232	288	-	289	305	-
Stage 2	-	-	-	-	-	-	390	301	-	372	280	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.7	21.6	26.7
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	312	932	-	-	729	-	-	194
HCM Lane V/C Ratio	0.307	0.066	-	-	0.163	-	-	0.144
HCM Control Delay (s)	21.6	9.1	-	-	10.9	-	-	26.7
HCM Lane LOS	C	A	-	-	B	-	-	D
HCM 95th %tile Q(veh)	1.3	0.2	-	-	0.6	-	-	0.5

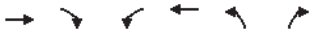
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	782	47	101	670	1	9	1	55	0	1	1
Future Vol, veh/h	0	782	47	101	670	1	9	1	55	0	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	115	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	91	91	91	81	81	81	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	823	49	111	736	1	11	1	68	0	4	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	737	0	0	872	0	0	1811	1807	848	1841	1831	737
Stage 1	-	-	-	-	-	-	848	848	-	959	959	-
Stage 2	-	-	-	-	-	-	963	959	-	882	872	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	869	-	-	773	-	-	61	79	361	58	76	418
Stage 1	-	-	-	-	-	-	356	378	-	309	335	-
Stage 2	-	-	-	-	-	-	307	335	-	341	368	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	869	-	-	773	-	-	51	68	361	41	65	418
Mov Cap-2 Maneuver	-	-	-	-	-	-	51	68	-	41	65	-
Stage 1	-	-	-	-	-	-	356	378	-	309	287	-
Stage 2	-	-	-	-	-	-	257	287	-	276	368	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.4	29.2	39.3
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	52	361	869	-	-	773	-	-	113
HCM Lane V/C Ratio	0.237	0.188	-	-	-	0.144	-	-	0.071
HCM Control Delay (s)	94.6	17.3	0	-	-	10.4	-	-	39.3
HCM Lane LOS	F	C	A	-	-	B	-	-	E
HCM 95th %tile Q(veh)	0.8	0.7	0	-	-	0.5	-	-	0.2



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	760	64	32	771	19	6
Future Volume (veh/h)	760	64	32	771	19	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	800	67	36	866	28	9
Peak Hour Factor	0.95	0.95	0.89	0.89	0.69	0.69
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1859	156	43	1305	59	52
Arrive On Green	0.56	0.56	0.02	0.70	0.03	0.03
Sat Flow, veh/h	3406	277	1781	1870	1781	1585
Grp Volume(v), veh/h	429	438	36	866	28	9
Grp Sat Flow(s),veh/h/ln	1777	1812	1781	1870	1781	1585
Q Serve(g_s), s	6.2	6.2	0.9	11.6	0.7	0.2
Cycle Q Clear(g_c), s	6.2	6.2	0.9	11.6	0.7	0.2
Prop In Lane		0.15	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	997	1017	43	1305	59	52
V/C Ratio(X)	0.43	0.43	0.83	0.66	0.48	0.17
Avail Cap(c_a), veh/h	1914	1953	440	1305	560	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.7	5.7	21.6	3.8	21.2	20.9
Incr Delay (d2), s/veh	1.1	1.0	14.2	2.3	2.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.5	0.5	1.5	0.3	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.7	6.7	35.8	6.1	23.4	21.5
LnGrp LOS	A	A	D	A	C	C
Approach Vol, veh/h	867			902	37	
Approach Delay, s/veh	6.7			7.3	22.9	
Approach LOS	A			A	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.1	32.0			38.1	6.5
Change Period (Y+Rc), s	5.0	7.0			7.0	5.0
Max Green Setting (Gmax), s	11.0	48.0			30.0	14.0
Max Q Clear Time (g_c+I1), s	2.9	8.2			13.6	2.7
Green Ext Time (p_c), s	0.0	16.8			11.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

HCM 6th Signalized Intersection Summary
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	149	387	229	243	162	221	673	118	58	667	331
Future Volume (veh/h)	223	149	387	229	243	162	221	673	118	58	667	331
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	251	167	350	283	300	51	238	724	109	72	834	340
Peak Hour Factor	0.89	0.89	0.89	0.81	0.81	0.81	0.93	0.93	0.93	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	322	913	402	308	629	529	257	990	149	92	1057	608
Arrive On Green	0.09	0.26	0.26	0.17	0.34	0.34	0.07	0.32	0.32	0.05	0.30	0.30
Sat Flow, veh/h	3456	3554	1563	1781	1870	1574	3456	3091	465	1781	3554	1548
Grp Volume(v), veh/h	251	167	350	283	300	51	238	416	417	72	834	340
Grp Sat Flow(s),veh/h/ln	1728	1777	1563	1781	1870	1574	1728	1777	1779	1781	1777	1548
Q Serve(g_s), s	8.6	4.4	25.9	18.9	15.3	2.7	8.3	25.1	25.2	4.8	26.1	20.8
Cycle Q Clear(g_c), s	8.6	4.4	25.9	18.9	15.3	2.7	8.3	25.1	25.2	4.8	26.1	20.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	322	913	402	308	629	529	257	569	570	92	1057	608
V/C Ratio(X)	0.78	0.18	0.87	0.92	0.48	0.10	0.93	0.73	0.73	0.79	0.79	0.56
Avail Cap(c_a), veh/h	571	1028	452	309	629	529	257	569	570	103	1057	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	35.1	43.0	49.2	31.7	27.5	55.7	36.5	36.5	56.7	39.0	28.8
Incr Delay (d2), s/veh	4.1	0.1	15.5	31.1	0.6	0.1	36.8	8.0	8.1	29.1	6.0	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	1.9	11.5	10.9	6.9	1.0	4.8	11.7	11.8	2.9	11.8	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.7	35.1	58.6	80.3	32.3	27.6	92.5	44.5	44.6	85.8	45.0	32.5
LnGrp LOS	E	D	E	F	C	C	F	D	D	F	D	C
Approach Vol, veh/h		768			634			1071			1246	
Approach Delay, s/veh		53.2			53.3			55.2			43.9	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	45.3	26.4	37.6	14.5	42.5	16.8	47.2
Change Period (Y+Rc), s	5.5	6.5	5.5	6.5	5.5	6.5	5.5	* 6.5
Max Green Setting (Gmax), s	7.0	38.0	21.0	35.0	9.0	36.0	20.0	* 33
Max Q Clear Time (g_c+I1), s	10.6	27.2	20.9	27.9	10.3	28.1	10.6	17.3
Green Ext Time (p_c), s	0.0	3.7	0.0	1.5	0.0	4.2	0.7	1.7

Intersection Summary	
HCM 6th Ctrl Delay	50.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
10: Broad Street (SR 227) & Aerovista Place

02/05/2020

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	9	58	1181	754	224
Future Vol, veh/h	40	9	58	1181	754	224
Conflicting Peds, #/hr	5	1	1	0	0	5
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	61	61	92	92	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	15	63	1284	838	249

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1741	550	1092	0	-	0
Stage 1	968	-	-	-	-	-
Stage 2	773	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	78	479	635	-	-	-
Stage 1	329	-	-	-	-	-
Stage 2	416	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	69	476	632	-	-	-
Mov Cap-2 Maneuver	188	-	-	-	-	-
Stage 1	295	-	-	-	-	-
Stage 2	414	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.2	0.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	632	-	188	476	-	-
HCM Lane V/C Ratio	0.1	-	0.349	0.031	-	-
HCM Control Delay (s)	11.3	-	34.1	12.8	-	-
HCM Lane LOS	B	-	D	B	-	-
HCM 95th %tile Q(veh)	0.3	-	1.5	0.1	-	-

HCM 6th Signalized Intersection Summary
11: Broad Street (SR 227) & Aero Drive

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	1	12	6	0	33	58	1139	16	39	596	103
Future Volume (veh/h)	87	1	12	6	0	33	58	1139	16	39	596	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	1	14	11	0	58	60	1186	17	46	701	106
Peak Hour Factor	0.85	0.85	0.85	0.57	0.57	0.57	0.96	0.96	0.96	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	145	1	130	90	0	79	78	2229	32	59	1886	285
Arrive On Green	0.08	0.08	0.08	0.05	0.00	0.05	0.04	0.62	0.62	0.03	0.61	0.61
Sat Flow, veh/h	1765	17	1579	1781	0	1566	1781	3585	51	1781	3085	466
Grp Volume(v), veh/h	103	0	14	11	0	58	60	588	615	46	403	404
Grp Sat Flow(s),veh/h/ln	1782	0	1579	1781	0	1566	1781	1777	1860	1781	1777	1775
Q Serve(g_s), s	5.7	0.0	0.8	0.6	0.0	3.7	3.4	19.0	19.0	2.6	11.6	11.6
Cycle Q Clear(g_c), s	5.7	0.0	0.8	0.6	0.0	3.7	3.4	19.0	19.0	2.6	11.6	11.6
Prop In Lane	0.99		1.00	1.00		1.00	1.00		0.03	1.00		0.26
Lane Grp Cap(c), veh/h	147	0	130	90	0	79	78	1105	1156	59	1086	1085
V/C Ratio(X)	0.70	0.00	0.11	0.12	0.00	0.73	0.77	0.53	0.53	0.78	0.37	0.37
Avail Cap(c_a), veh/h	615	0	545	615	0	541	228	1105	1156	228	1086	1085
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	0.0	43.1	46.0	0.0	47.5	48.0	10.8	10.8	48.6	9.9	9.9
Incr Delay (d2), s/veh	6.0	0.0	0.4	0.6	0.0	12.3	14.6	1.8	1.8	19.1	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.3	0.3	0.0	1.7	1.8	6.8	7.1	1.4	4.1	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	0.0	43.4	46.6	0.0	59.8	62.5	12.7	12.6	67.8	10.9	10.9
LnGrp LOS	D	A	D	D	A	E	E	B	B	E	B	B
Approach Vol, veh/h		117			69			1263			853	
Approach Delay, s/veh		50.4			57.7			15.0			14.0	
Approach LOS		D			E			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	69.6		13.4	9.4	68.5		10.1				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	13.0	62.0		35.0	13.0	62.0		35.0				
Max Q Clear Time (g_c+I1), s	4.6	21.0		7.7	5.4	13.6		5.7				
Green Ext Time (p_c), s	0.0	9.6		0.7	0.1	5.5		0.3				

Intersection Summary		
HCM 6th Ctrl Delay		17.7
HCM 6th LOS		B

HCM 6th TWSC
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive

02/05/2020

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	0	1211	614	0
Future Vol, veh/h	0	8	0	1211	614	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	96	96	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	12	0	1261	758	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	758	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	407	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	407	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	407	-
HCM Lane V/C Ratio	-	0.029	-
HCM Control Delay (s)	-	14.1	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.1	-

HCM 6th Signalized Intersection Summary
13: Edna Road (SR 227) & Buckley Road

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	5	170	2	0	3	216	1199	3	3	424	41
Future Volume (veh/h)	53	5	170	2	0	3	216	1199	3	3	424	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	5	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	6	169	3	0	5	223	1236	3	4	537	52
Peak Hour Factor	0.78	0.78	0.78	0.63	0.63	0.63	0.97	0.97	0.97	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	16	400	5	0	8	249	1363	3	11	1114	918
Arrive On Green	0.11	0.11	0.11	0.01	0.00	0.01	0.14	0.73	0.73	0.01	0.59	0.59
Sat Flow, veh/h	1643	145	1585	620	0	1033	1781	1865	5	1781	1870	1541
Grp Volume(v), veh/h	74	0	169	8	0	0	223	0	1239	4	537	52
Grp Sat Flow(s),veh/h/ln	1788	0	1585	1653	0	0	1781	0	1869	1781	1870	1541
Q Serve(g_s), s	4.7	0.0	11.0	0.6	0.0	0.0	15.2	0.0	66.0	0.3	20.3	1.8
Cycle Q Clear(g_c), s	4.7	0.0	11.0	0.6	0.0	0.0	15.2	0.0	66.0	0.3	20.3	1.8
Prop In Lane	0.92		1.00	0.37		0.62	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	202	0	400	13	0	0	249	0	1366	11	1114	918
V/C Ratio(X)	0.37	0.00	0.42	0.62	0.00	0.00	0.90	0.00	0.91	0.36	0.48	0.06
Avail Cap(c_a), veh/h	380	0	559	214	0	0	289	0	1651	231	1108	913
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	39.4	62.3	0.0	0.0	53.3	0.0	14.1	62.3	14.4	10.6
Incr Delay (d2), s/veh	1.3	0.0	0.9	47.5	0.0	0.0	23.9	0.0	7.2	18.6	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	4.5	0.4	0.0	0.0	8.3	0.0	24.5	0.2	7.8	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.0	0.0	40.2	109.8	0.0	0.0	77.2	0.0	22.3	80.9	14.9	10.7
LnGrp LOS	D	A	D	F	A	A	E	A	C	F	B	B
Approach Vol, veh/h		243			8			1462			593	
Approach Delay, s/veh		44.1			109.8			30.7			15.0	
Approach LOS		D			F			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.3	96.2		18.0	21.0	79.5		5.0				
Change Period (Y+Rc), s	3.5	6.4		4.0	3.7	6.4		4.0				
Max Green Setting (Gmax), s	16.0	109.0		26.2	20.0	58.0		16.0				
Max Q Clear Time (g_c+I1), s	2.3	68.0		13.0	17.2	22.3		2.6				
Green Ext Time (p_c), s	0.0	21.8		1.0	0.1	5.4		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		28.3
HCM 6th LOS		C

HCM 6th TWSC
1: Broad Street (SR 227) & Capitolio Way

02/05/2020

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	132	1226	17	70	1247
Future Vol, veh/h	11	132	1226	17	70	1247
Conflicting Peds, #/hr	4	4	0	4	4	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	90	90	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	176	1362	19	77	1370

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2219	699	0	0	1385	0
Stage 1	1376	-	-	-	-	-
Stage 2	843	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	37	382	-	-	490	-
Stage 1	200	-	-	-	-	-
Stage 2	382	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	31	379	-	-	488	-
Mov Cap-2 Maneuver	125	-	-	-	-	-
Stage 1	199	-	-	-	-	-
Stage 2	320	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.7	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	125	379	488	-
HCM Lane V/C Ratio	-	-	0.117	0.464	0.158	-
HCM Control Delay (s)	-	-	37.6	22.5	13.8	-
HCM Lane LOS	-	-	E	C	B	-
HCM 95th %tile Q(veh)	-	-	0.4	2.4	0.6	-

HCM 6th Signalized Intersection Summary
2: Broad Street (SR 227) & Industrial Way

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	19	44	178	13	220	89	1077	188	133	1096	98
Future Volume (veh/h)	70	19	44	178	13	220	89	1077	188	133	1096	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.93	1.00		0.93	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	25	49	212	15	170	94	1134	146	148	1218	79
Peak Hour Factor	0.76	0.76	0.76	0.84	0.84	0.84	0.95	0.95	0.95	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	40	163	284	20	251	122	1345	560	152	1406	603
Arrive On Green	0.10	0.10	0.10	0.17	0.17	0.17	0.07	0.38	0.38	0.09	0.40	0.40
Sat Flow, veh/h	1415	385	1576	1669	118	1476	1781	3554	1480	1781	3554	1524
Grp Volume(v), veh/h	117	0	49	227	0	170	94	1134	146	148	1218	79
Grp Sat Flow(s),veh/h/ln	1800	0	1576	1787	0	1476	1781	1777	1480	1781	1777	1524
Q Serve(g_s), s	5.1	0.0	2.4	9.9	0.0	8.8	4.3	23.9	5.6	6.8	25.8	2.7
Cycle Q Clear(g_c), s	5.1	0.0	2.4	9.9	0.0	8.8	4.3	23.9	5.6	6.8	25.8	2.7
Prop In Lane	0.79		1.00	0.93		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	0	163	304	0	251	122	1345	560	152	1406	603
V/C Ratio(X)	0.63	0.00	0.30	0.75	0.00	0.68	0.77	0.84	0.26	0.97	0.87	0.13
Avail Cap(c_a), veh/h	769	0	674	502	0	415	239	1584	660	152	1406	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.2	0.0	34.0	32.3	0.0	31.9	37.5	23.2	17.6	37.3	22.8	15.8
Incr Delay (d2), s/veh	3.5	0.0	1.0	3.7	0.0	3.2	9.9	3.8	0.2	64.3	6.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.9	4.3	0.0	3.2	2.1	9.5	1.8	5.5	10.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.6	0.0	35.0	36.0	0.0	35.0	47.4	27.0	17.8	101.6	28.7	15.9
LnGrp LOS	D	A	C	D	A	D	D	C	B	F	C	B
Approach Vol, veh/h		166			397			1374			1445	
Approach Delay, s/veh		37.6			35.6			27.4			35.5	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	37.5		13.5	10.6	38.9		18.9				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	7.0	36.5		35.0	11.0	26.5		23.0				
Max Q Clear Time (g_c+I1), s	8.8	25.9		7.1	6.3	27.8		11.9				
Green Ext Time (p_c), s	0.0	5.1		0.9	0.1	0.0		1.6				

Intersection Summary	
HCM 6th Ctrl Delay	32.3
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary
3: LOVR & 101 SB

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	910	631	61	1310	0	0	0	0	294	0	390
Future Volume (veh/h)	0	910	631	61	1310	0	0	0	0	294	0	390
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	938	569	63	1351	0				313	0	322
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2207	962	82	2508	0				356	0	308
Arrive On Green	0.00	1.00	1.00	0.05	0.71	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3647	1548	1781	3647	0				1781	0	1540
Grp Volume(v), veh/h	0	938	569	63	1351	0				313	0	322
Grp Sat Flow(s),veh/h/ln	0	1777	1548	1781	1777	0				1781	0	1540
Q Serve(g_s), s	0.0	0.0	0.0	3.1	16.2	0.0				15.4	0.0	18.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	3.1	16.2	0.0				15.4	0.0	18.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2207	962	82	2508	0				356	0	308
V/C Ratio(X)	0.00	0.43	0.59	0.77	0.54	0.00				0.88	0.00	1.05
Avail Cap(c_a), veh/h	0	2207	962	188	2508	0				485	0	419
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.85	0.85	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	42.5	6.3	0.0				35.0	0.0	36.0
Incr Delay (d2), s/veh	0.0	0.5	2.3	14.2	0.8	0.0				13.2	0.0	53.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.6	1.7	4.9	0.0				7.8	0.0	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.5	2.3	56.7	7.1	0.0				48.1	0.0	89.5
LnGrp LOS	A	A	A	E	A	A				D	A	F
Approach Vol, veh/h		1507			1414						635	
Approach Delay, s/veh		1.2			9.3						69.1	
Approach LOS		A			A						E	

Timer - Assigned Phs	1	2					6		8			
Phs Duration (G+Y+Rc), s	7.6	60.9					68.5		21.5			
Change Period (Y+Rc), s	3.5	5.0					5.0		3.5			
Max Green Setting (Gmax), s	4.1	44.0					57.0		24.5			
Max Q Clear Time (g_c+I1), s	5.1	2.0					18.2		17.4			
Green Ext Time (p_c), s	0.0	13.4					14.0		0.6			

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

HCM Signalized Intersection Capacity Analysis
4: 101 NB & LOVR

01/31/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	819	364	182	915	482	110
Future Volume (vph)	819	364	182	915	482	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	3.5	3.5	6.0	3.5	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.97	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3539	1564	1770	3539	3376	
Flt Permitted	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (perm)	3539	1564	1770	3539	3376	
Peak-hour factor, PHF	0.97	0.97	0.94	0.94	0.90	0.90
Adj. Flow (vph)	844	375	194	973	536	122
RTOR Reduction (vph)	0	138	0	0	16	0
Lane Group Flow (vph)	844	237	194	973	642	0
Confl. Bikes (#/hr)		5				
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	2	8	1	6	8	
Permitted Phases		2				
Actuated Green, G (s)	24.1	45.0	13.1	40.7	20.9	
Effective Green, g (s)	24.1	45.0	13.1	40.7	20.9	
Actuated g/C Ratio	0.34	0.63	0.18	0.57	0.29	
Clearance Time (s)	6.0	3.5	3.5	6.0	3.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1199	989	326	2025	992	
v/s Ratio Prot	c0.24	0.07	c0.11	0.27	c0.19	
v/s Ratio Perm		0.08				
v/c Ratio	0.70	0.24	0.60	0.48	0.65	
Uniform Delay, d1	20.4	5.6	26.6	9.0	21.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.9	0.1	2.9	0.2	1.5	
Delay (s)	22.3	5.8	29.5	9.1	23.3	
Level of Service	C	A	C	A	C	
Approach Delay (s)	17.2			12.5	23.3	
Approach LOS	B			B	C	

Intersection Summary				
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.71			
Actuated Cycle Length (s)	71.1	Sum of lost time (s)	17.0	
Intersection Capacity Utilization	61.6%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

HCM 6th Signalized Intersection Summary
5: S. Higuera Street & Tank Farm Road

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	9	21	570	11	324	30	503	430	275	683	18
Future Volume (veh/h)	9	9	21	570	11	324	30	503	430	275	683	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		1.00	1.00		0.86	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	12	5	642	0	0	32	541	260	331	823	21
Peak Hour Factor	0.75	0.75	0.75	0.90	0.90	0.90	0.93	0.93	0.93	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	166	245	745	0		40	747	619	348	1350	34
Arrive On Green	0.18	0.18	0.18	0.21	0.00	0.00	0.02	0.21	0.21	0.20	0.38	0.38
Sat Flow, veh/h	912	912	1351	3563	0	1585	1781	3554	1370	1781	3528	90
Grp Volume(v), veh/h	24	0	5	642	0	0	32	541	260	331	414	430
Grp Sat Flow(s),veh/h/ln	1825	0	1351	1781	0	1585	1781	1777	1370	1781	1777	1841
Q Serve(g_s), s	1.2	0.0	0.3	19.6	0.0	0.0	2.0	16.0	15.3	20.7	21.2	21.2
Cycle Q Clear(g_c), s	1.2	0.0	0.3	19.6	0.0	0.0	2.0	16.0	15.3	20.7	21.2	21.2
Prop In Lane	0.50		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	331	0	245	745	0		40	747	619	348	680	705
V/C Ratio(X)	0.07	0.00	0.02	0.86	0.00		0.80	0.72	0.42	0.95	0.61	0.61
Avail Cap(c_a), veh/h	486	0	360	948	0		79	757	623	348	680	705
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.3	0.0	37.9	43.0	0.0	0.0	54.8	41.5	23.5	44.9	28.0	28.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	6.7	0.0	0.0	28.8	3.4	0.5	35.8	1.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	9.0	0.0	0.0	1.2	7.1	6.9	12.3	8.8	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	0.0	37.9	49.7	0.0	0.0	83.6	44.9	23.9	80.7	29.6	29.6
LnGrp LOS	D	A	D	D	A		F	D	C	F	C	C
Approach Vol, veh/h		29			642	A		833			1175	
Approach Delay, s/veh		38.3			49.7			39.8			44.0	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	29.7		26.5	7.5	49.1		29.6				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	2.0	24.0		30.0	5.0	41.0		30.0				
Max Q Clear Time (g_c+I1), s	2.0	18.0		3.2	4.0	23.2		21.6				
Green Ext Time (p_c), s	0.0	2.4		0.1	0.0	4.7		2.0				

Intersection Summary	
HCM 6th Ctrl Delay	44.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	17.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	630	28	131	1032	23	12	2	168	12	2	66
Future Vol, veh/h	64	630	28	131	1032	23	12	2	168	12	2	66
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	225	-	-	175	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	92	92	92	86	86	86	61	61	61
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	663	29	142	1122	25	14	2	195	20	3	108

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1148	0	0	692	0	0	1660	2244	347	1888	2246	576
Stage 1	-	-	-	-	-	-	812	812	-	1420	1420	-
Stage 2	-	-	-	-	-	-	848	1432	-	468	826	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	604	-	-	899	-	-	64	41	649	43	41	460
Stage 1	-	-	-	-	-	-	339	390	-	143	201	-
Stage 2	-	-	-	-	-	-	322	198	-	545	385	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	603	-	-	899	-	-	36	31	648	23	31	459
Mov Cap-2 Maneuver	-	-	-	-	-	-	36	31	-	23	31	-
Stage 1	-	-	-	-	-	-	301	347	-	127	169	-
Stage 2	-	-	-	-	-	-	203	167	-	336	342	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	1.1	50.3	220.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	277	603	-	-	899	-	-	110
HCM Lane V/C Ratio	0.764	0.112	-	-	0.158	-	-	1.192
HCM Control Delay (s)	50.3	11.7	-	-	9.8	-	-	220.4
HCM Lane LOS	F	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	5.7	0.4	-	-	0.6	-	-	8.5

Intersection	
Int Delay, s/veh	20.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	844	24	66	1030	1	40	1	159	0	1	0
Future Vol, veh/h	0	844	24	66	1030	1	40	1	159	0	1	0
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	115	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	94	94	94	79	79	79	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	959	27	70	1096	1	51	1	201	0	4	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1098	0	0	986	0	0	2213	2211	974	2313	2224	1099
Stage 1	-	-	-	-	-	-	973	973	-	1238	1238	-
Stage 2	-	-	-	-	-	-	1240	1238	-	1075	986	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	636	-	-	701	-	-	~ 31	44	306	27	43	258
Stage 1	-	-	-	-	-	-	303	330	-	215	248	-
Stage 2	-	-	-	-	-	-	214	248	-	266	326	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	635	-	-	701	-	-	~ 26	40	306	8	39	258
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 26	40	-	8	39	-
Stage 1	-	-	-	-	-	-	303	330	-	215	223	-
Stage 2	-	-	-	-	-	-	189	223	-	91	326	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.6	190.3	107.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	26	306	635	-	-	701	-	-	39
HCM Lane V/C Ratio	1.996	0.658	-	-	-	0.1	-	-	0.103
HCM Control Delay (s)	$ 785.4	36.8	0	-	-	10.7	-	-	107.6
HCM Lane LOS	F	E	A	-	-	B	-	-	F
HCM 95th %tile Q(veh)	6.3	4.3	0	-	-	0.3	-	-	0.3

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
8: Mindbody Entrance & Tank Farm Road

02/05/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1034	10	6	978	136	33
Future Volume (veh/h)	1034	10	6	978	136	33
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1202	12	7	1087	184	45
Peak Hour Factor	0.86	0.86	0.90	0.90	0.74	0.74
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2132	21	10	1266	235	209
Arrive On Green	0.59	0.59	0.01	0.68	0.13	0.13
Sat Flow, veh/h	3697	36	1781	1870	1781	1585
Grp Volume(v), veh/h	593	621	7	1087	184	45
Grp Sat Flow(s),veh/h/ln	1777	1863	1781	1870	1781	1585
Q Serve(g_s), s	12.8	12.8	0.2	28.1	6.3	1.6
Cycle Q Clear(g_c), s	12.8	12.8	0.2	28.1	6.3	1.6
Prop In Lane		0.02	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1051	1102	10	1266	235	209
V/C Ratio(X)	0.56	0.56	0.72	0.86	0.78	0.22
Avail Cap(c_a), veh/h	1359	1425	312	1266	398	354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.8	7.8	31.1	7.8	26.4	24.3
Incr Delay (d2), s/veh	1.7	1.6	30.0	7.3	2.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	4.0	0.2	8.5	2.7	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.6	9.5	61.2	15.1	28.5	24.5
LnGrp LOS	A	A	E	B	C	C
Approach Vol, veh/h	1214			1094	229	
Approach Delay, s/veh	9.5			15.4	27.7	
Approach LOS	A			B	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.3	44.1				49.5	13.3
Change Period (Y+Rc), s	5.0	7.0				7.0	5.0
Max Green Setting (Gmax), s	11.0	48.0				30.0	14.0
Max Q Clear Time (g_c+I1), s	2.2	14.8				30.1	8.3
Green Ext Time (p_c), s	0.0	22.3				0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	473	428	275	185	194	120	368	664	189	201	701	514
Future Volume (veh/h)	473	428	275	185	194	120	368	664	189	201	701	514
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	503	455	241	208	218	111	449	810	192	221	770	443
Peak Hour Factor	0.94	0.94	0.94	0.89	0.89	0.89	0.82	0.82	0.82	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	647	762	328	252	315	258	564	795	188	266	949	713
Arrive On Green	0.19	0.21	0.21	0.14	0.17	0.17	0.16	0.28	0.28	0.15	0.27	0.27
Sat Flow, veh/h	3456	3554	1528	1781	1870	1531	3456	2827	670	1781	3554	1558
Grp Volume(v), veh/h	503	455	241	208	218	111	449	509	493	221	770	443
Grp Sat Flow(s),veh/h/ln	1728	1777	1528	1781	1870	1531	1728	1777	1720	1781	1777	1558
Q Serve(g_s), s	10.4	8.6	11.0	8.5	8.2	4.9	9.4	21.0	21.0	9.0	15.2	16.2
Cycle Q Clear(g_c), s	10.4	8.6	11.0	8.5	8.2	4.9	9.4	21.0	21.0	9.0	15.2	16.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	647	762	328	252	315	258	564	499	483	266	949	713
V/C Ratio(X)	0.78	0.60	0.74	0.83	0.69	0.43	0.80	1.02	1.02	0.83	0.81	0.62
Avail Cap(c_a), veh/h	1015	1139	490	333	400	327	738	499	483	357	949	713
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	26.5	27.4	31.3	29.3	27.9	30.1	26.9	26.9	30.9	25.7	15.6
Incr Delay (d2), s/veh	2.1	0.8	3.2	12.1	3.6	1.1	4.6	45.3	46.0	11.6	7.5	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.5	4.0	4.3	3.8	1.7	3.9	14.2	13.8	4.4	6.7	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.0	27.2	30.6	43.3	32.9	29.0	34.7	72.2	72.9	42.6	33.2	19.6
LnGrp LOS	C	C	C	D	C	C	C	F	F	D	C	B
Approach Vol, veh/h		1199			537			1451			1434	
Approach Delay, s/veh		29.5			36.1			60.8			30.4	
Approach LOS		C			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	25.0	14.6	20.1	16.2	24.0	18.0	16.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	21.0	14.0	24.0	16.0	20.0	22.0	16.0
Max Q Clear Time (g_c+I1), s	11.0	23.0	10.5	13.0	11.4	18.2	12.4	10.2
Green Ext Time (p_c), s	0.3	0.0	0.2	3.1	0.9	1.2	1.7	0.8

Intersection Summary	
HCM 6th Ctrl Delay	40.4
HCM 6th LOS	D

HCM 6th TWSC
10: Broad Street (SR 227) & Aerovista Place 02/05/2020

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	102	51	12	834	994	112
Future Vol, veh/h	102	51	12	834	994	112
Conflicting Peds, #/hr	9	9	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	83	83	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	136	68	14	1005	1092	123

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1703	626	1224	0	-	0
Stage 1	1163	-	-	-	-	-
Stage 2	540	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 83	427	565	-	-	-
Stage 1	260	-	-	-	-	-
Stage 2	548	-	-	-	-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	~ 80	420	560	-	-	-
Mov Cap-2 Maneuver	187	-	-	-	-	-
Stage 1	251	-	-	-	-	-
Stage 2	543	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	47.2	0.2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	560	-	187	420	-	-
HCM Lane V/C Ratio	0.026	-	0.727	0.162	-	-
HCM Control Delay (s)	11.6	-	63.2	15.2	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	4.6	0.6	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
11: Broad Street (SR 227) & Aero Drive 02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	218	0	55	8	1	22	55	712	2	4	870	108
Future Volume (veh/h)	218	0	55	8	1	22	55	712	2	4	870	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	291	0	53	11	1	30	63	818	0	4	978	108
Peak Hour Factor	0.75	0.75	0.75	0.71	0.71	0.71	0.87	0.87	0.87	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	342	0	303	55	5	52	81	2015	0	7	1691	187
Arrive On Green	0.19	0.00	0.19	0.03	0.03	0.03	0.05	0.57	0.00	0.00	0.53	0.53
Sat Flow, veh/h	1781	0	1580	1639	149	1547	1781	3647	0	1781	3218	355
Grp Volume(v), veh/h	291	0	53	12	0	30	63	818	0	4	540	546
Grp Sat Flow(s),veh/h/ln	1781	0	1580	1788	0	1547	1781	1777	0	1781	1777	1797
Q Serve(g_s), s	16.7	0.0	3.0	0.7	0.0	2.0	3.7	13.7	0.0	0.2	21.9	21.9
Cycle Q Clear(g_c), s	16.7	0.0	3.0	0.7	0.0	2.0	3.7	13.7	0.0	0.2	21.9	21.9
Prop In Lane	1.00		1.00	0.92		1.00	1.00		0.00	1.00		0.20
Lane Grp Cap(c), veh/h	342	0	303	60	0	52	81	2015	0	7	934	944
V/C Ratio(X)	0.85	0.00	0.17	0.20	0.00	0.58	0.78	0.41	0.00	0.54	0.58	0.58
Avail Cap(c_a), veh/h	506	0	449	508	0	440	135	2015	0	135	934	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.2	0.0	35.7	49.7	0.0	50.3	49.9	12.9	0.0	52.5	17.1	17.1
Incr Delay (d2), s/veh	8.9	0.0	0.3	1.6	0.0	10.0	14.4	0.6	0.0	48.7	2.6	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	0.0	1.2	0.3	0.0	0.9	1.9	5.0	0.0	0.2	8.7	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.1	0.0	35.9	51.3	0.0	60.3	64.3	13.5	0.0	101.2	19.7	19.7
LnGrp LOS	D	A	D	D	A	E	E	B	A	F	B	B
Approach Vol, veh/h		344			42			881			1090	
Approach Delay, s/veh		47.9			57.7			17.1			20.0	
Approach LOS		D			E			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	66.4		25.3	9.8	62.0		8.5				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	8.0	55.5		30.0	8.0	55.5		30.0				
Max Q Clear Time (g_c+I1), s	2.2	15.7		18.7	5.7	23.9		4.0				
Green Ext Time (p_c), s	0.0	6.2		1.6	0.0	7.9		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	23.6
HCM 6th LOS	C

HCM 6th TWSC
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive 02/05/2020

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	28	0	769	933	0
Future Vol, veh/h	0	28	0	769	933	0
Conflicting Peds, #/hr	0	3	0	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	43	43	87	87	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	65	0	884	1025	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1028	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	284	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	-	283	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	283	-
HCM Lane V/C Ratio	-	0.23	-
HCM Control Delay (s)	-	21.5	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.9	-

HCM 6th Signalized Intersection Summary
13: Edna Road (SR 227) & Buckley Road 02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	2	327	7	0	5	63	534	3	2	972	32
Future Volume (veh/h)	34	2	327	7	0	5	63	534	3	2	972	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	75	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	2	332	9	0	2	74	628	4	2	1023	34
Peak Hour Factor	0.87	0.87	0.87	0.75	0.75	0.75	0.85	0.85	0.85	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	291	15	355	14	0	3	93	1296	8	6	1212	1005
Arrive On Green	0.20	0.20	0.20	0.01	0.00	0.01	0.05	0.65	0.65	0.00	0.60	0.60
Sat Flow, veh/h	1698	87	1585	1425	0	317	1781	1856	12	1781	1870	1551
Grp Volume(v), veh/h	41	0	332	11	0	0	74	0	632	2	1023	34
Grp Sat Flow(s),veh/h/ln	1785	0	1585	1742	0	0	1781	0	1868	1781	1870	1551
Q Serve(g_s), s	2.5	0.0	26.2	0.8	0.0	0.0	5.4	0.0	23.4	0.1	63.5	1.2
Cycle Q Clear(g_c), s	2.5	0.0	26.2	0.8	0.0	0.0	5.4	0.0	23.4	0.1	63.5	1.2
Prop In Lane	0.95		1.00	0.82		0.18	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	306	0	355	17	0	0	93	0	1305	6	1212	1005
V/C Ratio(X)	0.13	0.00	0.94	0.65	0.00	0.00	0.80	0.00	0.48	0.35	0.84	0.03
Avail Cap(c_a), veh/h	355	0	399	211	0	0	270	0	1543	419	1403	1164
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	0.0	58.2	75.4	0.0	0.0	71.6	0.0	10.5	76.0	26.9	9.7
Incr Delay (d2), s/veh	0.2	0.0	28.2	40.3	0.0	0.0	5.7	0.0	0.4	33.2	4.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	152.6	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	15.5	0.6	0.0	0.0	2.9	0.0	8.5	0.1	90.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.9	0.0	86.5	115.7	0.0	0.0	77.3	0.0	10.9	109.2	184.2	9.7
LnGrp LOS	D	A	F	F	A	A	E	A	B	F	F	A
Approach Vol, veh/h		373			11			706			1059	
Approach Delay, s/veh		82.9			115.7			17.9			178.4	
Approach LOS		F			F			B			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	3.9	92.5		30.2	10.7	85.7		5.3				
Change Period (Y+Rc), s	3.5	6.4		4.0	3.7	6.4		4.0				
Max Green Setting (Gmax), s	31.0	109.0		26.2	20.0	99.0		16.0				
Max Q Clear Time (g_c+I1), s	2.1	25.4		28.2	7.4	65.5		2.8				
Green Ext Time (p_c), s	0.0	6.7		0.0	0.1	13.8		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		108.8
HCM 6th LOS		F

HCM 6th TWSC
1: Broad Street (SR 227) & Capitolio Way 02/05/2020

Intersection	
Int Delay, s/veh	15.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	171	66	1000	80	140	1650
Future Vol, veh/h	171	66	1000	80	140	1650
Conflicting Peds, #/hr	9	9	0	9	9	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	171	66	1000	80	140	1650

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2163	558	0	0	1089	0
Stage 1	1049	-	-	-	-	-
Stage 2	1114	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 40	473	-	-	636	-
Stage 1	298	-	-	-	-	-
Stage 2	276	-	-	-	-	-
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 31	465	-	-	631	-
Mov Cap-2 Maneuver	~ 127	-	-	-	-	-
Stage 1	295	-	-	-	-	-
Stage 2	213	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	194.2	0	1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	127	465	631	-
HCM Lane V/C Ratio	-	-	1.346	0.142	0.222	-
HCM Control Delay (s)	-	-	263.8	14	12.3	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	11.2	0.5	0.8	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
2: Broad Street (SR 227) & Industrial 02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	90	10	78	54	1150	202	90	1600	104
Future Volume (veh/h)	10	10	10	90	10	78	54	1150	202	90	1600	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.93	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	10	10	90	10	52	54	1150	165	90	1600	95
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	69	114	272	30	250	69	1817	769	115	1909	818
Arrive On Green	0.08	0.08	0.08	0.17	0.17	0.17	0.04	0.51	0.51	0.06	0.54	0.54
Sat Flow, veh/h	912	912	1509	1611	179	1479	1781	3554	1505	1781	3554	1523
Grp Volume(v), veh/h	20	0	10	100	0	52	54	1150	165	90	1600	95
Grp Sat Flow(s),veh/h/ln	1825	0	1509	1790	0	1479	1781	1777	1505	1781	1777	1523
Q Serve(g_s), s	0.9	0.0	0.5	4.4	0.0	2.7	2.7	20.8	5.4	4.4	33.7	2.7
Cycle Q Clear(g_c), s	0.9	0.0	0.5	4.4	0.0	2.7	2.7	20.8	5.4	4.4	33.7	2.7
Prop In Lane	0.50		1.00	0.90		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	0	114	302	0	250	69	1817	769	115	1909	818
V/C Ratio(X)	0.15	0.00	0.09	0.33	0.00	0.21	0.78	0.63	0.21	0.78	0.84	0.12
Avail Cap(c_a), veh/h	718	0	594	644	0	532	80	1817	769	140	1909	818
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	0.0	38.3	32.5	0.0	31.9	42.4	15.7	11.9	41.0	17.3	10.2
Incr Delay (d2), s/veh	0.5	0.0	0.3	0.6	0.0	0.4	34.2	1.7	0.6	20.5	4.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.2	1.9	0.0	1.0	1.8	7.7	1.7	2.5	12.7	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.9	0.0	38.6	33.2	0.0	32.3	76.6	17.4	12.6	61.5	21.9	10.5
LnGrp LOS	D	A	D	C	A	C	E	B	B	E	C	B
Approach Vol, veh/h		30			152			1369			1785	
Approach Delay, s/veh		38.8			32.9			19.2			23.3	
Approach LOS		D			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	49.5		10.7	7.4	51.8		19.0				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	45.5		35.0	4.0	28.0		32.0				
Max Q Clear Time (g_c+I1), s	6.4	22.8		2.9	4.7	35.7		6.4				
Green Ext Time (p_c), s	0.0	9.3		0.1	0.0	0.0		0.7				

Intersection Summary		
HCM 6th Ctrl Delay	22.2	
HCM 6th LOS	C	

HCM 6th Signalized Intersection Summary
3: LOVR & 101 SB

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	816	356	39	992	0	0	0	0	479	0	245
Future Volume (veh/h)	0	816	356	39	992	0	0	0	0	479	0	245
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	816	310	39	992	0				479	0	147
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1945	847	49	2181	0				520	0	458
Arrive On Green	0.00	1.00	1.00	0.03	0.61	0.00				0.29	0.00	0.29
Sat Flow, veh/h	0	3647	1548	1781	3647	0				1781	0	1570
Grp Volume(v), veh/h	0	816	310	39	992	0				479	0	147
Grp Sat Flow(s),veh/h/ln	0	1777	1548	1781	1777	0				1781	0	1570
Q Serve(g_s), s	0.0	0.0	0.0	2.0	13.5	0.0				23.4	0.0	6.6
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.0	13.5	0.0				23.4	0.0	6.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1945	847	49	2181	0				520	0	458
V/C Ratio(X)	0.00	0.42	0.37	0.80	0.45	0.00				0.92	0.00	0.32
Avail Cap(c_a), veh/h	0	1945	847	109	2181	0				544	0	480
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.96	0.96	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	43.5	9.3	0.0				30.9	0.0	24.9
Incr Delay (d2), s/veh	0.0	0.6	1.2	24.7	0.7	0.0				20.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.3	1.2	4.7	0.0				12.7	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.6	1.2	68.2	10.0	0.0				51.7	0.0	25.3
LnGrp LOS	A	A	A	E	B	A				D	A	C
Approach Vol, veh/h		1126			1031						626	
Approach Delay, s/veh		0.8			12.2						45.5	
Approach LOS		A			B						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	6.0	54.3				60.2		29.8				
Change Period (Y+Rc), s	3.5	5.0				5.0		3.5				
Max Green Setting (Gmax), s	5.5	45.0				54.0		27.5				
Max Q Clear Time (g_c+I1), s	4.0	2.0				15.5		25.4				
Green Ext Time (p_c), s	0.0	9.1				8.9		0.8				

Intersection Summary			
HCM 6th Ctrl Delay	15.1		
HCM 6th LOS	B		

HCM Signalized Intersection Capacity Analysis
4: 101 NB & LOVR

02/03/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1116	179	95	462	500	164
Future Volume (vph)	1116	179	95	462	500	164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	4.0	3.5	6.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.96	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3539	1560	1770	3539	3354	
Flt Permitted	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (perm)	3539	1560	1770	3539	3354	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	1116	179	95	462	500	164
RTOR Reduction (vph)	0	42	0	0	31	0
Lane Group Flow (vph)	1116	137	95	462	633	0
Confl. Bikes (#/hr)		3				
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	2	8	1	6	8	
Permitted Phases		2				
Actuated Green, G (s)	57.2	83.9	12.6	73.3	26.7	
Effective Green, g (s)	57.2	83.9	12.6	73.3	26.7	
Actuated g/C Ratio	0.52	0.76	0.11	0.67	0.24	
Clearance Time (s)	6.0	4.0	3.5	6.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1840	1189	202	2358	814	
v/s Ratio Prot	c0.32	0.03	c0.05	0.13	c0.19	
v/s Ratio Perm		0.06				
v/c Ratio	0.61	0.11	0.47	0.20	0.78	
Uniform Delay, d1	18.5	3.4	45.6	7.0	38.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.5	0.0	1.7	0.2	4.7	
Delay (s)	20.0	3.4	47.3	7.2	43.6	
Level of Service	C	A	D	A	D	
Approach Delay (s)	17.7			14.1	43.6	
Approach LOS	B			B	D	

Intersection Summary				
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	17.5	
Intersection Capacity Utilization	67.2%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

HCM 6th Signalized Intersection Summary
5: S. Higuera Street & Tank Farm

05/07/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	20	30	288	10	290	20	500	880	500	450	10
Future Volume (veh/h)	24	20	30	288	10	290	20	500	880	500	450	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		1.00	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	20	28	295	0	0	20	500	702	500	450	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	90	160	480	0		40	1068	668	583	1585	35
Arrive On Green	0.11	0.11	0.11	0.13	0.00	0.00	0.02	0.30	0.30	0.17	0.45	0.45
Sat Flow, veh/h	993	828	1477	3563	0	1585	1781	3554	1513	3456	3550	79
Grp Volume(v), veh/h	44	0	28	295	0	0	20	500	702	500	225	235
Grp Sat Flow(s),veh/h/ln	1821	0	1477	1781	0	1585	1781	1777	1513	1728	1777	1852
Q Serve(g_s), s	1.8	0.0	1.4	6.2	0.0	0.0	0.9	9.2	24.0	11.2	6.4	6.4
Cycle Q Clear(g_c), s	1.8	0.0	1.4	6.2	0.0	0.0	0.9	9.2	24.0	11.2	6.4	6.4
Prop In Lane	0.55		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	197	0	160	480	0		40	1068	668	583	794	827
V/C Ratio(X)	0.22	0.00	0.18	0.61	0.00		0.50	0.47	1.05	0.86	0.28	0.28
Avail Cap(c_a), veh/h	615	0	499	981	0		111	1068	668	606	794	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	32.4	32.6	0.0	0.0	38.6	22.7	19.5	32.3	14.0	14.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.5	0.0	0.0	3.6	0.7	48.9	11.7	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.5	2.5	0.0	0.0	0.4	3.6	21.5	5.3	2.3	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	0.0	32.6	33.1	0.0	0.0	42.2	23.4	68.4	44.0	14.4	14.4
LnGrp LOS	C	A	C	C	A		D	C	F	D	B	B
Approach Vol, veh/h		72			295	A		1222			960	
Approach Delay, s/veh		32.7			33.1			49.6			29.8	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.5	30.0		14.6	6.8	41.7		16.8				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	14.0	24.0		27.0	5.0	33.0		22.0				
Max Q Clear Time (g_c+I1), s	13.2	26.0		3.8	2.9	8.4		8.2				
Green Ext Time (p_c), s	0.2	0.0		0.2	0.0	5.0		0.6				

Intersection Summary			
HCM 6th Ctrl Delay			39.7
HCM 6th LOS			D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
6: Long Street & Tank Farm Road

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	1300	50	120	620	40	20	20	100	40	10	40
Future Volume (veh/h)	61	1300	50	120	620	40	20	20	100	40	10	40
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		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	1300	50	120	620	40	20	20	100	40	10	40
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	1616	62	154	1714	110	27	27	135	55	14	55
Arrive On Green	0.04	0.46	0.46	0.09	0.51	0.51	0.11	0.11	0.11	0.07	0.07	0.07
Sat Flow, veh/h	1781	3485	134	1781	3384	218	234	234	1172	751	188	751
Grp Volume(v), veh/h	61	662	688	120	325	335	140	0	0	90	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1842	1781	1777	1825	1640	0	0	1690	0	0
Q Serve(g_s), s	2.1	19.5	19.5	4.0	6.8	6.8	5.0	0.0	0.0	3.2	0.0	0.0
Cycle Q Clear(g_c), s	2.1	19.5	19.5	4.0	6.8	6.8	5.0	0.0	0.0	3.2	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.12	0.14		0.71	0.44		0.44
Lane Grp Cap(c), veh/h	77	824	854	154	900	924	188	0	0	124	0	0
V/C Ratio(X)	0.79	0.80	0.81	0.78	0.36	0.36	0.74	0.00	0.00	0.72	0.00	0.00
Avail Cap(c_a), veh/h	233	989	1025	204	960	986	456	0	0	443	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.0	14.0	14.0	27.4	9.1	9.1	26.2	0.0	0.0	27.7	0.0	0.0
Incr Delay (d2), s/veh	16.1	4.1	4.0	13.0	0.2	0.2	5.7	0.0	0.0	7.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	6.8	7.0	2.1	2.0	2.0	2.2	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.1	18.1	18.1	40.4	9.4	9.4	31.8	0.0	0.0	35.5	0.0	0.0
LnGrp LOS	D	B	B	D	A	A	C	A	A	D	A	A
Approach Vol, veh/h		1411			780			140			90	
Approach Delay, s/veh		19.3			14.1			31.8			35.5	
Approach LOS		B			B			C			D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.0	9.3	32.3		8.5	6.7	34.9				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		17.0	7.0	34.0		16.0	8.0	33.0				
Max Q Clear Time (g_c+I1), s		7.0	6.0	21.5		5.2	4.1	8.8				
Green Ext Time (p_c), s		0.5	0.0	6.8		0.3	0.0	3.9				

Intersection Summary			
HCM 6th Ctrl Delay			18.9
HCM 6th LOS			B

HCM 6th Roundabout
7: Santa Fe Road & Tank Farm Road

05/07/2020

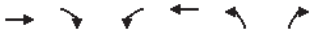
Intersection								
Intersection Delay, s/veh	10.3							
Intersection LOS	B							

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1370	1450	180	0
Demand Flow Rate, veh/h	1398	1479	183	0
Vehicles Circulating, veh/h	235	20	1357	1499
Vehicles Exiting, veh/h	1264	1520	276	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.6	8.6	14.1	0.0
Approach LOS	B	A	B	-

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	R	L	LTR
Assumed Moves	LT	TR	LT	TR	LT	R	L	LTR
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	0.109	0.891	0.500	0.500
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	657	741	695	784	20	163	0	0
Cap Entry Lane, veh/h	1087	1163	1325	1396	387	448	340	397
Entry HV Adj Factor	0.980	0.980	0.980	0.980	1.000	0.982	1.000	1.000
Flow Entry, veh/h	644	726	681	768	20	160	0	0
Cap Entry, veh/h	1066	1140	1299	1368	387	440	340	397
V/C Ratio	0.604	0.637	0.524	0.562	0.052	0.364	0.000	0.000
Control Delay, s/veh	11.4	11.7	8.4	8.8	10.1	14.6	10.6	9.1
LOS	B	B	A	A	B	B	B	A
95th %tile Queue, veh	4	5	3	4	0	2	0	0

HCM 6th Signalized Intersection Summary
8: Mindbody Entrance & Tank Farm Road

02/05/2020



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	980	380	100	1400	50	20
Future Volume (veh/h)	980	380	100	1400	50	20
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	980	380	100	1400	50	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1562	598	129	1448	78	69
Arrive On Green	0.63	0.63	0.07	0.77	0.04	0.04
Sat Flow, veh/h	2587	955	1781	1870	1781	1585
Grp Volume(v), veh/h	695	665	100	1400	50	20
Grp Sat Flow(s),veh/h/ln	1777	1672	1781	1870	1781	1585
Q Serve(g_s), s	15.8	16.3	3.6	44.3	1.8	0.8
Cycle Q Clear(g_c), s	15.8	16.3	3.6	44.3	1.8	0.8
Prop In Lane		0.57	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1113	1047	129	1448	78	69
V/C Ratio(X)	0.62	0.64	0.78	0.97	0.64	0.29
Avail Cap(c_a), veh/h	1292	1215	297	1448	378	336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.6	7.7	30.1	6.7	31.1	30.6
Incr Delay (d2), s/veh	2.1	2.4	3.8	16.7	3.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	4.6	1.6	11.2	0.8	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.7	10.0	33.9	23.4	34.3	31.4
LnGrp LOS	A	B	C	C	C	C
Approach Vol, veh/h	1360			1500	70	
Approach Delay, s/veh	9.9			24.1	33.5	
Approach LOS	A			C	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.8	48.4				58.1	7.9
Change Period (Y+Rc), s	5.0	7.0				7.0	5.0
Max Green Setting (Gmax), s	11.0	48.0				30.0	14.0
Max Q Clear Time (g_c+I1), s	5.6	18.3				46.3	3.8
Green Ext Time (p_c), s	0.0	23.1				0.0	0.0

Intersection Summary			
HCM 6th Ctrl Delay		17.7	
HCM 6th LOS		B	

HCM 6th Signalized Intersection Summary
9: Broad Street (SR 227) & Tank Farm Road

05/07/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	210	400	300	420	179	340	950	130	100	800	800
Future Volume (veh/h)	320	210	400	300	420	179	340	950	130	100	800	800
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	320	210	324	300	420	58	340	950	113	100	800	741
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	405	884	388	327	1119	495	387	1167	804	140	913	583
Arrive On Green	0.12	0.25	0.25	0.18	0.31	0.31	0.11	0.33	0.33	0.04	0.26	0.26
Sat Flow, veh/h	3456	3554	1562	1781	3554	1573	3456	3554	1563	3456	3554	1545
Grp Volume(v), veh/h	320	210	324	300	420	58	340	950	113	100	800	741
Grp Sat Flow(s),veh/h/ln	1728	1777	1562	1781	1777	1573	1728	1777	1563	1728	1777	1545
Q Serve(g_s), s	10.9	5.7	23.7	19.9	11.1	3.2	11.7	29.6	4.6	3.4	26.0	31.0
Cycle Q Clear(g_c), s	10.9	5.7	23.7	19.9	11.1	3.2	11.7	29.6	4.6	3.4	26.0	31.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	405	884	388	327	1119	495	387	1167	804	140	913	583
V/C Ratio(X)	0.79	0.24	0.83	0.92	0.38	0.12	0.88	0.81	0.14	0.71	0.88	1.27
Avail Cap(c_a), veh/h	874	1119	492	347	1119	495	387	1167	804	140	913	583
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	36.2	43.0	48.4	32.1	29.4	52.8	37.1	15.5	57.2	43.0	37.9
Incr Delay (d2), s/veh	3.5	0.1	9.6	27.7	0.2	0.1	20.1	6.3	0.4	15.6	11.5	135.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	2.5	10.0	11.2	4.7	1.2	6.0	13.3	1.7	1.8	12.5	38.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.3	36.3	52.6	76.0	32.3	29.5	72.8	43.4	15.9	72.7	54.5	173.1
LnGrp LOS	E	D	D	E	C	C	E	D	B	E	D	F
Approach Vol, veh/h		854			778			1403			1641	
Approach Delay, s/veh		49.6			49.0			48.3			109.2	
Approach LOS		D			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	46.1	27.6	36.5	19.0	37.5	19.6	44.5
Change Period (Y+Rc), s	5.5	6.5	5.5	6.5	5.5	6.5	5.5	* 6.5
Max Green Setting (Gmax), s	4.9	39.6	23.5	38.0	13.5	31.0	30.5	* 32
Max Q Clear Time (g_c+I1), s	5.4	31.6	21.9	25.7	13.7	33.0	12.9	13.1
Green Ext Time (p_c), s	0.0	4.0	0.2	2.2	0.0	0.0	1.3	2.8

Intersection Summary	
HCM 6th Ctrl Delay	70.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
10: Broad Street (SR 227) & Aerovista Place

02/05/2020

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	42	40	90	1520	1000	226
Future Vol, veh/h	42	40	90	1520	1000	226
Conflicting Peds, #/hr	5	1	1	0	0	5
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	40	90	1520	1000	226

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2063	619	1231	0	-	0
Stage 1	1118	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	47	432	562	-	-	-
Stage 1	274	-	-	-	-	-
Stage 2	338	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 39	430	559	-	-	-
Mov Cap-2 Maneuver	141	-	-	-	-	-
Stage 1	229	-	-	-	-	-
Stage 2	336	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.9	0.7	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	559	-	141	430	-	-
HCM Lane V/C Ratio	0.161	-	0.298	0.093	-	-
HCM Control Delay (s)	12.7	-	41	14.2	-	-
HCM Lane LOS	B	-	E	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1.2	0.3	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
11: Broad Street (SR 227) & Aero Drive

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	10	40	20	0	130	59	1440	20	50	800	120
Future Volume (veh/h)	60	10	40	20	0	130	59	1440	20	50	800	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	10	40	20	0	130	59	1440	20	50	800	107
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	16	99	186	0	164	77	2127	30	65	1841	246
Arrive On Green	0.06	0.06	0.06	0.10	0.00	0.10	0.04	0.59	0.59	0.04	0.59	0.59
Sat Flow, veh/h	1537	256	1578	1781	0	1576	1781	3587	50	1781	3141	420
Grp Volume(v), veh/h	70	0	40	20	0	130	59	713	747	50	453	454
Grp Sat Flow(s),veh/h/ln	1793	0	1578	1781	0	1576	1781	1777	1860	1781	1777	1784
Q Serve(g_s), s	4.0	0.0	2.6	1.1	0.0	8.5	3.5	28.8	28.9	2.9	15.0	15.0
Cycle Q Clear(g_c), s	4.0	0.0	2.6	1.1	0.0	8.5	3.5	28.8	28.9	2.9	15.0	15.0
Prop In Lane	0.86		1.00	1.00		1.00	1.00		0.03	1.00		0.24
Lane Grp Cap(c), veh/h	113	0	99	186	0	164	77	1054	1103	65	1042	1046
V/C Ratio(X)	0.62	0.00	0.40	0.11	0.00	0.79	0.77	0.68	0.68	0.77	0.43	0.43
Avail Cap(c_a), veh/h	594	0	522	590	0	522	219	1054	1103	219	1042	1046
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	0.0	47.6	42.9	0.0	46.2	50.1	14.6	14.6	50.5	12.1	12.1
Incr Delay (d2), s/veh	5.4	0.0	2.6	0.3	0.0	8.2	14.8	3.5	3.4	17.4	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	1.1	0.5	0.0	3.7	1.8	11.0	11.5	1.6	5.6	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.7	0.0	50.2	43.2	0.0	54.4	64.9	18.1	18.0	67.9	13.5	13.5
LnGrp LOS	D	A	D	D	A	D	E	B	B	E	B	B
Approach Vol, veh/h		110			150			1519			957	
Approach Delay, s/veh		52.5			52.9			19.9			16.3	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	69.2		11.7	9.6	68.5		16.0				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	13.0	62.0		35.0	13.0	62.0		35.0				
Max Q Clear Time (g_c+I1), s	4.9	30.9		6.0	5.5	17.0		10.5				
Green Ext Time (p_c), s	0.1	12.2		0.6	0.1	6.4		0.7				

Intersection Summary		
HCM 6th Ctrl Delay		21.8
HCM 6th LOS		C

HCM 6th TWSC
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive

02/05/2020

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	0	1519	860	0
Future Vol, veh/h	0	8	0	1519	860	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	0	1519	860	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	860	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	356	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	356	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	356	-
HCM Lane V/C Ratio	-	0.022	-
HCM Control Delay (s)	-	15.3	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.1	-

HCM 6th Roundabout
13: Edna Road (SR 227) & Buckley Road

05/07/2020

Intersection							
Intersection Delay, s/veh	10.1						
Intersection LOS	B						
Approach		**EB**		**WB**		**NB**	**SB**
Entry Lanes		2		1		2	2
Conflicting Circle Lanes		2		2		2	2
Adj Approach Flow, veh/h		259		5		1711	847
Demand Flow Rate, veh/h		264		5		1746	864
Vehicles Circulating, veh/h		701		1818		83	236
Vehicles Exiting, veh/h		399		11		882	1587
Ped Vol Crossing Leg, #/h		0		0		0	0
Ped Cap Adj		1.000		1.000		1.000	1.000
Approach Delay, s/veh		7.0		12.2		12.1	7.2
Approach LOS		A		B		B	A

Lane	Left	Right	Left	Left	Right	Left	Right
Designated Moves	LT	R	LTR	LT	TR	LT	TR
Assumed Moves	LT	R	LTR	LT	TR	LT	TR
RT Channelized							
Lane Util	0.303	0.697	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.667	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	80	184	5	821	925	406	458
Cap Entry Lane, veh/h	708	783	303	1251	1323	1086	1162
Entry HV Adj Factor	0.986	0.978	1.000	0.980	0.981	0.981	0.981
Flow Entry, veh/h	79	180	5	804	907	398	449
Cap Entry, veh/h	699	766	303	1225	1298	1066	1139
V/C Ratio	0.113	0.235	0.017	0.656	0.699	0.374	0.394
Control Delay, s/veh	6.4	7.3	12.2	11.6	12.4	7.2	7.2
LOS	A	A	B	B	B	A	A
95th %tile Queue, veh	0	1	0	5	6	2	2

HCM 6th Signalized Intersection Summary
14: S. Higuera Street & Buckley Road

02/05/2020

Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations							
Traffic Volume (veh/h)	97	158	499	235	97	358	
Future Volume (veh/h)	97	158	499	235	97	358	
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	
Work Zone On Approach	No		No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	97	158	499	225	97	358	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	287	256	758	642	127	1117	
Arrive On Green	0.16	0.16	0.41	0.41	0.07	0.60	
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870	
Grp Volume(v), veh/h	97	158	499	225	97	358	
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870	
Q Serve(g_s), s	1.6	3.1	7.2	3.3	1.8	3.2	
Cycle Q Clear(g_c), s	1.6	3.1	7.2	3.3	1.8	3.2	
Prop In Lane	1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	287	256	758	642	127	1117	
V/C Ratio(X)	0.34	0.62	0.66	0.35	0.76	0.32	
Avail Cap(c_a), veh/h	968	861	2202	1867	592	3050	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	12.3	12.9	8.0	6.8	15.1	3.3	
Incr Delay (d2), s/veh	0.7	2.4	1.0	0.3	9.1	0.2	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.6	1.0	1.5	0.6	0.8	0.1	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	13.0	15.4	9.0	7.2	24.2	3.5	
LnGrp LOS	B	B	A	A	C	A	
Approach Vol, veh/h	255		724			455	
Approach Delay, s/veh	14.5		8.4			7.9	
Approach LOS	B		A			A	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	6.4	17.4				23.8	9.3
Change Period (Y+Rc), s	4.0	4.0				4.0	4.0
Max Green Setting (Gmax), s	13.0	39.0				54.0	18.0
Max Q Clear Time (g_c+I1), s	3.6	9.2				5.2	5.1
Green Ext Time (p_c), s	0.1	4.2				2.2	0.8

Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

HCM 6th TWSC
1: Broad Street (SR 227) & Capitolio Way 02/05/2020

Intersection	
Int Delay, s/veh	7.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	90	150	1670	100	90	1500
Future Vol, veh/h	90	150	1670	100	90	1500
Conflicting Peds, #/hr	4	4	0	4	4	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	90	150	1670	100	90	1500

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2658	893	0	0	1774	0
Stage 1	1724	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 18	285	-	-	347	-
Stage 1	129	-	-	-	-	-
Stage 2	343	-	-	-	-	-
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 13	283	-	-	346	-
Mov Cap-2 Maneuver	~ 83	-	-	-	-	-
Stage 1	128	-	-	-	-	-
Stage 2	253	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	99.8	0	1.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	83	283	346	-
HCM Lane V/C Ratio	-	-	1.084	0.53	0.26	-
HCM Control Delay (s)	-	-	214.1	31.2	19	-
HCM Lane LOS	-	-	F	D	C	-
HCM 95th %tile Q(veh)	-	-	6.3	2.9	1	-

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
2: Broad Street (SR 227) & Industrial Way 02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	20	50	190	14	258	94	1600	199	140	1400	111
Future Volume (veh/h)	100	20	50	190	14	258	94	1600	199	140	1400	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.92	1.00		0.94	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	20	43	190	14	181	94	1600	150	140	1400	84
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	30	159	250	18	220	112	1563	655	149	1637	704
Arrive On Green	0.10	0.10	0.10	0.15	0.15	0.15	0.06	0.44	0.44	0.08	0.46	0.46
Sat Flow, veh/h	1496	299	1576	1664	123	1465	1781	3554	1491	1781	3554	1528
Grp Volume(v), veh/h	120	0	43	204	0	181	94	1600	150	140	1400	84
Grp Sat Flow(s),veh/h/ln	1796	0	1576	1787	0	1465	1781	1777	1491	1781	1777	1528
Q Serve(g_s), s	6.2	0.0	2.4	10.5	0.0	11.4	5.0	42.0	6.0	7.5	33.5	3.0
Cycle Q Clear(g_c), s	6.2	0.0	2.4	10.5	0.0	11.4	5.0	42.0	6.0	7.5	33.5	3.0
Prop In Lane	0.83		1.00	0.93		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	0	159	269	0	220	112	1563	655	149	1637	704
V/C Ratio(X)	0.66	0.00	0.27	0.76	0.00	0.82	0.84	1.02	0.23	0.94	0.86	0.12
Avail Cap(c_a), veh/h	658	0	577	309	0	253	112	1563	655	149	1637	704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	0.0	39.7	38.9	0.0	39.3	44.3	26.8	16.7	43.5	22.9	14.7
Incr Delay (d2), s/veh	4.1	0.0	0.9	9.1	0.0	17.1	40.5	29.0	0.2	55.4	4.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.9	5.1	0.0	5.0	3.4	22.1	1.9	5.4	13.5	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.5	0.0	40.6	48.0	0.0	56.4	84.8	55.8	16.8	98.9	27.6	14.8
LnGrp LOS	D	A	D	D	A	E	F	F	B	F	C	B
Approach Vol, veh/h		163			385			1844			1624	
Approach Delay, s/veh		44.2			52.0			54.1			33.1	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	48.5		14.6	11.0	50.5		19.4				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	8.0	42.0		35.0	6.0	44.0		16.5				
Max Q Clear Time (g_c+I1), s	9.5	44.0		8.2	7.0	35.5		13.4				
Green Ext Time (p_c), s	0.0	0.0		0.9	0.0	5.5		0.6				

Intersection Summary		
HCM 6th Ctrl Delay	45.0	
HCM 6th LOS	D	

HCM 6th Signalized Intersection Summary
3: LOVR & 101 SB

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	962	669	65	1386	0	0	0	0	306	0	413
Future Volume (veh/h)	0	962	669	65	1386	0	0	0	0	306	0	413
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	962	589	65	1386	0				306	0	326
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2216	965	84	2522	0				349	0	301
Arrive On Green	0.00	0.83	0.83	0.05	0.71	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3647	1548	1781	3647	0				1781	0	1539
Grp Volume(v), veh/h	0	962	589	65	1386	0				306	0	326
Grp Sat Flow(s),veh/h/ln	0	1777	1548	1781	1777	0				1781	0	1539
Q Serve(g_s), s	0.0	6.5	11.8	3.2	16.7	0.0				15.0	0.0	17.6
Cycle Q Clear(g_c), s	0.0	6.5	11.8	3.2	16.7	0.0				15.0	0.0	17.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2216	965	84	2522	0				349	0	301
V/C Ratio(X)	0.00	0.43	0.61	0.77	0.55	0.00				0.88	0.00	1.08
Avail Cap(c_a), veh/h	0	2216	965	188	2522	0				485	0	419
HCM Platoon Ratio	1.00	1.33	1.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.85	0.85	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	3.4	3.9	42.4	6.2	0.0				35.1	0.0	36.2
Incr Delay (d2), s/veh	0.0	0.5	2.4	13.8	0.9	0.0				12.6	0.0	65.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.7	2.7	1.7	5.0	0.0				7.6	0.0	11.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	4.0	6.3	56.2	7.1	0.0				47.8	0.0	101.7
LnGrp LOS	A	A	A	E	A	A				D	A	F
Approach Vol, veh/h		1551			1451						632	
Approach Delay, s/veh		4.9			9.3						75.6	
Approach LOS		A			A						E	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	7.8	61.1				68.9		21.1				
Change Period (Y+Rc), s	3.5	5.0				5.0		3.5				
Max Green Setting (Gmax), s	4.5	44.0				57.0		24.5				
Max Q Clear Time (g_c+I1), s	5.2	13.8				18.7		17.0				
Green Ext Time (p_c), s	0.0	12.6				14.5		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		18.9	
HCM 6th LOS		B	

HCM Signalized Intersection Capacity Analysis
4: 101 NB & LOVR

02/03/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	861	386	188	968	511	117
Future Volume (vph)	861	386	188	968	511	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	3.5	3.5	6.0	3.5	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.97	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3539	1563	1770	3539	3375	
Flt Permitted	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (perm)	3539	1563	1770	3539	3375	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	861	386	188	968	511	117
RTOR Reduction (vph)	0	142	0	0	16	0
Lane Group Flow (vph)	861	244	188	968	612	0
Confl. Bikes (#/hr)		5				
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	2	8	1	6	8	
Permitted Phases		2				
Actuated Green, G (s)	24.6	44.7	12.9	41.0	20.1	
Effective Green, g (s)	24.6	44.7	12.9	41.0	20.1	
Actuated g/C Ratio	0.35	0.63	0.18	0.58	0.28	
Clearance Time (s)	6.0	3.5	3.5	6.0	3.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1233	989	323	2055	960	
v/s Ratio Prot	c0.24	0.07	c0.11	0.27	c0.18	
v/s Ratio Perm		0.09				
v/c Ratio	0.70	0.25	0.58	0.47	0.64	
Uniform Delay, d1	19.8	5.6	26.4	8.5	22.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	0.1	2.7	0.2	1.4	
Delay (s)	21.6	5.8	29.0	8.7	23.5	
Level of Service	C	A	C	A	C	
Approach Delay (s)	16.7			12.0	23.5	
Approach LOS	B			B	C	

Intersection Summary				
HCM 2000 Control Delay	16.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	70.6	Sum of lost time (s)	17.0	
Intersection Capacity Utilization	64.1%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

HCM 6th Signalized Intersection Summary
5: S. Higuera Street & Tank Farm Road

05/07/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	22	600	20	600	32	800	443	450	850	40
Future Volume (veh/h)	20	10	22	600	20	600	32	800	443	450	850	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		1.00	1.00		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	10	5	614	0	0	32	800	255	450	850	39
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	111	249	706	0		40	931	683	510	1330	61
Arrive On Green	0.18	0.18	0.18	0.20	0.00	0.00	0.02	0.26	0.26	0.15	0.39	0.39
Sat Flow, veh/h	1207	603	1355	3563	0	1585	1781	3554	1408	3456	3438	158
Grp Volume(v), veh/h	30	0	5	614	0	0	32	800	255	450	439	450
Grp Sat Flow(s),veh/h/ln	1810	0	1355	1781	0	1585	1781	1777	1408	1728	1777	1819
Q Serve(g_s), s	1.5	0.0	0.3	18.5	0.0	0.0	2.0	23.7	13.2	14.1	22.3	22.3
Cycle Q Clear(g_c), s	1.5	0.0	0.3	18.5	0.0	0.0	2.0	23.7	13.2	14.1	22.3	22.3
Prop In Lane	0.67		1.00	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	333	0	249	706	0		40	931	683	510	687	704
V/C Ratio(X)	0.09	0.00	0.02	0.87	0.00		0.79	0.86	0.37	0.88	0.64	0.64
Avail Cap(c_a), veh/h	442	0	331	838	0		81	1029	722	531	707	724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	36.9	42.9	0.0	0.0	53.8	38.9	19.7	46.2	27.6	27.6
Incr Delay (d2), s/veh	0.1	0.0	0.0	8.6	0.0	0.0	28.4	6.9	0.3	15.6	1.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.1	8.7	0.0	0.0	1.2	10.7	6.0	7.0	9.3	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.5	0.0	37.0	51.5	0.0	0.0	82.2	45.8	20.0	61.7	29.5	29.4
LnGrp LOS	D	A	D	D	A		F	D	C	E	C	C
Approach Vol, veh/h		35			614	A		1087			1339	
Approach Delay, s/veh		37.4			51.5			40.8			40.3	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.3	35.0		26.4	7.5	48.8		27.9				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	17.0	32.0		27.0	5.0	44.0		26.0				
Max Q Clear Time (g_c+I1), s	16.1	25.7		3.5	4.0	24.3		20.5				
Green Ext Time (p_c), s	0.2	3.3		0.1	0.0	5.3		1.4				

Intersection Summary		
HCM 6th Ctrl Delay		42.7
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
6: Long Street & Tank Farm Road

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	790	30	160	1200	70	20	10	180	40	20	70
Future Volume (veh/h)	90	790	30	160	1200	70	20	10	180	40	20	70
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		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	90	790	30	160	1200	70	20	10	180	40	20	70
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	1251	48	203	1391	81	25	13	226	54	27	94
Arrive On Green	0.06	0.36	0.36	0.11	0.41	0.41	0.16	0.16	0.16	0.10	0.10	0.10
Sat Flow, veh/h	1781	3487	132	1781	3407	199	154	77	1383	517	258	904
Grp Volume(v), veh/h	90	402	418	160	625	645	210	0	0	130	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1843	1781	1777	1829	1614	0	0	1679	0	0
Q Serve(g_s), s	3.1	11.6	11.6	5.4	19.8	19.8	7.7	0.0	0.0	4.6	0.0	0.0
Cycle Q Clear(g_c), s	3.1	11.6	11.6	5.4	19.8	19.8	7.7	0.0	0.0	4.6	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.11	0.10		0.86	0.31		0.54
Lane Grp Cap(c), veh/h	115	637	661	203	725	746	264	0	0	174	0	0
V/C Ratio(X)	0.78	0.63	0.63	0.79	0.86	0.86	0.80	0.00	0.00	0.75	0.00	0.00
Avail Cap(c_a), veh/h	145	637	661	289	779	802	419	0	0	436	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.4	16.4	16.4	26.6	16.6	16.7	24.8	0.0	0.0	26.8	0.0	0.0
Incr Delay (d2), s/veh	19.1	2.0	1.9	9.0	9.3	9.2	5.4	0.0	0.0	6.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.2	4.3	2.5	8.2	8.4	3.2	0.0	0.0	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.5	18.4	18.3	35.6	25.9	25.9	30.2	0.0	0.0	33.0	0.0	0.0
LnGrp LOS	D	B	B	D	C	C	C	A	A	C	A	A
Approach Vol, veh/h		910			1430			210			130	
Approach Delay, s/veh		21.2			27.0			30.2			33.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.1	11.0	26.1		10.4	8.0	29.1				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		16.0	10.0	22.0		16.0	5.0	27.0				
Max Q Clear Time (g_c+I1), s		9.7	7.4	13.6		6.6	5.1	21.8				
Green Ext Time (p_c), s		0.7	0.1	3.1		0.4	0.0	3.3				

Intersection Summary		
HCM 6th Ctrl Delay		25.6
HCM 6th LOS		C

HCM 6th Roundabout
7: Santa Fe Road & Tank Farm Road

05/08/2020

Intersection								
Intersection Delay, s/veh	10.8							
Intersection LOS	B							

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1230	1520	340	0
Demand Flow Rate, veh/h	1255	1550	347	0
Vehicles Circulating, veh/h	224	41	1224	1591
Vehicles Exiting, veh/h	1367	1530	255	0
Ped Vol Crossing Leg, #/h	1	1	0	1
Ped Cap Adj	0.999	0.999	1.000	1.000
Approach Delay, s/veh	9.9	9.4	19.8	0.0
Approach LOS	A	A	C	-

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	R	L	LTR
Assumed Moves	LT	TR	LT	TR	LT	R	L	LTR
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	0.118	0.882	0.500	0.500
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	590	665	728	822	41	306	0	0
Cap Entry Lane, veh/h	1098	1174	1300	1371	438	502	312	367
Entry HV Adj Factor	0.980	0.980	0.981	0.980	0.976	0.980	1.000	1.000
Flow Entry, veh/h	578	652	714	806	40	300	0	0
Cap Entry, veh/h	1075	1150	1274	1343	427	492	312	367
V/C Ratio	0.538	0.567	0.561	0.600	0.094	0.610	0.000	0.000
Control Delay, s/veh	9.9	10.0	9.2	9.6	9.8	21.2	11.5	9.8
LOS	A	A	A	A	A	C	B	A
95th %tile Queue, veh	3	4	4	4	0	4	0	0

HCM 6th Signalized Intersection Summary
8: Mindbody Entrance & Tank Farm Road

02/05/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1300	140	70	1320	250	100
Future Volume (veh/h)	1300	140	70	1320	250	100
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1300	140	70	1320	250	100
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1833	196	90	1277	291	259
Arrive On Green	0.57	0.57	0.05	0.68	0.16	0.16
Sat Flow, veh/h	3322	346	1781	1870	1781	1585
Grp Volume(v), veh/h	713	727	70	1320	250	100
Grp Sat Flow(s),veh/h/ln	1777	1798	1781	1870	1781	1585
Q Serve(g_s), s	22.5	22.9	3.0	53.2	10.6	4.4
Cycle Q Clear(g_c), s	22.5	22.9	3.0	53.2	10.6	4.4
Prop In Lane		0.19	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1009	1021	90	1277	291	259
V/C Ratio(X)	0.71	0.71	0.78	1.03	0.86	0.39
Avail Cap(c_a), veh/h	1095	1108	252	1277	320	285
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	12.2	36.5	12.4	31.7	29.1
Incr Delay (d2), s/veh	3.6	3.6	5.3	34.4	17.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	8.4	1.4	26.5	5.9	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.7	15.8	41.8	46.8	49.3	29.4
LnGrp LOS	B	B	D	F	D	C
Approach Vol, veh/h	1440			1390	350	
Approach Delay, s/veh	15.8			46.5	43.6	
Approach LOS	B			D	D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	8.9	51.2				60.2	17.7
Change Period (Y+Rc), s	5.0	7.0				7.0	5.0
Max Green Setting (Gmax), s	11.0	48.0				30.0	14.0
Max Q Clear Time (g_c+I1), s	5.0	24.9				55.2	12.6
Green Ext Time (p_c), s	0.0	19.3				0.0	0.1

Intersection Summary			
HCM 6th Ctrl Delay		32.3	
HCM 6th LOS		C	

HCM 6th Signalized Intersection Summary
9: Broad Street (SR 227) & Tank Farm Road

05/08/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	670	580	319	210	290	150	520	1000	340	260	860	580
Future Volume (veh/h)	670	580	319	210	290	150	520	1000	340	260	860	580
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	670	580	270	210	290	129	520	1000	309	260	860	469
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	747	779	335	248	507	217	594	1265	767	338	1001	782
Arrive On Green	0.22	0.22	0.22	0.14	0.14	0.14	0.17	0.36	0.36	0.10	0.28	0.28
Sat Flow, veh/h	3456	3554	1529	1781	3554	1522	3456	3554	1536	3456	3554	1560
Grp Volume(v), veh/h	670	580	270	210	290	129	520	1000	309	260	860	469
Grp Sat Flow(s),veh/h/ln	1728	1777	1529	1781	1777	1522	1728	1777	1536	1728	1777	1560
Q Serve(g_s), s	16.1	13.0	14.3	9.8	6.5	6.8	12.5	21.5	10.8	6.3	19.5	18.4
Cycle Q Clear(g_c), s	16.1	13.0	14.3	9.8	6.5	6.8	12.5	21.5	10.8	6.3	19.5	18.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	747	779	335	248	507	217	594	1265	767	338	1001	782
V/C Ratio(X)	0.90	0.74	0.81	0.85	0.57	0.59	0.88	0.79	0.40	0.77	0.86	0.60
Avail Cap(c_a), veh/h	771	876	377	293	667	286	608	1265	767	365	1001	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	31.0	31.5	35.8	34.1	34.2	34.4	24.6	13.6	37.5	29.0	15.4
Incr Delay (d2), s/veh	13.0	3.1	11.0	17.7	1.0	2.6	13.3	5.1	1.6	9.0	9.5	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	5.6	6.0	5.3	2.7	2.5	6.0	9.0	3.7	2.9	8.9	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.5	34.1	42.5	53.4	35.1	36.8	47.7	29.7	15.2	46.5	38.5	18.8
LnGrp LOS	D	C	D	D	D	D	D	C	B	D	D	B
Approach Vol, veh/h		1520			629			1829			1589	
Approach Delay, s/veh		40.6			41.6			32.4			34.0	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	34.3	15.9	22.7	18.6	28.0	22.4	16.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	30.0	14.0	21.0	15.0	24.0	19.0	16.0
Max Q Clear Time (g_c+I1), s	8.3	23.5	11.8	16.3	14.5	21.5	18.1	8.8
Green Ext Time (p_c), s	0.1	3.0	0.2	2.1	0.1	1.7	0.4	1.4

Intersection Summary	
HCM 6th Ctrl Delay	36.1
HCM 6th LOS	D

HCM 6th TWSC
10: Broad Street (SR 227) & Aerovista Place

02/05/2020

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	120	54	90	1400	1300	106
Future Vol, veh/h	120	54	90	1400	1300	106
Conflicting Peds, #/hr	9	9	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	120	54	90	1400	1300	106

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2251	721	1415	0	-	0
Stage 1	1362	-	-	-	-	-
Stage 2	889	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 35	370	478	-	-	-
Stage 1	203	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 28	364	474	-	-	-
Mov Cap-2 Maneuver	~ 113	-	-	-	-	-
Stage 1	163	-	-	-	-	-
Stage 2	359	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	125.8	0.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	474	-	113	364	-	-
HCM Lane V/C Ratio	0.19	-	1.062	0.148	-	-
HCM Control Delay (s)	14.4	-	175	16.6	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	0.7	-	7.2	0.5	-	-

Notes				
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon	

HCM 6th Signalized Intersection Summary
11: Broad Street (SR 227) & Aero Drive

05/08/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	10	46	30	7	350	41	1000	20	100	1250	75
Future Volume (veh/h)	180	10	46	30	7	350	41	1000	20	100	1250	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	180	10	31	30	7	250	41	1000	18	100	1250	63
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	12	197	206	48	223	52	1752	32	95	1769	89
Arrive On Green	0.12	0.12	0.12	0.14	0.14	0.14	0.03	0.49	0.49	0.05	0.51	0.51
Sat Flow, veh/h	1692	94	1577	1457	340	1575	1781	3569	64	1781	3438	173
Grp Volume(v), veh/h	190	0	31	37	0	250	41	498	520	100	645	668
Grp Sat Flow(s),veh/h/ln	1786	0	1577	1797	0	1575	1781	1777	1857	1781	1777	1834
Q Serve(g_s), s	11.8	0.0	2.0	2.0	0.0	16.0	2.6	22.4	22.4	6.0	31.3	31.4
Cycle Q Clear(g_c), s	11.8	0.0	2.0	2.0	0.0	16.0	2.6	22.4	22.4	6.0	31.3	31.4
Prop In Lane	0.95		1.00	0.81		1.00	1.00		0.03	1.00		0.09
Lane Grp Cap(c), veh/h	223	0	197	254	0	223	52	872	911	95	914	944
V/C Ratio(X)	0.85	0.00	0.16	0.15	0.00	1.12	0.78	0.57	0.57	1.06	0.71	0.71
Avail Cap(c_a), veh/h	253	0	223	254	0	223	95	872	911	95	914	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	0.0	44.2	42.6	0.0	48.5	54.5	20.4	20.4	53.5	20.9	21.0
Incr Delay (d2), s/veh	21.7	0.0	0.4	0.3	0.0	97.0	21.8	2.7	2.6	109.2	4.6	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	0.0	0.8	0.9	0.0	12.3	1.4	9.3	9.6	5.5	13.0	13.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.2	0.0	44.6	42.8	0.0	145.5	76.4	23.1	23.0	162.8	25.5	25.4
LnGrp LOS	E	A	D	D	A	F	E	C	C	F	C	C
Approach Vol, veh/h		221			287			1059			1413	
Approach Delay, s/veh		66.6			132.3			25.1			35.2	
Approach LOS		E			F			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	62.0		19.1	8.3	64.7		21.0				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	6.0	55.5		16.0	6.0	55.5		16.0				
Max Q Clear Time (g_c+I1), s	8.0	24.4		13.8	4.6	33.4		18.0				
Green Ext Time (p_c), s	0.0	7.1		0.3	0.0	9.1		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		43.3
HCM 6th LOS		D

HCM 6th TWSC
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive

02/05/2020

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	30	0	948	1173	0
Future Vol, veh/h	1	30	0	948	1173	0
Conflicting Peds, #/hr	0	3	0	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	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	30	0	948	1173	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2121	1176	-	0	-	0
Stage 1	1173	-	-	-	-	-
Stage 2	948	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	55	233	0	-	-	0
Stage 1	294	-	0	-	-	0
Stage 2	377	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	55	232	-	-	-	-
Mov Cap-2 Maneuver	55	-	-	-	-	-
Stage 1	294	-	-	-	-	-
Stage 2	377	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	232	-
HCM Lane V/C Ratio	-	0.129	-
HCM Control Delay (s)	-	22.8	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.4	-

HCM 6th Roundabout
13: Edna Road (SR 227) & Buckley Road

05/08/2020

Intersection							
Intersection Delay, s/veh	8.4						
Intersection LOS	A						

Approach	EB	WB	NB	SB
Entry Lanes	2	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	435	12	819	1050
Demand Flow Rate, veh/h	444	12	835	1071
Vehicles Circulating, veh/h	1043	920	92	75
Vehicles Exiting, veh/h	103	7	1395	857
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	16.6	5.7	5.9	6.9
Approach LOS	C	A	A	A

Lane	Left	Right	Left	Left	Right	Left	Right
Designated Moves	LT	R	LTR	LT	TR	LT	TR
Assumed Moves	LT	R	LTR	LT	TR	LT	TR
RT Channelized							
Lane Util	0.203	0.797	1.000	0.469	0.531	0.470	0.530
Follow-Up Headway, s	2.667	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	90	354	12	392	443	503	568
Cap Entry Lane, veh/h	517	585	650	1240	1313	1260	1332
Entry HV Adj Factor	0.977	0.980	1.000	0.982	0.980	0.981	0.979
Flow Entry, veh/h	88	347	12	385	434	493	556
Cap Entry, veh/h	505	574	650	1218	1287	1236	1305
V/C Ratio	0.174	0.605	0.018	0.316	0.337	0.399	0.426
Control Delay, s/veh	9.5	18.4	5.7	5.9	5.9	6.8	6.9
LOS	A	C	A	A	A	A	A
95th %tile Queue, veh	1	4	0	1	2	2	2

HCM 6th Signalized Intersection Summary
14: S. Higuera Street & Buckley Road

02/05/2020

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	230	424	295	241	243	663
Future Volume (veh/h)	230	424	295	241	243	663
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	230	424	295	241	243	663
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	601	534	442	375	319	931
Arrive On Green	0.34	0.34	0.24	0.24	0.18	0.50
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	230	424	295	241	243	663
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	4.8	11.7	6.9	6.6	6.3	13.4
Cycle Q Clear(g_c), s	4.8	11.7	6.9	6.6	6.3	13.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	601	534	442	375	319	931
V/C Ratio(X)	0.38	0.79	0.67	0.64	0.76	0.71
Avail Cap(c_a), veh/h	991	882	1080	915	845	2121
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	14.5	16.8	16.7	18.9	9.5
Incr Delay (d2), s/veh	0.4	2.7	1.7	1.8	3.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.9	2.6	2.1	2.4	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.6	17.3	18.5	18.5	22.7	10.5
LnGrp LOS	B	B	B	B	C	B
Approach Vol, veh/h	654		536			906
Approach Delay, s/veh	15.6		18.5			13.8
Approach LOS	B		B			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.7	15.5			28.2	20.4
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	23.0	28.0			55.0	27.0
Max Q Clear Time (g_c+I1), s	8.8	8.9			15.4	13.7
Green Ext Time (p_c), s	0.7	2.5			4.8	2.6

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

HCM 6th TWSC
1: Broad Street (SR 227) & Capitolio Way 02/05/2020

Intersection	
Int Delay, s/veh	16.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	171	66	1021	80	140	1680
Future Vol, veh/h	171	66	1021	80	140	1680
Conflicting Peds, #/hr	9	9	0	9	9	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	171	66	1021	80	140	1680

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2199	569	0	0	1110	0
Stage 1	1070	-	-	-	-	-
Stage 2	1129	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 38	465	-	-	625	-
Stage 1	291	-	-	-	-	-
Stage 2	271	-	-	-	-	-
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 29	457	-	-	620	-
Mov Cap-2 Maneuver	~ 123	-	-	-	-	-
Stage 1	288	-	-	-	-	-
Stage 2	208	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	208.4	0	1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	123	457	620	-
HCM Lane V/C Ratio	-	-	1.39	0.144	0.226	-
HCM Control Delay (s)	-	-	283.4	14.2	12.5	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	11.6	0.5	0.9	-

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
2: Broad Street (SR 227) & Industrial 02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	90	10	78	54	1171	202	90	1630	104
Future Volume (veh/h)	10	10	10	90	10	78	54	1171	202	90	1630	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.93	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	10	10	90	10	52	54	1171	165	90	1630	95
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	69	114	272	30	250	69	1817	769	115	1909	818
Arrive On Green	0.08	0.08	0.08	0.17	0.17	0.17	0.04	0.51	0.51	0.06	0.54	0.54
Sat Flow, veh/h	912	912	1509	1611	179	1479	1781	3554	1505	1781	3554	1523
Grp Volume(v), veh/h	20	0	10	100	0	52	54	1171	165	90	1630	95
Grp Sat Flow(s),veh/h/ln	1825	0	1509	1790	0	1479	1781	1777	1505	1781	1777	1523
Q Serve(g_s), s	0.9	0.0	0.5	4.4	0.0	2.7	2.7	21.4	5.4	4.4	34.9	2.7
Cycle Q Clear(g_c), s	0.9	0.0	0.5	4.4	0.0	2.7	2.7	21.4	5.4	4.4	34.9	2.7
Prop In Lane	0.50		1.00	0.90		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	0	114	302	0	250	69	1817	769	115	1909	818
V/C Ratio(X)	0.15	0.00	0.09	0.33	0.00	0.21	0.78	0.64	0.21	0.78	0.85	0.12
Avail Cap(c_a), veh/h	718	0	594	644	0	532	80	1817	769	140	1909	818
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	0.0	38.3	32.5	0.0	31.9	42.4	15.9	11.9	41.0	17.6	10.2
Incr Delay (d2), s/veh	0.5	0.0	0.3	0.6	0.0	0.4	34.2	1.8	0.6	20.5	5.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.2	1.9	0.0	1.0	1.8	7.9	1.7	2.5	13.2	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.9	0.0	38.6	33.2	0.0	32.3	76.6	17.6	12.6	61.5	22.7	10.5
LnGrp LOS	D	A	D	C	A	C	E	B	B	E	C	B
Approach Vol, veh/h		30			152			1390			1815	
Approach Delay, s/veh		38.8			32.9			19.3			24.0	
Approach LOS		D			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	49.5		10.7	7.4	51.8		19.0				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	45.5		35.0	4.0	28.0		32.0				
Max Q Clear Time (g_c+I1), s	6.4	23.4		2.9	4.7	36.9		6.4				
Green Ext Time (p_c), s	0.0	9.4		0.1	0.0	0.0		0.7				

Intersection Summary		
HCM 6th Ctrl Delay	22.6	
HCM 6th LOS	C	

HCM 6th Signalized Intersection Summary
3: LOVR & 101 SB

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	819	356	39	924	0	0	0	0	483	0	245
Future Volume (veh/h)	0	819	356	39	924	0	0	0	0	483	0	245
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	819	310	39	924	0				483	0	147
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1940	845	49	2175	0				523	0	461
Arrive On Green	0.00	1.00	1.00	0.03	0.61	0.00				0.29	0.00	0.29
Sat Flow, veh/h	0	3647	1548	1781	3647	0				1781	0	1570
Grp Volume(v), veh/h	0	819	310	39	924	0				483	0	147
Grp Sat Flow(s),veh/h/ln	0	1777	1548	1781	1777	0				1781	0	1570
Q Serve(g_s), s	0.0	0.0	0.0	2.0	12.3	0.0				23.7	0.0	6.6
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.0	12.3	0.0				23.7	0.0	6.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1940	845	49	2175	0				523	0	461
V/C Ratio(X)	0.00	0.42	0.37	0.80	0.42	0.00				0.92	0.00	0.32
Avail Cap(c_a), veh/h	0	1940	845	109	2175	0				544	0	480
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.96	0.96	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	43.5	9.1	0.0				30.8	0.0	24.8
Incr Delay (d2), s/veh	0.0	0.6	1.2	24.7	0.6	0.0				21.3	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.3	1.2	4.3	0.0				12.9	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.6	1.2	68.2	9.8	0.0				52.1	0.0	25.2
LnGrp LOS	A	A	A	E	A	A				D	A	C
Approach Vol, veh/h		1129			963						630	
Approach Delay, s/veh		0.8			12.1						45.8	
Approach LOS		A			B						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	6.0	54.1				60.1		29.9				
Change Period (Y+Rc), s	3.5	5.0				5.0		3.5				
Max Green Setting (Gmax), s	5.5	45.0				54.0		27.5				
Max Q Clear Time (g_c+I1), s	4.0	2.0				14.3		25.7				
Green Ext Time (p_c), s	0.0	9.1				8.1		0.7				

Intersection Summary				
HCM 6th Ctrl Delay	15.2			
HCM 6th LOS	B			

HCM Signalized Intersection Capacity Analysis
4: 101 NB & LOVR

02/03/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1123	179	98	464	500	164
Future Volume (vph)	1123	179	98	464	500	164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	4.0	3.5	6.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.96	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3539	1560	1770	3539	3354	
Flt Permitted	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (perm)	3539	1560	1770	3539	3354	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	1123	179	98	464	500	164
RTOR Reduction (vph)	0	43	0	0	31	0
Lane Group Flow (vph)	1123	136	98	464	633	0
Confl. Bikes (#/hr)		3				
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	2	8	1	6	8	
Permitted Phases		2				
Actuated Green, G (s)	56.7	83.4	13.1	73.3	26.7	
Effective Green, g (s)	56.7	83.4	13.1	73.3	26.7	
Actuated g/C Ratio	0.52	0.76	0.12	0.67	0.24	
Clearance Time (s)	6.0	4.0	3.5	6.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1824	1182	210	2358	814	
v/s Ratio Prot	c0.32	0.03	c0.06	0.13	c0.19	
v/s Ratio Perm		0.06				
v/c Ratio	0.62	0.11	0.47	0.20	0.78	
Uniform Delay, d1	18.9	3.5	45.2	7.0	38.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.6	0.0	1.6	0.2	4.7	
Delay (s)	20.5	3.6	46.8	7.2	43.6	
Level of Service	C	A	D	A	D	
Approach Delay (s)	18.2			14.1	43.6	
Approach LOS	B			B	D	

Intersection Summary					
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C		
HCM 2000 Volume to Capacity ratio	0.67				
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	17.5		
Intersection Capacity Utilization	67.6%	ICU Level of Service	C		
Analysis Period (min)	15				
c Critical Lane Group					

HCM 6th Signalized Intersection Summary
5: S. Higuera Street & Tank Farm

05/07/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	20	30	293	10	292	20	500	887	503	450	10
Future Volume (veh/h)	24	20	30	293	10	292	20	500	887	503	450	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		1.00	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	20	28	300	0	0	20	500	709	503	450	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	90	160	484	0		40	1065	669	584	1584	35
Arrive On Green	0.11	0.11	0.11	0.14	0.00	0.00	0.02	0.30	0.30	0.17	0.45	0.45
Sat Flow, veh/h	993	828	1477	3563	0	1585	1781	3554	1513	3456	3550	79
Grp Volume(v), veh/h	44	0	28	300	0	0	20	500	709	503	225	235
Grp Sat Flow(s),veh/h/ln	1821	0	1477	1781	0	1585	1781	1777	1513	1728	1777	1852
Q Serve(g_s), s	1.8	0.0	1.4	6.4	0.0	0.0	0.9	9.2	24.0	11.3	6.4	6.4
Cycle Q Clear(g_c), s	1.8	0.0	1.4	6.4	0.0	0.0	0.9	9.2	24.0	11.3	6.4	6.4
Prop In Lane	0.55		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	197	0	160	484	0		40	1065	669	584	793	827
V/C Ratio(X)	0.22	0.00	0.18	0.62	0.00		0.50	0.47	1.06	0.86	0.28	0.28
Avail Cap(c_a), veh/h	614	0	498	979	0		111	1065	669	604	793	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.6	0.0	32.5	32.6	0.0	0.0	38.7	22.9	19.5	32.4	14.1	14.1
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.5	0.0	0.0	3.6	0.7	51.9	12.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.5	2.6	0.0	0.0	0.4	3.6	22.1	5.4	2.3	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	32.7	33.1	0.0	0.0	42.3	23.5	71.4	44.4	14.5	14.5
LnGrp LOS	C	A	C	C	A		D	C	F	D	B	B
Approach Vol, veh/h		72			300	A		1229			963	
Approach Delay, s/veh		32.8			33.1			51.4			30.1	
Approach LOS		C			C			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.5	30.0		14.7	6.8	41.7		16.9				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	14.0	24.0		27.0	5.0	33.0		22.0				
Max Q Clear Time (g_c+I1), s	13.3	26.0		3.8	2.9	8.4		8.4				
Green Ext Time (p_c), s	0.2	0.0		0.2	0.0	5.0		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	40.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
6: Long Street & Tank Farm Road

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	1310	50	120	627	40	20	20	100	40	10	40
Future Volume (veh/h)	61	1310	50	120	627	40	20	20	100	40	10	40
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		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	1310	50	120	627	40	20	20	100	40	10	40
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	1621	62	154	1720	110	27	27	135	55	14	55
Arrive On Green	0.04	0.46	0.46	0.09	0.51	0.51	0.11	0.11	0.11	0.07	0.07	0.07
Sat Flow, veh/h	1781	3487	133	1781	3387	216	234	234	1172	751	188	751
Grp Volume(v), veh/h	61	667	693	120	329	338	140	0	0	90	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1843	1781	1777	1826	1640	0	0	1690	0	0
Q Serve(g_s), s	2.1	19.7	19.8	4.1	6.9	6.9	5.1	0.0	0.0	3.2	0.0	0.0
Cycle Q Clear(g_c), s	2.1	19.7	19.8	4.1	6.9	6.9	5.1	0.0	0.0	3.2	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.12	0.14		0.71	0.44		0.44
Lane Grp Cap(c), veh/h	77	826	857	154	902	927	188	0	0	124	0	0
V/C Ratio(X)	0.79	0.81	0.81	0.78	0.36	0.37	0.74	0.00	0.00	0.73	0.00	0.00
Avail Cap(c_a), veh/h	232	984	1020	203	955	981	454	0	0	440	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.1	14.1	14.1	27.5	9.1	9.1	26.3	0.0	0.0	27.8	0.0	0.0
Incr Delay (d2), s/veh	16.1	4.3	4.2	13.2	0.2	0.2	5.7	0.0	0.0	7.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	6.9	7.2	2.1	2.0	2.1	2.2	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.2	18.4	18.3	40.7	9.4	9.4	32.0	0.0	0.0	35.6	0.0	0.0
LnGrp LOS	D	B	B	D	A	A	C	A	A	D	A	A
Approach Vol, veh/h		1421			787			140			90	
Approach Delay, s/veh		19.5			14.2			32.0			35.6	
Approach LOS		B			B			C			D	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.1	9.3	32.6		8.5	6.7	35.2				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		17.0	7.0	34.0		16.0	8.0	33.0				
Max Q Clear Time (g_c+I1), s		7.1	6.1	21.8		5.2	4.1	8.9				
Green Ext Time (p_c), s		0.5	0.0	6.7		0.3	0.0	3.9				

Intersection Summary	
HCM 6th Ctrl Delay	19.1
HCM 6th LOS	B

HCM 6th Roundabout
7: Santa Fe Road & Tank Farm Road

05/07/2020

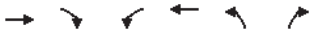
Intersection								
Intersection Delay, s/veh	10.4							
Intersection LOS	B							

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1380	1457	180	0
Demand Flow Rate, veh/h	1408	1487	183	0
Vehicles Circulating, veh/h	235	20	1367	1507
Vehicles Exiting, veh/h	1272	1530	276	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.7	8.6	14.3	0.0
Approach LOS	B	A	B	-

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	R	L	LTR
Assumed Moves	LT	TR	LT	TR	LT	R	L	LTR
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	0.109	0.891	0.500	0.500
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	662	746	699	788	20	163	0	0
Cap Entry Lane, veh/h	1087	1163	1325	1396	384	444	337	394
Entry HV Adj Factor	0.980	0.981	0.980	0.980	1.000	0.982	1.000	1.000
Flow Entry, veh/h	649	732	685	772	20	160	0	0
Cap Entry, veh/h	1066	1140	1299	1369	384	436	337	394
V/C Ratio	0.609	0.641	0.527	0.564	0.052	0.367	0.000	0.000
Control Delay, s/veh	11.5	11.8	8.5	8.8	10.2	14.8	10.7	9.1
LOS	B	B	A	A	B	B	B	A
95th %tile Queue, veh	4	5	3	4	0	2	0	0

HCM 6th Signalized Intersection Summary
8: Mindbody Entrance & Tank Farm Road

02/05/2020



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	990	380	100	1407	50	20
Future Volume (veh/h)	990	380	100	1407	50	20
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	990	380	100	1407	50	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1570	595	129	1450	78	69
Arrive On Green	0.63	0.63	0.07	0.78	0.04	0.04
Sat Flow, veh/h	2595	948	1781	1870	1781	1585
Grp Volume(v), veh/h	700	670	100	1407	50	20
Grp Sat Flow(s),veh/h/ln	1777	1673	1781	1870	1781	1585
Q Serve(g_s), s	16.0	16.5	3.7	45.2	1.8	0.8
Cycle Q Clear(g_c), s	16.0	16.5	3.7	45.2	1.8	0.8
Prop In Lane		0.57	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1115	1050	129	1450	78	69
V/C Ratio(X)	0.63	0.64	0.78	0.97	0.64	0.29
Avail Cap(c_a), veh/h	1287	1212	296	1450	376	335
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.6	7.7	30.2	6.8	31.2	30.7
Incr Delay (d2), s/veh	2.2	2.4	3.8	17.4	3.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	4.6	1.6	11.6	0.8	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.7	10.1	34.0	24.2	34.4	31.5
LnGrp LOS	A	B	C	C	C	C
Approach Vol, veh/h	1370			1507	70	
Approach Delay, s/veh	9.9			24.8	33.6	
Approach LOS	A			C	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.8	48.6				58.4	7.9
Change Period (Y+Rc), s	5.0	7.0				7.0	5.0
Max Green Setting (Gmax), s	11.0	48.0				30.0	14.0
Max Q Clear Time (g_c+I1), s	5.7	18.5				47.2	3.8
Green Ext Time (p_c), s	0.0	23.1				0.0	0.0

Intersection Summary			
HCM 6th Ctrl Delay		18.1	
HCM 6th LOS		B	

HCM 6th Signalized Intersection Summary
9: Broad Street (SR 227) & Tank Farm Road

05/07/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	210	410	304	420	179	347	971	133	100	830	800
Future Volume (veh/h)	320	210	410	304	420	179	347	971	133	100	830	800
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	320	210	334	304	420	58	347	971	116	100	830	741
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	403	891	392	330	1135	502	380	1171	809	135	920	585
Arrive On Green	0.12	0.25	0.25	0.19	0.32	0.32	0.11	0.33	0.33	0.04	0.26	0.26
Sat Flow, veh/h	3456	3554	1562	1781	3554	1573	3456	3554	1563	3456	3554	1545
Grp Volume(v), veh/h	320	210	334	304	420	58	347	971	116	100	830	741
Grp Sat Flow(s),veh/h/ln	1728	1777	1562	1781	1777	1573	1728	1777	1563	1728	1777	1545
Q Serve(g_s), s	11.1	5.8	25.0	20.6	11.2	3.2	12.2	31.0	4.8	3.5	27.7	31.8
Cycle Q Clear(g_c), s	11.1	5.8	25.0	20.6	11.2	3.2	12.2	31.0	4.8	3.5	27.7	31.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	403	891	392	330	1135	502	380	1171	809	135	920	585
V/C Ratio(X)	0.79	0.24	0.85	0.92	0.37	0.12	0.91	0.83	0.14	0.74	0.90	1.27
Avail Cap(c_a), veh/h	835	1070	471	344	1135	502	380	1171	809	135	920	585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	36.6	43.9	49.2	32.3	29.5	54.1	38.0	15.6	58.4	44.0	38.5
Incr Delay (d2), s/veh	3.6	0.1	12.2	29.0	0.2	0.1	26.0	6.8	0.4	19.4	13.8	133.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	2.5	10.8	11.6	4.8	1.2	6.5	14.0	1.7	1.9	13.5	38.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.4	36.8	56.1	78.1	32.5	29.7	80.1	44.8	16.0	77.8	57.8	172.0
LnGrp LOS	E	D	E	E	C	C	F	D	B	E	E	F
Approach Vol, veh/h		864			782			1434			1671	
Approach Delay, s/veh		51.5			50.0			51.0			109.6	
Approach LOS		D			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	47.0	28.2	37.3	19.0	38.3	19.8	45.7
Change Period (Y+Rc), s	5.5	6.5	5.5	6.5	5.5	6.5	5.5	* 6.5
Max Green Setting (Gmax), s	4.8	40.5	23.7	37.0	13.5	31.8	29.7	* 32
Max Q Clear Time (g_c+I1), s	5.5	33.0	22.6	27.0	14.2	33.8	13.1	13.2
Green Ext Time (p_c), s	0.0	3.9	0.1	2.0	0.0	0.0	1.2	2.8

Intersection Summary	
HCM 6th Ctrl Delay	71.6
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
10: Broad Street (SR 227) & Aerovista Place

02/05/2020

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	42	40	90	1551	1033	237
Future Vol, veh/h	42	40	90	1551	1033	237
Conflicting Peds, #/hr	5	1	1	0	0	5
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	40	90	1551	1033	237

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2118	641	1275	0	-	0
Stage 1	1157	-	-	-	-	-
Stage 2	961	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	43	417	540	-	-	-
Stage 1	261	-	-	-	-	-
Stage 2	332	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 35	415	537	-	-	-
Mov Cap-2 Maneuver	134	-	-	-	-	-
Stage 1	216	-	-	-	-	-
Stage 2	330	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	29.5	0.7	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	537	-	134	415	-	-
HCM Lane V/C Ratio	0.168	-	0.313	0.096	-	-
HCM Control Delay (s)	13	-	43.7	14.6	-	-
HCM Lane LOS	B	-	E	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1.2	0.3	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
11: Broad Street (SR 227) & Aero Drive

05/07/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	10	51	20	0	130	75	1440	20	50	800	153
Future Volume (veh/h)	91	10	51	20	0	130	75	1440	20	50	800	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	10	51	20	0	130	75	1440	20	50	800	140
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	14	121	171	0	151	95	2296	32	65	2214	1088
Arrive On Green	0.08	0.08	0.08	0.10	0.00	0.10	0.05	0.64	0.64	0.04	0.62	0.62
Sat Flow, veh/h	1613	177	1579	1781	0	1575	1781	3587	50	1781	3554	1551
Grp Volume(v), veh/h	101	0	51	20	0	130	75	713	747	50	800	140
Grp Sat Flow(s),veh/h/ln	1790	0	1579	1781	0	1575	1781	1777	1860	1781	1777	1551
Q Serve(g_s), s	7.9	0.0	4.4	1.5	0.0	11.6	5.9	34.3	34.4	4.0	15.6	4.2
Cycle Q Clear(g_c), s	7.9	0.0	4.4	1.5	0.0	11.6	5.9	34.3	34.4	4.0	15.6	4.2
Prop In Lane	0.90		1.00	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	137	0	121	171	0	151	95	1137	1190	65	2214	1088
V/C Ratio(X)	0.74	0.00	0.42	0.12	0.00	0.86	0.79	0.63	0.63	0.77	0.36	0.13
Avail Cap(c_a), veh/h	365	0	322	188	0	166	163	1137	1190	125	2214	1088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.2	0.0	62.6	58.8	0.0	63.4	66.5	15.4	15.4	67.9	13.0	7.0
Incr Delay (d2), s/veh	7.4	0.0	2.3	0.3	0.0	32.3	13.5	2.6	2.5	17.6	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	1.9	0.7	0.0	6.0	3.0	13.5	14.1	2.1	6.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.6	0.0	64.9	59.1	0.0	95.7	80.1	18.0	17.9	85.5	13.5	7.3
LnGrp LOS	E	A	E	E	A	F	F	B	B	F	B	A
Approach Vol, veh/h		152			150			1535			990	
Approach Delay, s/veh		69.4			90.8			21.0			16.3	
Approach LOS		E			F			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	97.5		15.9	12.6	95.1		18.6				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	10.0	91.0		29.0	13.0	88.0		15.0				
Max Q Clear Time (g_c+I1), s	6.0	36.4		9.9	7.9	17.6		13.6				
Green Ext Time (p_c), s	0.0	14.1		0.7	0.1	7.1		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		25.6
HCM 6th LOS		C

HCM 6th TWSC
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive

02/05/2020

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	0	1535	871	0
Future Vol, veh/h	0	8	0	1535	871	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	0	1535	871	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	871	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	350	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	350	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	350	-
HCM Lane V/C Ratio	-	0.023	-
HCM Control Delay (s)	-	15.5	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.1	-

HCM 6th Roundabout
13: Edna Road (SR 227) & Buckley Road

05/07/2020

Intersection							
Intersection Delay, s/veh	10.3						
Intersection LOS	B						

Approach	EB	WB	NB	SB
Entry Lanes	2	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	264	5	1722	858
Demand Flow Rate, veh/h	270	5	1757	875
Vehicles Circulating, veh/h	709	1835	89	236
Vehicles Exiting, veh/h	402	11	890	1604
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.1	12.4	12.4	7.3
Approach LOS	A	B	B	A

Lane	Left	Right	Left	Left	Right	Left	Right
Designated Moves	LT	R	LTR	LT	TR	LT	TR
Assumed Moves	LT	R	LTR	LT	TR	LT	TR
RT Channelized							
Lane Util	0.319	0.681	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.667	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	86	184	5	826	931	411	464
Cap Entry Lane, veh/h	703	777	298	1244	1317	1086	1162
Entry HV Adj Factor	0.976	0.978	1.000	0.980	0.980	0.981	0.980
Flow Entry, veh/h	84	180	5	809	913	403	455
Cap Entry, veh/h	686	760	298	1219	1291	1066	1139
V/C Ratio	0.122	0.237	0.017	0.664	0.707	0.378	0.399
Control Delay, s/veh	6.6	7.4	12.4	11.9	12.7	7.3	7.2
LOS	A	A	B	B	B	A	A
95th %tile Queue, veh	0	1	0	5	6	2	2

HCM 6th Signalized Intersection Summary
14: S. Higuera Street & Buckley Road

02/05/2020

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	100	158	499	240	97	358
Future Volume (veh/h)	100	158	499	240	97	358
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	158	499	230	97	358
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	288	257	758	642	127	1117
Arrive On Green	0.16	0.16	0.41	0.41	0.07	0.60
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	100	158	499	230	97	358
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	1.7	3.1	7.2	3.4	1.8	3.2
Cycle Q Clear(g_c), s	1.7	3.1	7.2	3.4	1.8	3.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	288	257	758	642	127	1117
V/C Ratio(X)	0.35	0.62	0.66	0.36	0.76	0.32
Avail Cap(c_a), veh/h	966	859	2197	1862	590	3043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.4	12.9	8.0	6.9	15.1	3.3
Incr Delay (d2), s/veh	0.7	2.4	1.0	0.3	9.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.0	1.5	0.6	0.8	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.1	15.3	9.0	7.2	24.3	3.5
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	258		729			455
Approach Delay, s/veh	14.5		8.4			7.9
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	6.4	17.5				23.8	9.4
Change Period (Y+Rc), s	4.0	4.0				4.0	4.0
Max Green Setting (Gmax), s	13.0	39.0				54.0	18.0
Max Q Clear Time (g_c+I1), s	3.8	9.2				5.2	5.1
Green Ext Time (p_c), s	0.1	4.3				2.2	0.8

Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

HCM 6th TWSC
1: Broad Street (SR 227) & Capitolio Way 02/05/2020

Intersection	
Int Delay, s/veh	7.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	90	150	1698	100	90	1528
Future Vol, veh/h	90	150	1698	100	90	1528
Conflicting Peds, #/hr	4	4	0	4	4	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	90	150	1698	100	90	1528

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2700	907	0	0	1802	0
Stage 1	1752	-	-	-	-	-
Stage 2	948	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 17	279	-	-	338	-
Stage 1	125	-	-	-	-	-
Stage 2	337	-	-	-	-	-
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 12	277	-	-	337	-
Mov Cap-2 Maneuver	~ 81	-	-	-	-	-
Stage 1	125	-	-	-	-	-
Stage 2	246	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	104.8	0	1.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	81	277	337	-
HCM Lane V/C Ratio	-	-	1.111	0.542	0.267	-
HCM Control Delay (s)	-	-	225.6	32.3	19.5	-
HCM Lane LOS	-	-	F	D	C	-
HCM 95th %tile Q(veh)	-	-	6.4	3	1.1	-

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
2: Broad Street (SR 227) & Industrial Way 02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	20	50	190	14	258	94	1628	199	140	1428	111
Future Volume (veh/h)	100	20	50	190	14	258	94	1628	199	140	1428	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.92	1.00		0.94	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	20	43	190	14	181	94	1628	150	140	1428	84
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	30	159	250	18	220	112	1563	655	149	1637	704
Arrive On Green	0.10	0.10	0.10	0.15	0.15	0.15	0.06	0.44	0.44	0.08	0.46	0.46
Sat Flow, veh/h	1496	299	1576	1664	123	1465	1781	3554	1491	1781	3554	1528
Grp Volume(v), veh/h	120	0	43	204	0	181	94	1628	150	140	1428	84
Grp Sat Flow(s),veh/h/ln	1796	0	1576	1787	0	1465	1781	1777	1491	1781	1777	1528
Q Serve(g_s), s	6.2	0.0	2.4	10.5	0.0	11.4	5.0	42.0	6.0	7.5	34.6	3.0
Cycle Q Clear(g_c), s	6.2	0.0	2.4	10.5	0.0	11.4	5.0	42.0	6.0	7.5	34.6	3.0
Prop In Lane	0.83		1.00	0.93		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	0	159	269	0	220	112	1563	655	149	1637	704
V/C Ratio(X)	0.66	0.00	0.27	0.76	0.00	0.82	0.84	1.04	0.23	0.94	0.87	0.12
Avail Cap(c_a), veh/h	658	0	577	309	0	253	112	1563	655	149	1637	704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	0.0	39.7	38.9	0.0	39.3	44.3	26.8	16.7	43.5	23.2	14.7
Incr Delay (d2), s/veh	4.1	0.0	0.9	9.1	0.0	17.1	40.5	34.5	0.2	55.4	5.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.9	5.1	0.0	5.0	3.4	23.3	1.9	5.4	14.1	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.5	0.0	40.6	48.0	0.0	56.4	84.8	61.2	16.8	98.9	28.7	14.8
LnGrp LOS	D	A	D	D	A	E	F	F	B	F	C	B
Approach Vol, veh/h		163			385			1872			1652	
Approach Delay, s/veh		44.2			52.0			58.9			33.9	
Approach LOS		D			D			E			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	48.5		14.6	11.0	50.5		19.4				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	8.0	42.0		35.0	6.0	44.0		16.5				
Max Q Clear Time (g_c+I1), s	9.5	44.0		8.2	7.0	36.6		13.4				
Green Ext Time (p_c), s	0.0	0.0		0.9	0.0	5.0		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	47.5
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary
3: LOVR & 101 SB

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	964	669	65	1388	0	0	0	0	311	0	413
Future Volume (veh/h)	0	964	669	65	1388	0	0	0	0	311	0	413
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	964	589	65	1388	0				311	0	326
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2206	961	84	2512	0				354	0	306
Arrive On Green	0.00	0.83	0.83	0.05	0.71	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3647	1548	1781	3647	0				1781	0	1540
Grp Volume(v), veh/h	0	964	589	65	1388	0				311	0	326
Grp Sat Flow(s),veh/h/ln	0	1777	1548	1781	1777	0				1781	0	1540
Q Serve(g_s), s	0.0	6.7	12.1	3.2	16.9	0.0				15.3	0.0	17.9
Cycle Q Clear(g_c), s	0.0	6.7	12.1	3.2	16.9	0.0				15.3	0.0	17.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2206	961	84	2512	0				354	0	306
V/C Ratio(X)	0.00	0.44	0.61	0.77	0.55	0.00				0.88	0.00	1.07
Avail Cap(c_a), veh/h	0	2206	961	188	2512	0				485	0	419
HCM Platoon Ratio	1.00	1.33	1.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.85	0.85	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	3.6	4.0	42.4	6.3	0.0				35.0	0.0	36.1
Incr Delay (d2), s/veh	0.0	0.5	2.5	13.8	0.9	0.0				13.0	0.0	60.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.8	2.8	1.7	5.1	0.0				7.7	0.0	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	4.1	6.5	56.2	7.2	0.0				48.0	0.0	96.2
LnGrp LOS	A	A	A	E	A	A				D	A	F
Approach Vol, veh/h		1553			1453						637	
Approach Delay, s/veh		5.0			9.4						72.7	
Approach LOS		A			A						E	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	7.8	60.9				68.6		21.4				
Change Period (Y+Rc), s	3.5	5.0				5.0		3.5				
Max Green Setting (Gmax), s	4.3	44.0				57.0		24.5				
Max Q Clear Time (g_c+I1), s	5.2	14.1				18.9		17.3				
Green Ext Time (p_c), s	0.0	12.5				14.5		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		18.6	
HCM 6th LOS		B	

HCM Signalized Intersection Capacity Analysis
4: 101 NB & LOVR

02/03/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	868	386	193	970	511	117
Future Volume (vph)	868	386	193	970	511	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	3.5	3.5	6.0	3.5	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.97	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3539	1563	1770	3539	3375	
Flt Permitted	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (perm)	3539	1563	1770	3539	3375	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	868	386	193	970	511	117
RTOR Reduction (vph)	0	141	0	0	16	0
Lane Group Flow (vph)	868	245	193	970	612	0
Confl. Bikes (#/hr)		5				
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	2	8	1	6	8	
Permitted Phases		2				
Actuated Green, G (s)	25.0	45.2	13.1	41.6	20.2	
Effective Green, g (s)	25.0	45.2	13.1	41.6	20.2	
Actuated g/C Ratio	0.35	0.63	0.18	0.58	0.28	
Clearance Time (s)	6.0	3.5	3.5	6.0	3.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1240	990	325	2064	956	
v/s Ratio Prot	c0.25	0.07	c0.11	0.27	c0.18	
v/s Ratio Perm		0.09				
v/c Ratio	0.70	0.25	0.59	0.47	0.64	
Uniform Delay, d1	19.9	5.7	26.7	8.5	22.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.8	0.1	2.9	0.2	1.4	
Delay (s)	21.7	5.8	29.6	8.7	23.8	
Level of Service	C	A	C	A	C	
Approach Delay (s)	16.8			12.2	23.8	
Approach LOS	B			B	C	

Intersection Summary				
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	71.3	Sum of lost time (s)	17.0	
Intersection Capacity Utilization	64.6%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

HCM 6th Signalized Intersection Summary
5: S. Higuera Street & Tank Farm Road

05/07/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	22	607	20	603	32	800	450	453	850	40
Future Volume (veh/h)	20	10	22	607	20	603	32	800	450	453	850	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		1.00	1.00		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	10	5	621	0	0	32	800	262	453	850	39
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	111	249	711	0		40	929	685	512	1331	61
Arrive On Green	0.18	0.18	0.18	0.20	0.00	0.00	0.02	0.26	0.26	0.15	0.39	0.39
Sat Flow, veh/h	1207	603	1354	3563	0	1585	1781	3554	1408	3456	3438	158
Grp Volume(v), veh/h	30	0	5	621	0	0	32	800	262	453	439	450
Grp Sat Flow(s),veh/h/ln	1810	0	1354	1781	0	1585	1781	1777	1408	1728	1777	1819
Q Serve(g_s), s	1.5	0.0	0.3	18.8	0.0	0.0	2.0	23.8	13.7	14.3	22.4	22.4
Cycle Q Clear(g_c), s	1.5	0.0	0.3	18.8	0.0	0.0	2.0	23.8	13.7	14.3	22.4	22.4
Prop In Lane	0.67		1.00	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	332	0	249	711	0		40	929	685	512	688	704
V/C Ratio(X)	0.09	0.00	0.02	0.87	0.00		0.80	0.86	0.38	0.89	0.64	0.64
Avail Cap(c_a), veh/h	440	0	329	834	0		80	1024	722	529	704	721
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.6	0.0	37.1	43.1	0.0	0.0	54.0	39.1	19.8	46.4	27.7	27.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	9.0	0.0	0.0	28.6	7.1	0.4	16.0	1.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.1	8.8	0.0	0.0	1.2	10.8	6.3	7.1	9.3	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.7	0.0	37.2	52.1	0.0	0.0	82.6	46.1	20.2	62.4	29.6	29.6
LnGrp LOS	D	A	D	D	A		F	D	C	E	C	C
Approach Vol, veh/h		35			621	A		1094			1342	
Approach Delay, s/veh		37.7			52.1			41.0			40.7	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.4	35.0		26.4	7.5	49.0		28.2				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	17.0	32.0		27.0	5.0	44.0		26.0				
Max Q Clear Time (g_c+I1), s	16.3	25.8		3.5	4.0	24.4		20.8				
Green Ext Time (p_c), s	0.2	3.2		0.1	0.0	5.2		1.4				

Intersection Summary			
HCM 6th Ctrl Delay			43.0
HCM 6th LOS			D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
6: Long Street & Tank Farm Road

02/05/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	800	30	160	1210	70	20	10	180	40	20	70
Future Volume (veh/h)	90	800	30	160	1210	70	20	10	180	40	20	70
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		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	90	800	30	160	1210	70	20	10	180	40	20	70
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	1255	47	203	1395	81	25	13	226	54	27	94
Arrive On Green	0.06	0.36	0.36	0.11	0.41	0.41	0.16	0.16	0.16	0.10	0.10	0.10
Sat Flow, veh/h	1781	3489	131	1781	3409	197	154	77	1383	517	258	904
Grp Volume(v), veh/h	90	407	423	160	630	650	210	0	0	130	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1843	1781	1777	1829	1614	0	0	1679	0	0
Q Serve(g_s), s	3.1	11.8	11.8	5.4	20.1	20.1	7.7	0.0	0.0	4.6	0.0	0.0
Cycle Q Clear(g_c), s	3.1	11.8	11.8	5.4	20.1	20.1	7.7	0.0	0.0	4.6	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.11	0.10		0.86	0.31		0.54
Lane Grp Cap(c), veh/h	115	639	663	203	727	748	264	0	0	174	0	0
V/C Ratio(X)	0.78	0.64	0.64	0.79	0.87	0.87	0.80	0.00	0.00	0.75	0.00	0.00
Avail Cap(c_a), veh/h	144	639	663	288	777	800	418	0	0	435	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.5	16.4	16.4	26.6	16.7	16.7	24.8	0.0	0.0	26.9	0.0	0.0
Incr Delay (d2), s/veh	19.3	2.1	2.0	9.1	9.7	9.7	5.5	0.0	0.0	6.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.3	4.4	2.6	8.4	8.6	3.2	0.0	0.0	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.7	18.5	18.5	35.8	26.5	26.4	30.4	0.0	0.0	33.1	0.0	0.0
LnGrp LOS	D	B	B	D	C	C	C	A	A	C	A	A
Approach Vol, veh/h		920			1440			210			130	
Approach Delay, s/veh		21.3			27.5			30.4			33.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.1	11.0	26.2		10.4	8.0	29.3				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		16.0	10.0	22.0		16.0	5.0	27.0				
Max Q Clear Time (g_c+I1), s		9.7	7.4	13.8		6.6	5.1	22.1				
Green Ext Time (p_c), s		0.6	0.1	3.1		0.4	0.0	3.2				

Intersection Summary			
HCM 6th Ctrl Delay			25.9
HCM 6th LOS			C

HCM 6th Roundabout
7: Santa Fe Road & Tank Farm Road

05/08/2020

Intersection								
Intersection Delay, s/veh	10.9							
Intersection LOS	B							

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1240	1530	340	0
Demand Flow Rate, veh/h	1265	1560	347	0
Vehicles Circulating, veh/h	224	41	1234	1601
Vehicles Exiting, veh/h	1377	1540	255	0
Ped Vol Crossing Leg, #/h	1	1	0	1
Ped Cap Adj	0.999	0.999	1.000	1.000
Approach Delay, s/veh	10.0	9.5	20.2	0.0
Approach LOS	B	A	C	-

Lane	Left	Right	Left	Right	Left	Right	Left	Right
Designated Moves	LT	TR	LT	TR	LT	R	L	LTR
Assumed Moves	LT	TR	LT	TR	LT	R	L	LTR
RT Channelized								
Lane Util	0.470	0.530	0.470	0.530	0.118	0.882	0.500	0.500
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	595	670	733	827	41	306	0	0
Cap Entry Lane, veh/h	1098	1174	1300	1371	434	497	310	364
Entry HV Adj Factor	0.979	0.981	0.981	0.980	0.976	0.980	1.000	1.000
Flow Entry, veh/h	583	657	719	811	40	300	0	0
Cap Entry, veh/h	1075	1150	1274	1343	423	488	310	364
V/C Ratio	0.542	0.571	0.565	0.604	0.095	0.615	0.000	0.000
Control Delay, s/veh	10.0	10.1	9.2	9.7	9.9	21.5	11.6	9.9
LOS	A	B	A	A	A	C	B	A
95th %tile Queue, veh	3	4	4	4	0	4	0	0

HCM 6th Signalized Intersection Summary
8: Mindbody Entrance & Tank Farm Road

02/05/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1310	140	70	1330	250	100
Future Volume (veh/h)	1310	140	70	1330	250	100
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1310	140	70	1330	250	100
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1837	195	90	1277	291	259
Arrive On Green	0.57	0.57	0.05	0.68	0.16	0.16
Sat Flow, veh/h	3325	344	1781	1870	1781	1585
Grp Volume(v), veh/h	717	733	70	1330	250	100
Grp Sat Flow(s),veh/h/ln	1777	1798	1781	1870	1781	1585
Q Serve(g_s), s	22.8	23.2	3.0	53.3	10.7	4.4
Cycle Q Clear(g_c), s	22.8	23.2	3.0	53.3	10.7	4.4
Prop In Lane		0.19	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1010	1022	90	1277	291	259
V/C Ratio(X)	0.71	0.72	0.78	1.04	0.86	0.39
Avail Cap(c_a), veh/h	1092	1106	251	1277	319	284
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	12.3	36.6	12.4	31.8	29.2
Incr Delay (d2), s/veh	3.6	3.7	5.3	36.6	17.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	8.5	1.4	27.3	5.9	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.8	16.0	41.9	48.9	49.5	29.5
LnGrp LOS	B	B	D	F	D	C
Approach Vol, veh/h	1450			1400	350	
Approach Delay, s/veh	15.9			48.6	43.8	
Approach LOS	B			D	D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	8.9	51.4				60.3	17.7
Change Period (Y+Rc), s	5.0	7.0				7.0	5.0
Max Green Setting (Gmax), s	11.0	48.0				30.0	14.0
Max Q Clear Time (g_c+I1), s	5.0	25.2				55.3	12.7
Green Ext Time (p_c), s	0.0	19.2				0.0	0.1

Intersection Summary			
HCM 6th Ctrl Delay		33.3	
HCM 6th LOS		C	

HCM 6th Signalized Intersection Summary
9: Broad Street (SR 227) & Tank Farm Road

05/08/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	670	580	329	217	290	150	530	1028	346	260	888	580
Future Volume (veh/h)	670	580	329	217	290	150	530	1028	346	260	888	580
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	670	580	280	217	290	129	530	1028	315	260	888	469
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	743	780	335	254	523	224	599	1277	779	321	991	776
Arrive On Green	0.22	0.22	0.22	0.14	0.15	0.15	0.17	0.36	0.36	0.09	0.28	0.28
Sat Flow, veh/h	3456	3554	1529	1781	3554	1524	3456	3554	1536	3456	3554	1559
Grp Volume(v), veh/h	670	580	280	217	290	129	530	1028	315	260	888	469
Grp Sat Flow(s),veh/h/ln	1728	1777	1529	1781	1777	1524	1728	1777	1536	1728	1777	1559
Q Serve(g_s), s	16.3	13.1	15.1	10.3	6.5	6.8	12.9	22.5	11.1	6.4	20.7	18.8
Cycle Q Clear(g_c), s	16.3	13.1	15.1	10.3	6.5	6.8	12.9	22.5	11.1	6.4	20.7	18.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	743	780	335	254	523	224	599	1277	779	321	991	776
V/C Ratio(X)	0.90	0.74	0.83	0.85	0.55	0.58	0.89	0.80	0.40	0.81	0.90	0.60
Avail Cap(c_a), veh/h	761	865	372	289	659	283	601	1277	779	321	991	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.0	31.4	32.2	36.1	34.2	34.3	34.8	24.9	13.4	38.4	29.9	15.8
Incr Delay (d2), s/veh	13.7	3.2	13.9	19.3	0.9	2.3	14.7	5.5	1.6	14.5	12.3	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	5.7	6.6	5.6	2.8	2.5	6.3	9.5	3.7	3.2	9.8	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.7	34.6	46.1	55.4	35.1	36.6	49.5	30.4	15.0	52.9	42.2	19.3
LnGrp LOS	D	C	D	E	D	D	D	C	B	D	D	B
Approach Vol, veh/h		1530			636			1873			1617	
Approach Delay, s/veh		42.0			42.3			33.2			37.3	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	35.0	16.3	22.9	18.9	28.1	22.6	16.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	31.0	14.0	21.0	15.0	24.0	19.0	16.0
Max Q Clear Time (g_c+I1), s	8.4	24.5	12.3	17.1	14.9	22.7	18.3	8.8
Green Ext Time (p_c), s	0.0	3.1	0.1	1.8	0.0	0.9	0.3	1.4

Intersection Summary	
HCM 6th Ctrl Delay	37.8
HCM 6th LOS	D

HCM 6th TWSC
10: Broad Street (SR 227) & Aerovista Place

02/05/2020

Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	120	54	90	1444	1333	118
Future Vol, veh/h	120	54	90	1444	1333	118
Conflicting Peds, #/hr	9	9	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	120	54	90	1444	1333	118

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2312	744	1460	0	-	0
Stage 1	1401	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 32	357	459	-	-	-
Stage 1	194	-	-	-	-	-
Stage 2	352	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 25	351	455	-	-	-
Mov Cap-2 Maneuver	~ 107	-	-	-	-	-
Stage 1	154	-	-	-	-	-
Stage 2	349	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	142.6	0.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	455	-	107	351	-	-
HCM Lane V/C Ratio	0.198	-	1.121	0.154	-	-
HCM Control Delay (s)	14.9	-	199.1	17.1	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	0.7	-	7.6	0.5	-	-

Notes				
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon	

HCM 6th Signalized Intersection Summary
11: Broad Street (SR 227) & Aero Drive

05/08/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	10	66	30	7	350	62	1000	20	100	1250	108
Future Volume (veh/h)	224	10	66	30	7	350	62	1000	20	100	1250	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	224	10	51	30	7	250	62	1000	18	100	1250	96
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	10	210	206	48	223	80	1740	31	104	1781	988
Arrive On Green	0.13	0.13	0.13	0.14	0.14	0.14	0.04	0.49	0.49	0.06	0.50	0.50
Sat Flow, veh/h	1709	76	1578	1457	340	1575	1781	3569	64	1781	3554	1549
Grp Volume(v), veh/h	234	0	51	37	0	250	62	498	520	100	1250	96
Grp Sat Flow(s),veh/h/ln	1785	0	1578	1797	0	1575	1781	1777	1857	1781	1777	1549
Q Serve(g_s), s	15.7	0.0	3.5	2.2	0.0	17.0	4.1	23.9	23.9	6.7	32.5	2.9
Cycle Q Clear(g_c), s	15.7	0.0	3.5	2.2	0.0	17.0	4.1	23.9	23.9	6.7	32.5	2.9
Prop In Lane	0.96		1.00	0.81		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	238	0	210	255	0	223	80	866	905	104	1781	988
V/C Ratio(X)	0.98	0.00	0.24	0.15	0.00	1.12	0.78	0.57	0.57	0.96	0.70	0.10
Avail Cap(c_a), veh/h	238	0	210	255	0	223	104	866	905	104	1781	988
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.9	0.0	46.6	45.1	0.0	51.5	56.7	21.9	21.9	56.4	23.0	8.5
Incr Delay (d2), s/veh	53.4	0.0	0.6	0.3	0.0	96.4	23.6	2.8	2.7	76.0	2.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	0.0	1.4	1.0	0.0	12.7	2.3	10.0	10.4	5.1	13.2	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.3	0.0	47.2	45.4	0.0	147.9	80.3	24.7	24.5	132.4	25.4	8.7
LnGrp LOS	F	A	D	D	A	F	F	C	C	F	C	A
Approach Vol, veh/h		285			287			1080			1446	
Approach Delay, s/veh		94.9			134.7			27.8			31.7	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	65.0		21.0	10.4	66.6		22.0				
Change Period (Y+Rc), s	5.0	6.5		5.0	5.0	6.5		5.0				
Max Green Setting (Gmax), s	7.0	58.5		16.0	7.0	58.5		17.0				
Max Q Clear Time (g_c+I1), s	8.7	25.9		17.7	6.1	34.5		19.0				
Green Ext Time (p_c), s	0.0	7.1		0.0	0.0	9.1		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		45.7
HCM 6th LOS		D

HCM 6th TWSC
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive

02/05/2020

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	30	0	969	1193	0
Future Vol, veh/h	1	30	0	969	1193	0
Conflicting Peds, #/hr	0	3	0	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	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	30	0	969	1193	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2162	1196	-	0	-	0
Stage 1	1193	-	-	-	-	-
Stage 2	969	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	52	227	0	-	-	0
Stage 1	288	-	0	-	-	0
Stage 2	368	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	52	226	-	-	-	-
Mov Cap-2 Maneuver	52	-	-	-	-	-
Stage 1	288	-	-	-	-	-
Stage 2	368	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	226	-
HCM Lane V/C Ratio	-	0.133	-
HCM Control Delay (s)	-	23.4	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.5	-

HCM 6th Roundabout
13: Edna Road (SR 227) & Buckley Road

05/08/2020

Intersection							
Intersection Delay, s/veh	8.5						
Intersection LOS	A						

Approach	EB	WB	NB	SB
Entry Lanes	2	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	440	12	835	1070
Demand Flow Rate, veh/h	449	12	851	1092
Vehicles Circulating, veh/h	1059	941	97	75
Vehicles Exiting, veh/h	108	7	1411	878
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	17.1	5.8	6.0	7.0
Approach LOS	C	A	A	A

Lane	Left	Right	Left	Left	Right	Left	Right
Designated Moves	LT	R	LTR	LT	TR	LT	TR
Assumed Moves	LT	R	LTR	LT	TR	LT	TR
RT Channelized							
Lane Util	0.212	0.788	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.667	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	95	354	12	400	451	513	579
Cap Entry Lane, veh/h	510	577	638	1235	1308	1260	1332
Entry HV Adj Factor	0.979	0.980	1.000	0.981	0.981	0.981	0.980
Flow Entry, veh/h	93	347	12	392	442	503	567
Cap Entry, veh/h	499	566	638	1211	1283	1236	1306
V/C Ratio	0.186	0.613	0.019	0.324	0.345	0.407	0.435
Control Delay, s/veh	9.8	19.0	5.8	6.0	6.0	6.9	7.0
LOS	A	C	A	A	A	A	A
95th %tile Queue, veh	1	4	0	1	2	2	2

HCM 6th Signalized Intersection Summary
14: S. Higuera Street & Buckley Road

02/05/2020

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	235	424	295	246	243	663
Future Volume (veh/h)	235	424	295	246	243	663
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	235	424	295	246	243	663
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	601	535	443	375	319	932
Arrive On Green	0.34	0.34	0.24	0.24	0.18	0.50
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	235	424	295	246	243	663
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	4.9	11.8	6.9	6.8	6.3	13.4
Cycle Q Clear(g_c), s	4.9	11.8	6.9	6.8	6.3	13.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	601	535	443	375	319	932
V/C Ratio(X)	0.39	0.79	0.67	0.66	0.76	0.71
Avail Cap(c_a), veh/h	990	881	1078	913	843	2117
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.3	14.6	16.8	16.8	19.0	9.5
Incr Delay (d2), s/veh	0.4	2.7	1.7	1.9	3.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.9	2.6	2.2	2.4	3.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.7	17.3	18.5	18.7	22.7	10.5
LnGrp LOS	B	B	B	B	C	B
Approach Vol, veh/h	659		541			906
Approach Delay, s/veh	15.6		18.6			13.8
Approach LOS	B		B			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.7	15.5			28.2	20.4
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	23.0	28.0			55.0	27.0
Max Q Clear Time (g_c+I1), s	8.9	8.9			15.4	13.8
Green Ext Time (p_c), s	0.7	2.6			4.8	2.6

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Appendix D

Pedestrian and Bicycle Intersection Level of Service Calculations

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HCM 6th Edition TWSC-Pedestrians
1: Broad Street (SR 227) & Capitolio Way

02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	529621.4
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2023
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.96
Delay for adq Gap	529623.13
Avg Ped Delay (s)	529621.38

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	529621.4
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2023
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.96
Delay for adq Gap	529623.13
Avg Ped Delay (s)	529621.38

HCM 6th Signals-Pedestrians
2: Broad Street (SR 227) & Industrial

02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.1	61.3	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	13.0	7.0	7.0	7.0
Right Corner Size B (ft)	7.0	7.0	13.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	42.62	0.62	42.62	0.62
Ped. Left-Right Flow Rate (p/h)	0	8	1	1
Ped. Right-Left Flow Rate (p/h)	0	7	2	6
Ped. R. Sidewalk Flow Rate (p/h)	12	1	0	4
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	17	103	277	67
Veh. RTOR Flow in Walk (v/h)	1	63	79	21
85th percentile speed (mph)	25	40	45	45
Right Corner Area per Ped (sq.ft)	2552.2	-1.9	2089.2	9.7
Right Corner Quality of Service	A	F	A	E
Ped. Circulation Area (sq.ft)	0.0	207.7	366.9	855.3
Crosswalk Circulation Code	-	A	A	A
Pedestrian Delay (s/p)	60.2	60.2	60.2	60.2
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.01	2.27	3.19	3.07
Pedestrian Crosswalk LOS	B	B	C	C

HCM 6th Signals-Pedestrians
5: S. Higuera Street & Tank Farm

02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	54.8	62.3	73.7	62.3
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	6	5
Number of Right-Turn Islands	0	1	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	10.0
Right Corner Size B (ft)	11.0	15.0	15.0	12.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	50.62	86.62	86.62	71.62
Ped. Left-Right Flow Rate (p/h)	2	6	2	1
Ped. Right-Left Flow Rate (p/h)	1	7	1	0
Ped. R. Sidewalk Flow Rate (p/h)	3	4	4	3
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	35	179	885	13
Veh. RTOR Flow in Walk (v/h)	8	243	246	0
85th percentile speed (mph)	25	45	45	45
Right Corner Area per Ped (sq.ft)	5039.4	4300.9	3874.2	9188.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2401.3	320.6	0.0	7968.5
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	54.3	54.3	54.3	54.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.00	3.02	3.27	2.68
Pedestrian Crosswalk LOS	B	C	C	C

HCM 6th Edition TWSC-Pedestrians
6: Long Street & Tank Farm Road

02/05/2020

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	3585144.8
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1398
Ped Vol Crossed	2
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	3585147.25
Avg Ped Delay (s)	3585144.75

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	36848260.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1398
Ped Vol Crossed	3
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	36848264.00
Avg Ped Delay (s)	36848260.00

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	3330.2
Level of Service	F

Crosswalk	
Length (ft)	53
Lanes Crossed	2
Veh Vol Crossed	1427
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	18.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	3332.75
Avg Ped Delay (s)	3330.24

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	9262.8
Level of Service	F

Crosswalk	
Length (ft)	62
Lanes Crossed	2
Veh Vol Crossed	1427
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	20.71
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	9265.37
Avg Ped Delay (s)	9262.85

Approach	EB	WB	NB
Crosswalk Length (ft)	47.9	48.9	36.5
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	3
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	6	8	2
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	0	0	2
Ped. Right-Left Flow Rate (p/h)	0	0	2
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	95	0	10
Veh. RTOR Flow in Walk (v/h)	0	0	2
85th percentile speed (mph)	40	40	25
Right Corner Area per Ped (sq.ft)	7311.4	0.0	7311.4
Right Corner Quality of Service	A	-	A
Ped. Circulation Area (sq.ft)	0.0	0.0	0.1
Crosswalk Circulation Code	-	-	F
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.70	2.69	1.99
Pedestrian Crosswalk LOS	C	C	B

HCM 6th Signals-Pedestrians
9: Broad Street (SR 227) & Tank Farm Road 02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	85.6	71.4	72.2	83.5
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	12.0	12.0	7.0
Right Corner Size B (ft)	7.0	7.0	7.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	14.62	35.62	35.62	0.62
Ped. Left-Right Flow Rate (p/h)	0	3	11	4
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	508	218	189	556
Veh. RTOR Flow in Walk (v/h)	144	67	37	147
85th percentile speed (mph)	40	40	45	45
Right Corner Area per Ped (sq.ft)	1127.7	4540.6	2275.2	111.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	1309.0	414.1	0.0
Crosswalk Circulation Code	-	A	A	F
Pedestrian Delay (s/p)	54.8	54.8	54.8	54.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.15	2.71	3.14	3.27
Pedestrian Crosswalk LOS	C	C	C	C

HCM 6th Edition TWSC-Pedestrians
10: Broad Street (SR 227) & Aerovista Place 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	212228.1
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1863
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.95
Delay for adq Gap	212230.00
Avg Ped Delay (s)	212228.06

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	INF
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1863
Ped Vol Crossed	3
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	INF
Avg Ped Delay (s)	INF

HCM 6th Signals-Pedestrians
11: Broad Street (SR 227) & Aero Drive 02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	80.0	40.0	80.0	85.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	0	2	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	36	36	3	119
Veh. RTOR Flow in Walk (v/h)	23	1	0	18
85th percentile speed (mph)	25	25	45	45
Right Corner Area per Ped (sq.ft)	0.0	14679.0	14585.0	0.0
Right Corner Quality of Service	-	A	A	-
Ped. Circulation Area (sq.ft)	0.0	2252.7	0.0	0.0
Crosswalk Circulation Code	-	A	-	-
Pedestrian Delay (s/p)	75.2	75.2	83.0	83.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.06	2.01	2.91	2.98
Pedestrian Crosswalk LOS	B	B	C	C

HCM 6th Edition TWSC-Pedestrians
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	867.2
Level of Service	F
Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	1806
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.95
Delay for adq Gap	869.21
Avg Ped Delay (s)	867.24

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	4904.5
Level of Service	F
Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	1806
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	4906.50
Avg Ped Delay (s)	4904.51

HCM 6th Edition TWSC-Pedestrians
1: Broad Street (SR 227) & Capitolio Way 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	5161281.5
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2417
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	5161283.00
Avg Ped Delay (s)	5161281.50

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	5161281.5
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2417
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	5161283.00
Avg Ped Delay (s)	5161281.50

HCM 6th Signals-Pedestrians
2: Broad Street (SR 227) & Industrial Way 02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.1	61.3	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	4	3	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	13.0	7.0	7.0	7.0
Right Corner Size B (ft)	7.0	7.0	13.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	42.62	0.62	42.62	0.62
Ped. Left-Right Flow Rate (p/h)	2	13	0	3
Ped. Right-Left Flow Rate (p/h)	0	7	0	3
Ped. R. Sidewalk Flow Rate (p/h)	3	0	2	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	75	240	245	113
Veh. RTOR Flow in Walk (v/h)	15	138	100	0
85th percentile speed (mph)	25	40	45	45
Right Corner Area per Ped (sq.ft)	7671.6	-4.4	1703.8	24.7
Right Corner Quality of Service	A	F	A	C
Ped. Circulation Area (sq.ft)	2667.0	0.0	0.0	1069.0
Crosswalk Circulation Code	A	F	-	A
Pedestrian Delay (s/p)	53.8	53.8	53.8	53.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.25	2.53	3.31	3.18
Pedestrian Crosswalk LOS	B	C	C	C

HCM 6th Signals-Pedestrians
5: S. Higuera Street & Tank Farm Road

02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	45.4	50.0	74.0	62.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	6	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	10.0
Right Corner Size B (ft)	11.0	15.0	15.0	12.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	50.62	86.62	86.62	71.62
Ped. Left-Right Flow Rate (p/h)	3	9	20	0
Ped. Right-Left Flow Rate (p/h)	6	5	0	3
Ped. R. Sidewalk Flow Rate (p/h)	12	5	17	20
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	13	236	488	34
Veh. RTOR Flow in Walk (v/h)	33	362	347	3
85th percentile speed (mph)	25	45	45	45
Right Corner Area per Ped (sq.ft)	1066.2	3527.4	1516.1	2001.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	878.9	93.7	0.0	2669.1
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	56.7	56.7	56.7	56.7
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.04	3.32	3.57	2.93
Pedestrian Crosswalk LOS	B	C	D	C

HCM 6th Edition TWSC-Pedestrians
6: Long Street & Tank Farm Road

02/05/2020

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	9.11981979572375E29
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1632
Ped Vol Crossed	5
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	9.11981979572375E29
Avg Ped Delay (s)	9.11981979572375E29

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	5.27493957979954E19
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1632
Ped Vol Crossed	3
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	5.27493957979954E19
Avg Ped Delay (s)	5.27493957979954E19

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	21188.7
Level of Service	F
Crosswalk	
Length (ft)	53
Lanes Crossed	2
Veh Vol Crossed	1844
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	18.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	21190.65
Avg Ped Delay (s)	21188.71

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	8071129071616.0
Level of Service	F
Crosswalk	
Length (ft)	62
Lanes Crossed	2
Veh Vol Crossed	1844
Ped Vol Crossed	1
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	20.71
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	8071129071616.00
Avg Ped Delay (s)	8071129071616.00

Approach	EB	WB	NB
Crosswalk Length (ft)	48.1	48.9	36.4
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	3
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	6	8	2
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	0	0	1
Ped. Right-Left Flow Rate (p/h)	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	24	72	0
Veh. Perm. R. Flow in Walk (v/h)	1	0	27
Veh. RTOR Flow in Walk (v/h)	0	0	0
85th percentile speed (mph)	40	40	25
Right Corner Area per Ped (sq.ft)	29301.8	0.0	29358.0
Right Corner Quality of Service	A	-	A
Ped. Circulation Area (sq.ft)	0.0	0.0	0.3
Crosswalk Circulation Code	-	-	F
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.05	2.99	2.02
Pedestrian Crosswalk LOS	C	C	B

HCM 6th Signals-Pedestrians
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	85.2	71.4	72.3	83.5
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	No signal	No signal	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	20.0	21.0	9.0	9.0
Right Corner Size A (ft)	9.0	12.0	12.0	7.0
Right Corner Size B (ft)	7.0	7.0	7.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	14.62	35.62	35.62	0.62
Ped. Left-Right Flow Rate (p/h)	0	1	2	2
Ped. Right-Left Flow Rate (p/h)	1	4	1	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	12
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	369	201	297	771
Veh. RTOR Flow in Walk (v/h)	94	51	54	206
85th percentile speed (mph)	40	40	45	45
Right Corner Area per Ped (sq.ft)	3258.2	4547.8	3997.4	37.2
Right Corner Quality of Service	A	A	A	C
Ped. Circulation Area (sq.ft)	23261.9	5278.3	2371.3	0.1
Crosswalk Circulation Code	A	A	A	F
Pedestrian Delay (s/p)	27.2	26.5	36.5	36.5
Pedestrian Compliance Code	Fair	Fair	Poor	Poor
Pedestrian Crosswalk Score	3.17	2.74	3.18	3.46
Pedestrian Crosswalk LOS	C	C	C	C

HCM 6th Edition TWSC-Pedestrians
10: Broad Street (SR 227) & Aerovista Place

02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	106186.3
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1741
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.93
Delay for adq Gap	106188.32
Avg Ped Delay (s)	106186.25

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	106186.3
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1741
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.93
Delay for adq Gap	106188.32
Avg Ped Delay (s)	106186.25

HCM 6th Signals-Pedestrians
11: Broad Street (SR 227) & Aero Drive

02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	80.0	40.0	80.0	85.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	1	1	0	0
Ped. Right-Left Flow Rate (p/h)	0	1	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	1	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	36	36	3	119
Veh. RTOR Flow in Walk (v/h)	23	1	0	18
85th percentile speed (mph)	25	25	45	45
Right Corner Area per Ped (sq.ft)	29358.0	9759.4	14639.1	29278.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	7566.7	3073.5	0.0	0.0
Crosswalk Circulation Code	A	A	-	-
Pedestrian Delay (s/p)	63.8	63.8	72.5	72.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.11	1.98	2.89	2.98
Pedestrian Crosswalk LOS	B	B	C	C

HCM 6th Edition TWSC-Pedestrians
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive

02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	589.9
Level of Service	F

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	1671
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.94
Delay for adq Gap	591.96
Avg Ped Delay (s)	589.85

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	2949.1
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	1671
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	2951.25
Avg Ped Delay (s)	2949.10

HCM 6th Edition TWSC-Pedestrians
1: Broad Street (SR 227) & Capitolio Way 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	709822.4
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2074
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.96
Delay for adq Gap	709824.19
Avg Ped Delay (s)	709822.44

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	709822.4
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2074
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.96
Delay for adq Gap	709824.19
Avg Ped Delay (s)	709822.44

HCM 6th Signals-Pedestrians
2: Broad Street (SR 227) & Industrial 02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.1	61.3	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	13.0	7.0	7.0	7.0
Right Corner Size B (ft)	7.0	7.0	13.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	42.62	0.62	42.62	0.62
Ped. Left-Right Flow Rate (p/h)	0	8	1	1
Ped. Right-Left Flow Rate (p/h)	0	7	2	6
Ped. R. Sidewalk Flow Rate (p/h)	12	1	0	4
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	17	103	277	67
Veh. RTOR Flow in Walk (v/h)	1	63	79	21
85th percentile speed (mph)	25	40	45	45
Right Corner Area per Ped (sq.ft)	2552.2	-1.9	2089.2	9.7
Right Corner Quality of Service	A	F	A	E
Ped. Circulation Area (sq.ft)	0.0	207.7	366.9	855.3
Crosswalk Circulation Code	-	A	A	A
Pedestrian Delay (s/p)	60.2	60.2	60.2	60.2
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.01	2.27	3.20	3.08
Pedestrian Crosswalk LOS	B	B	C	C

HCM 6th Signals-Pedestrians
5: S. Higuera Street & Tank Farm

02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	54.8	62.3	73.7	62.3
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	6	5
Number of Right-Turn Islands	0	1	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	10.0
Right Corner Size B (ft)	11.0	15.0	15.0	12.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	50.62	86.62	86.62	71.62
Ped. Left-Right Flow Rate (p/h)	2	6	2	1
Ped. Right-Left Flow Rate (p/h)	1	7	1	0
Ped. R. Sidewalk Flow Rate (p/h)	3	4	4	3
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	35	179	885	13
Veh. RTOR Flow in Walk (v/h)	8	243	246	0
85th percentile speed (mph)	25	45	45	45
Right Corner Area per Ped (sq.ft)	5039.4	4300.9	3874.2	9188.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2401.3	320.6	0.0	7968.5
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	54.3	54.3	54.3	54.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.00	3.03	3.28	2.69
Pedestrian Crosswalk LOS	B	C	C	C

HCM 6th Edition TWSC-Pedestrians
6: Long Street & Tank Farm Road

02/05/2020

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	10000273.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1423
Ped Vol Crossed	2
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	10000275.00
Avg Ped Delay (s)	10000273.00

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	236237616.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1423
Ped Vol Crossed	3
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	236237616.00
Avg Ped Delay (s)	236237616.00

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	3714.8
Level of Service	F

Crosswalk	
Length (ft)	53
Lanes Crossed	2
Veh Vol Crossed	1452
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	18.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	3717.25
Avg Ped Delay (s)	3714.78

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	10514.9
Level of Service	F

Crosswalk	
Length (ft)	62
Lanes Crossed	2
Veh Vol Crossed	1452
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	20.71
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	10517.40
Avg Ped Delay (s)	10514.92

Approach	EB	WB	NB
Crosswalk Length (ft)	47.9	48.9	36.5
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	3
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	6	8	2
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	0	0	2
Ped. Right-Left Flow Rate (p/h)	0	0	2
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	95	0	10
Veh. RTOR Flow in Walk (v/h)	0	0	2
85th percentile speed (mph)	40	40	25
Right Corner Area per Ped (sq.ft)	7311.4	0.0	7311.4
Right Corner Quality of Service	A	-	A
Ped. Circulation Area (sq.ft)	0.0	0.0	0.1
Crosswalk Circulation Code	-	-	F
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.71	2.70	1.99
Pedestrian Crosswalk LOS	C	C	B

HCM 6th Signals-Pedestrians
9: Broad Street (SR 227) & Tank Farm Road 02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	85.6	71.4	72.2	83.5
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	12.0	12.0	7.0
Right Corner Size B (ft)	7.0	7.0	7.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	14.62	35.62	35.62	0.62
Ped. Left-Right Flow Rate (p/h)	0	3	11	4
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	508	218	189	556
Veh. RTOR Flow in Walk (v/h)	144	67	37	147
85th percentile speed (mph)	40	40	45	45
Right Corner Area per Ped (sq.ft)	1127.7	4540.6	2275.2	111.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	1309.0	414.1	0.0
Crosswalk Circulation Code	-	A	A	F
Pedestrian Delay (s/p)	54.8	54.8	54.8	54.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.15	2.71	3.17	3.29
Pedestrian Crosswalk LOS	C	C	C	C

HCM 6th Edition TWSC-Pedestrians
10: Broad Street (SR 227) & Aerovista Place 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	320010.3
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1935
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.95
Delay for adq Gap	320012.19
Avg Ped Delay (s)	320010.31

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	INF
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1935
Ped Vol Crossed	3
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	INF
Avg Ped Delay (s)	INF

HCM 6th Signals-Pedestrians
11: Broad Street (SR 227) & Aero Drive

02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	80.0	40.0	80.0	85.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	0	2	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	36	36	3	119
Veh. RTOR Flow in Walk (v/h)	23	1	0	18
85th percentile speed (mph)	25	25	45	45
Right Corner Area per Ped (sq.ft)	0.0	14679.0	14585.0	0.0
Right Corner Quality of Service	-	A	A	-
Ped. Circulation Area (sq.ft)	0.0	2252.7	0.0	0.0
Crosswalk Circulation Code	-	A	-	-
Pedestrian Delay (s/p)	75.2	75.2	83.0	83.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.08	2.01	2.92	3.01
Pedestrian Crosswalk LOS	B	B	C	C

HCM 6th Edition TWSC-Pedestrians
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive

02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	915.8
Level of Service	F

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	1825
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.95
Delay for adq Gap	917.76
Avg Ped Delay (s)	915.81

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	5270.5
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	1825
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	5272.46
Avg Ped Delay (s)	5270.49

HCM 6th Edition TWSC-Pedestrians
1: Broad Street (SR 227) & Capitolio Way

02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	7150417.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2473
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	7150418.50
Avg Ped Delay (s)	7150417.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	7150417.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2473
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	7150418.50
Avg Ped Delay (s)	7150417.00

HCM 6th Signals-Pedestrians
2: Broad Street (SR 227) & Industrial Way

02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.1	61.3	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	13.0	7.0	7.0	7.0
Right Corner Size B (ft)	7.0	7.0	13.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	42.62	0.62	42.62	0.62
Ped. Left-Right Flow Rate (p/h)	2	13	0	3
Ped. Right-Left Flow Rate (p/h)	0	7	0	3
Ped. R. Sidewalk Flow Rate (p/h)	3	0	2	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	75	240	245	113
Veh. RTOR Flow in Walk (v/h)	15	138	100	0
85th percentile speed (mph)	25	40	45	45
Right Corner Area per Ped (sq.ft)	7671.6	-4.4	1703.8	24.7
Right Corner Quality of Service	A	F	A	C
Ped. Circulation Area (sq.ft)	2667.0	0.0	0.0	1069.0
Crosswalk Circulation Code	A	F	-	A
Pedestrian Delay (s/p)	53.8	53.8	53.8	53.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.09	2.53	3.32	3.19
Pedestrian Crosswalk LOS	B	C	C	C

HCM 6th Signals-Pedestrians
5: S. Higuera Street & Tank Farm Road

02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	45.4	50.0	74.0	62.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	6	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	10.0
Right Corner Size B (ft)	11.0	15.0	15.0	12.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	50.62	86.62	86.62	71.62
Ped. Left-Right Flow Rate (p/h)	3	9	20	0
Ped. Right-Left Flow Rate (p/h)	6	5	0	3
Ped. R. Sidewalk Flow Rate (p/h)	12	5	17	20
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	13	236	488	34
Veh. RTOR Flow in Walk (v/h)	33	362	347	3
85th percentile speed (mph)	25	45	45	45
Right Corner Area per Ped (sq.ft)	1066.2	3527.4	1516.1	2001.0
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	878.9	93.7	0.0	2669.1
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	56.7	56.7	56.7	56.7
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.04	3.33	3.58	2.93
Pedestrian Crosswalk LOS	B	C	D	C

HCM 6th Edition TWSC-Pedestrians
6: Long Street & Tank Farm Road

02/05/2020

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	8.081210679453E34
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1662
Ped Vol Crossed	5
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	8.081210679453E34
Avg Ped Delay (s)	8.081210679453E34

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	1.89897250663831E23
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1662
Ped Vol Crossed	3
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	1.89897250663831E23
Avg Ped Delay (s)	1.89897250663831E23

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	24255.4
Level of Service	F

Crosswalk	
Length (ft)	53
Lanes Crossed	2
Veh Vol Crossed	1874
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	18.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	24257.36
Avg Ped Delay (s)	24255.44

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	289486399340544.0
Level of Service	F

Crosswalk	
Length (ft)	62
Lanes Crossed	2
Veh Vol Crossed	1874
Ped Vol Crossed	1
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	20.71
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	289486399340544.00
Avg Ped Delay (s)	289486399340544.00

Approach	EB	WB	NB
Crosswalk Length (ft)	48.1	48.9	36.4
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	3
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	6	8	2
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	0	0	1
Ped. Right-Left Flow Rate (p/h)	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	24	72	0
Veh. Perm. R. Flow in Walk (v/h)	1	0	27
Veh. RTOR Flow in Walk (v/h)	0	0	0
85th percentile speed (mph)	40	40	25
Right Corner Area per Ped (sq.ft)	29301.8	0.0	29358.0
Right Corner Quality of Service	A	-	A
Ped. Circulation Area (sq.ft)	0.0	0.0	0.3
Crosswalk Circulation Code	-	-	F
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.06	3.00	2.02
Pedestrian Crosswalk LOS	C	C	B

HCM 6th Signals-Pedestrians
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	85.2	71.4	72.3	83.5
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	No signal	No signal	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	20.0	21.0	9.0	9.0
Right Corner Size A (ft)	9.0	12.0	12.0	7.0
Right Corner Size B (ft)	7.0	7.0	7.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	14.62	35.62	35.62	0.62
Ped. Left-Right Flow Rate (p/h)	0	1	2	2
Ped. Right-Left Flow Rate (p/h)	1	4	1	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	12
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	369	201	297	771
Veh. RTOR Flow in Walk (v/h)	94	51	54	206
85th percentile speed (mph)	40	40	45	45
Right Corner Area per Ped (sq.ft)	3258.2	4547.8	3997.4	37.2
Right Corner Quality of Service	A	A	A	C
Ped. Circulation Area (sq.ft)	23261.9	5278.3	2371.3	0.1
Crosswalk Circulation Code	A	A	A	F
Pedestrian Delay (s/p)	27.2	26.5	36.5	36.5
Pedestrian Compliance Code	Fair	Fair	Poor	Poor
Pedestrian Crosswalk Score	3.18	2.74	3.20	3.48
Pedestrian Crosswalk LOS	C	C	C	C

HCM 6th Edition TWSC-Pedestrians
10: Broad Street (SR 227) & Aerovista Place

02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	173911.4
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1828
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.94
Delay for adq Gap	173913.36
Avg Ped Delay (s)	173911.39

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	173911.4
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	1828
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.94
Delay for adq Gap	173913.36
Avg Ped Delay (s)	173911.39

HCM 6th Signals-Pedestrians
11: Broad Street (SR 227) & Aero Drive 02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	80.0	40.0	80.0	85.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	1	1	0	0
Ped. Right-Left Flow Rate (p/h)	0	1	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	1	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	36	36	3	119
Veh. RTOR Flow in Walk (v/h)	23	1	0	18
85th percentile speed (mph)	25	25	45	45
Right Corner Area per Ped (sq.ft)	29358.0	9759.4	14639.1	29278.3
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	7566.7	3073.5	0.0	0.0
Crosswalk Circulation Code	A	A	-	-
Pedestrian Delay (s/p)	63.8	63.8	72.5	72.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.15	1.98	2.90	3.01
Pedestrian Crosswalk LOS	B	B	C	C

HCM 6th Edition TWSC-Pedestrians
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	644.3
Level of Service	F

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	1702
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.94
Delay for adq Gap	646.34
Avg Ped Delay (s)	644.27

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	3313.1
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	1702
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	3315.18
Avg Ped Delay (s)	3313.07

HCM 6th Edition TWSC-Pedestrians
1: Broad Street (SR 227) & Capitolio Way 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	20101262.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2650
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	20101264.00
Avg Ped Delay (s)	20101262.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	20101262.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2650
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	20101264.00
Avg Ped Delay (s)	20101262.00

HCM 6th Signals-Pedestrians
2: Broad Street (SR 227) & Industrial 02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.1	61.3	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	13.0	7.0	7.0	7.0
Right Corner Size B (ft)	7.0	7.0	13.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	42.62	0.62	42.62	0.62
Ped. Left-Right Flow Rate (p/h)	0	8	1	1
Ped. Right-Left Flow Rate (p/h)	0	7	2	6
Ped. R. Sidewalk Flow Rate (p/h)	12	1	0	4
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	17	103	277	67
Veh. RTOR Flow in Walk (v/h)	1	63	79	21
85th percentile speed (mph)	25	40	45	45
Right Corner Area per Ped (sq.ft)	2552.2	-1.9	2089.2	9.7
Right Corner Quality of Service	A	F	A	E
Ped. Circulation Area (sq.ft)	0.0	207.7	366.9	855.3
Crosswalk Circulation Code	-	A	A	A
Pedestrian Delay (s/p)	60.2	60.2	60.2	60.2
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.02	2.26	3.34	3.24
Pedestrian Crosswalk LOS	B	B	C	C

HCM 6th Signals-Pedestrians
5: S. Higuera Street & Tank Farm

05/08/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	54.8	62.3	73.7	62.3
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	6	6
Number of Right-Turn Islands	0	1	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	10.0
Right Corner Size B (ft)	11.0	15.0	15.0	12.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	50.62	86.62	86.62	71.62
Ped. Left-Right Flow Rate (p/h)	2	6	2	1
Ped. Right-Left Flow Rate (p/h)	1	7	1	0
Ped. R. Sidewalk Flow Rate (p/h)	3	4	4	3
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	35	179	885	13
Veh. RTOR Flow in Walk (v/h)	8	243	246	0
85th percentile speed (mph)	25	45	45	45
Right Corner Area per Ped (sq.ft)	5042.3	4304.7	3877.2	9191.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2744.9	401.5	0.0	9020.8
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	47.3	47.3	47.3	47.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.99	3.07	3.34	2.90
Pedestrian Crosswalk LOS	B	C	C	C

HCM 6th Signals-Pedestrians
6: Long Street & Tank Farm Road

05/08/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.2	60.2	24.2	24.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	45.0	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.92	2.96	1.85	1.81
Pedestrian Crosswalk LOS	C	C	B	B

HCM 6th Edition TWSC-Pedestrians
7: Santa Fe Road & Tank Farm Road 02/05/2020

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	538204.4
Level of Service	F

Crosswalk	
Length (ft)	53
Lanes Crossed	2
Veh Vol Crossed	2550
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	18.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	538205.88
Avg Ped Delay (s)	538204.44

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	3326568.3
Level of Service	F

Crosswalk	
Length (ft)	62
Lanes Crossed	2
Veh Vol Crossed	2550
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	20.71
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	3326569.75
Avg Ped Delay (s)	3326568.25

HCM 6th Signals-Pedestrians
8: Mindbody Entrance & Tank Farm Road 05/08/2020

Approach	EB	WB	NB
Crosswalk Length (ft)	47.9	48.9	36.5
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	6	8	2
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	0	0	2
Ped. Right-Left Flow Rate (p/h)	0	0	2
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	95	0	10
Veh. RTOR Flow in Walk (v/h)	0	0	2
85th percentile speed (mph)	40	40	25
Right Corner Area per Ped (sq.ft)	7311.4	0.0	7311.4
Right Corner Quality of Service	A	-	A
Ped. Circulation Area (sq.ft)	0.0	0.0	0.1
Crosswalk Circulation Code	-	-	F
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.05	2.95	2.10
Pedestrian Crosswalk LOS	C	C	B

HCM 6th Signals-Pedestrians
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	85.6	71.4	72.2	83.5
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	5	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	No signal	No signal	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	31.8	37.4	8.0	8.0
Right Corner Size A (ft)	9.0	12.0	12.0	7.0
Right Corner Size B (ft)	7.0	7.0	7.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	14.62	35.62	35.62	0.62
Ped. Left-Right Flow Rate (p/h)	0	3	11	4
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	508	218	189	556
Veh. RTOR Flow in Walk (v/h)	144	67	37	147
85th percentile speed (mph)	40	40	45	45
Right Corner Area per Ped (sq.ft)	1127.7	4540.6	2281.6	111.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	11549.0	414.1	0.0
Crosswalk Circulation Code	-	A	A	F
Pedestrian Delay (s/p)	34.7	30.7	54.8	54.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.26	2.74	3.24	3.45
Pedestrian Crosswalk LOS	C	C	C	C

HCM 6th Edition TWSC-Pedestrians
10: Broad Street (SR 227) & Aerovista Place

02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	9404250.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2520
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	9404252.00
Avg Ped Delay (s)	9404250.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	INF
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2520
Ped Vol Crossed	3
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	INF
Avg Ped Delay (s)	INF

HCM 6th Signals-Pedestrians
11: Broad Street (SR 227) & Aero Drive 02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	80.0	40.0	80.0	85.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	0	2	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	36	36	3	119
Veh. RTOR Flow in Walk (v/h)	23	1	0	18
85th percentile speed (mph)	25	25	45	45
Right Corner Area per Ped (sq.ft)	0.0	14679.0	14585.0	0.0
Right Corner Quality of Service	-	A	A	-
Ped. Circulation Area (sq.ft)	0.0	2252.7	0.0	0.0
Crosswalk Circulation Code	-	A	-	-
Pedestrian Delay (s/p)	75.2	75.2	83.0	83.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.08	2.03	3.03	3.12
Pedestrian Crosswalk LOS	B	B	C	C

HCM 6th Edition TWSC-Pedestrians
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	4608.7
Level of Service	F
Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	2379
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	4610.21
Avg Ped Delay (s)	4608.70

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	44533.2
Level of Service	F
Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	2379
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	44534.66
Avg Ped Delay (s)	44533.15

HCM 6th Edition TWSC-Pedestrians
1: Broad Street (SR 227) & Capitolio Way 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	428930496.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	3170
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	428930496.00
Avg Ped Delay (s)	428930496.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	428930496.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	3170
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	428930496.00
Avg Ped Delay (s)	428930496.00

HCM 6th Signals-Pedestrians
2: Broad Street (SR 227) & Industrial Way 02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.1	61.3	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	13.0	7.0	7.0	7.0
Right Corner Size B (ft)	7.0	7.0	13.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	42.62	0.62	42.62	0.62
Ped. Left-Right Flow Rate (p/h)	2	13	0	3
Ped. Right-Left Flow Rate (p/h)	0	7	0	3
Ped. R. Sidewalk Flow Rate (p/h)	3	0	2	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	75	240	245	113
Veh. RTOR Flow in Walk (v/h)	15	138	100	0
85th percentile speed (mph)	25	40	45	45
Right Corner Area per Ped (sq.ft)	7671.6	-4.4	1703.8	24.7
Right Corner Quality of Service	A	F	A	C
Ped. Circulation Area (sq.ft)	2667.0	0.0	0.0	1069.0
Crosswalk Circulation Code	A	F	-	A
Pedestrian Delay (s/p)	53.8	53.8	53.8	53.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.08	2.51	3.47	3.35
Pedestrian Crosswalk LOS	B	C	C	C

HCM 6th Signals-Pedestrians
5: S. Higuera Street & Tank Farm Road

05/08/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	45.4	50.0	74.0	62.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	10.0
Right Corner Size B (ft)	11.0	15.0	15.0	12.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	50.62	86.62	86.62	71.62
Ped. Left-Right Flow Rate (p/h)	3	9	20	0
Ped. Right-Left Flow Rate (p/h)	6	5	0	3
Ped. R. Sidewalk Flow Rate (p/h)	12	5	17	20
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	13	236	488	34
Veh. RTOR Flow in Walk (v/h)	33	362	347	3
85th percentile speed (mph)	25	45	45	45
Right Corner Area per Ped (sq.ft)	1067.8	3528.0	1516.5	2001.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	908.6	113.2	0.0	2763.9
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	54.8	54.8	54.8	54.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.04	3.44	3.63	3.15
Pedestrian Crosswalk LOS	B	C	D	C

HCM 6th Signals-Pedestrians
6: Long Street & Tank Farm Road

05/08/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.0	60.0	24.1	24.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	40.0	40.0	40.0	40.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.95	3.02	1.89	1.84
Pedestrian Crosswalk LOS	C	C	B	B

HCM 6th Edition TWSC-Pedestrians
7: Santa Fe Road & Tank Farm Road 02/05/2020

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	426685.4
Level of Service	F

Crosswalk	
Length (ft)	53
Lanes Crossed	2
Veh Vol Crossed	2500
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	18.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	426686.84
Avg Ped Delay (s)	426685.41

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	INF
Level of Service	F

Crosswalk	
Length (ft)	62
Lanes Crossed	2
Veh Vol Crossed	2500
Ped Vol Crossed	1
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	20.71
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	INF
Avg Ped Delay (s)	INF

HCM 6th Signals-Pedestrians
8: Mindbody Entrance & Tank Farm Road 05/08/2020

Approach	EB	WB	NB
Crosswalk Length (ft)	48.1	48.9	36.4
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	6	8	2
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	0	0	1
Ped. Right-Left Flow Rate (p/h)	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	24	72	0
Veh. Perm. R. Flow in Walk (v/h)	1	0	27
Veh. RTOR Flow in Walk (v/h)	0	0	0
85th percentile speed (mph)	40	40	25
Right Corner Area per Ped (sq.ft)	29301.8	0.0	29358.0
Right Corner Quality of Service	A	-	A
Ped. Circulation Area (sq.ft)	0.0	0.0	0.3
Crosswalk Circulation Code	-	-	F
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.15	3.15	2.10
Pedestrian Crosswalk LOS	C	C	B

HCM 6th Signals-Pedestrians
9: Broad Street (SR 227) & Tank Farm Road 05/08/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	85.2	71.4	72.3	83.5
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	6	7	7
Number of Right-Turn Islands	0	0	0	0
Type of Control	No signal	No signal	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	24.0	30.0	9.0	9.0
Right Corner Size A (ft)	9.0	12.0	12.0	7.0
Right Corner Size B (ft)	7.0	7.0	7.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	14.62	35.62	35.62	0.62
Ped. Left-Right Flow Rate (p/h)	0	1	2	2
Ped. Right-Left Flow Rate (p/h)	1	4	1	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	12
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	369	201	297	771
Veh. RTOR Flow in Walk (v/h)	94	51	54	206
85th percentile speed (mph)	40	40	45	45
Right Corner Area per Ped (sq.ft)	3259.2	4552.4	3998.4	37.2
Right Corner Quality of Service	A	A	A	C
Ped. Circulation Area (sq.ft)	29200.4	7891.3	2371.3	0.1
Crosswalk Circulation Code	A	A	A	F
Pedestrian Delay (s/p)	24.2	20.0	36.5	36.5
Pedestrian Compliance Code	Fair	Fair	Poor	Poor
Pedestrian Crosswalk Score	3.26	2.90	3.35	3.62
Pedestrian Crosswalk LOS	C	C	C	D

HCM 6th Edition TWSC-Pedestrians
10: Broad Street (SR 227) & Aerovista Place 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	26939644.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2700
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	26939646.00
Avg Ped Delay (s)	26939644.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	26939644.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2700
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	26939646.00
Avg Ped Delay (s)	26939644.00

HCM 6th Signals-Pedestrians
11: Broad Street (SR 227) & Aero Drive 05/08/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	80.0	40.0	80.0	85.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	1	1	0	0
Ped. Right-Left Flow Rate (p/h)	0	1	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	1	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	36	36	3	119
Veh. RTOR Flow in Walk (v/h)	23	1	0	18
85th percentile speed (mph)	25	25	45	45
Right Corner Area per Ped (sq.ft)	29358.0	9765.6	14648.5	29296.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	9714.2	4029.8	0.0	0.0
Crosswalk Circulation Code	A	A	-	-
Pedestrian Delay (s/p)	48.9	48.9	57.5	57.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.08	2.09	3.02	3.21
Pedestrian Crosswalk LOS	B	B	C	C

HCM 6th Edition TWSC-Pedestrians
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	2157.7
Level of Service	F

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	2121
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	2159.43
Avg Ped Delay (s)	2157.75

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	16352.8
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	2121
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	16354.53
Avg Ped Delay (s)	16352.83

HCM 6th Edition TWSC-Pedestrians
1: Broad Street (SR 227) & Capitolio Way 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	27097950.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2701
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	27097952.00
Avg Ped Delay (s)	27097950.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	27097950.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2701
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	27097952.00
Avg Ped Delay (s)	27097950.00

HCM 6th Signals-Pedestrians
2: Broad Street (SR 227) & Industrial 02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.1	61.3	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	13.0	7.0	7.0	7.0
Right Corner Size B (ft)	7.0	7.0	13.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	42.62	0.62	42.62	0.62
Ped. Left-Right Flow Rate (p/h)	0	8	1	1
Ped. Right-Left Flow Rate (p/h)	0	7	2	6
Ped. R. Sidewalk Flow Rate (p/h)	12	1	0	4
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	17	103	277	67
Veh. RTOR Flow in Walk (v/h)	1	63	79	21
85th percentile speed (mph)	25	40	45	45
Right Corner Area per Ped (sq.ft)	2552.2	-1.9	2089.2	9.7
Right Corner Quality of Service	A	F	A	E
Ped. Circulation Area (sq.ft)	0.0	207.7	366.9	855.3
Crosswalk Circulation Code	-	A	A	A
Pedestrian Delay (s/p)	60.2	60.2	60.2	60.2
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.02	2.26	3.36	3.26
Pedestrian Crosswalk LOS	B	B	C	C

HCM 6th Signals-Pedestrians
5: S. Higuera Street & Tank Farm

05/08/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	54.8	62.3	73.7	62.3
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	6	6
Number of Right-Turn Islands	0	1	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	10.0
Right Corner Size B (ft)	11.0	15.0	15.0	12.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	50.62	86.62	86.62	71.62
Ped. Left-Right Flow Rate (p/h)	2	6	2	1
Ped. Right-Left Flow Rate (p/h)	1	7	1	0
Ped. R. Sidewalk Flow Rate (p/h)	3	4	4	3
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	35	179	885	13
Veh. RTOR Flow in Walk (v/h)	8	243	246	0
85th percentile speed (mph)	25	45	45	45
Right Corner Area per Ped (sq.ft)	5042.3	4304.7	3877.2	9191.4
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	2744.9	401.5	0.0	9020.8
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	47.3	47.3	47.3	47.3
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.99	3.08	3.35	2.90
Pedestrian Crosswalk LOS	B	C	C	C

HCM 6th Signals-Pedestrians
6: Long Street & Tank Farm Road

05/08/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.2	60.2	24.2	24.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	45.0	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.93	2.96	1.85	1.81
Pedestrian Crosswalk LOS	C	C	B	B

HCM 6th Edition TWSC-Pedestrians
7: Santa Fe Road & Tank Farm Road 02/05/2020

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	582466.7
Level of Service	F

Crosswalk	
Length (ft)	53
Lanes Crossed	2
Veh Vol Crossed	2567
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	18.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	582468.06
Avg Ped Delay (s)	582466.69

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	3644122.5
Level of Service	F

Crosswalk	
Length (ft)	62
Lanes Crossed	2
Veh Vol Crossed	2567
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	20.71
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	3644123.75
Avg Ped Delay (s)	3644122.50

HCM 6th Signals-Pedestrians
8: Mindbody Entrance & Tank Farm Road 05/08/2020

Approach	EB	WB	NB
Crosswalk Length (ft)	47.9	48.9	36.5
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	6	8	2
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	0	0	2
Ped. Right-Left Flow Rate (p/h)	0	0	2
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	95	0	10
Veh. RTOR Flow in Walk (v/h)	0	0	2
85th percentile speed (mph)	40	40	25
Right Corner Area per Ped (sq.ft)	7311.4	0.0	7311.4
Right Corner Quality of Service	A	-	A
Ped. Circulation Area (sq.ft)	0.0	0.0	0.1
Crosswalk Circulation Code	-	-	F
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.06	2.96	2.10
Pedestrian Crosswalk LOS	C	C	B

HCM 6th Signals-Pedestrians
9: Broad Street (SR 227) & Tank Farm Road 05/08/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	85.6	71.4	72.2	83.5
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	6	7	7
Number of Right-Turn Islands	0	0	0	0
Type of Control	No signal	No signal	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	31.8	40.5	8.0	8.0
Right Corner Size A (ft)	9.0	12.0	12.0	7.0
Right Corner Size B (ft)	7.0	7.0	7.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	14.62	35.62	35.62	0.62
Ped. Left-Right Flow Rate (p/h)	0	3	11	4
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	508	218	189	556
Veh. RTOR Flow in Walk (v/h)	144	67	37	147
85th percentile speed (mph)	40	40	45	45
Right Corner Area per Ped (sq.ft)	1124.6	4538.8	2281.6	111.6
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	0.0	12086.0	384.8	0.0
Crosswalk Circulation Code	-	A	A	F
Pedestrian Delay (s/p)	37.1	30.8	57.2	57.2
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.27	2.83	3.29	3.49
Pedestrian Crosswalk LOS	C	C	C	C

HCM 6th Edition TWSC-Pedestrians
10: Broad Street (SR 227) & Aerovista Place 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	13664661.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2584
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	13664663.00
Avg Ped Delay (s)	13664661.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	INF
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2584
Ped Vol Crossed	3
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	INF
Avg Ped Delay (s)	INF

HCM 6th Signals-Pedestrians
11: Broad Street (SR 227) & Aero Drive 05/07/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	80.0	40.0	80.0	85.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	0	2	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	36	36	3	119
Veh. RTOR Flow in Walk (v/h)	23	1	0	18
85th percentile speed (mph)	25	25	45	45
Right Corner Area per Ped (sq.ft)	0.0	14679.0	14585.0	0.0
Right Corner Quality of Service	-	A	A	-
Ped. Circulation Area (sq.ft)	0.0	2252.7	0.0	0.0
Crosswalk Circulation Code	-	A	-	-
Pedestrian Delay (s/p)	75.2	75.2	83.0	83.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.11	2.03	3.04	3.16
Pedestrian Crosswalk LOS	B	B	C	C

HCM 6th Edition TWSC-Pedestrians
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	4992.6
Level of Service	F

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	2406
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.98
Delay for adq Gap	4994.12
Avg Ped Delay (s)	4992.62

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	49490.1
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	2406
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	49491.63
Avg Ped Delay (s)	49490.13

HCM 6th Edition TWSC-Pedestrians
1: Broad Street (SR 227) & Capitolio Way 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	597451968.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	3226
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	597451968.00
Avg Ped Delay (s)	597451968.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	597451968.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	3226
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	597451968.00
Avg Ped Delay (s)	597451968.00

HCM 6th Signals-Pedestrians
2: Broad Street (SR 227) & Industrial Way 02/05/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	36.0	36.1	61.3	62.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	13.0	7.0	7.0	7.0
Right Corner Size B (ft)	7.0	7.0	13.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	42.62	0.62	42.62	0.62
Ped. Left-Right Flow Rate (p/h)	2	13	0	3
Ped. Right-Left Flow Rate (p/h)	0	7	0	3
Ped. R. Sidewalk Flow Rate (p/h)	3	0	2	1
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	75	240	245	113
Veh. RTOR Flow in Walk (v/h)	15	138	100	0
85th percentile speed (mph)	25	40	45	45
Right Corner Area per Ped (sq.ft)	7671.6	-4.4	1703.8	24.7
Right Corner Quality of Service	A	F	A	C
Ped. Circulation Area (sq.ft)	2667.0	0.0	0.0	1069.0
Crosswalk Circulation Code	A	F	-	A
Pedestrian Delay (s/p)	53.8	53.8	53.8	53.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.08	2.51	3.49	3.36
Pedestrian Crosswalk LOS	B	C	C	C

HCM 6th Signals-Pedestrians
5: S. Higuera Street & Tank Farm Road

05/08/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	45.4	50.0	74.0	62.2
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	4	6	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	8.0	8.0	8.0	8.0
Right Corner Size A (ft)	9.0	9.0	9.0	10.0
Right Corner Size B (ft)	11.0	15.0	15.0	12.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	50.62	86.62	86.62	71.62
Ped. Left-Right Flow Rate (p/h)	3	9	20	0
Ped. Right-Left Flow Rate (p/h)	6	5	0	3
Ped. R. Sidewalk Flow Rate (p/h)	12	5	17	20
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	13	236	488	34
Veh. RTOR Flow in Walk (v/h)	33	362	347	3
85th percentile speed (mph)	25	45	45	45
Right Corner Area per Ped (sq.ft)	1067.8	3528.0	1516.5	2001.5
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	908.6	113.2	0.0	2763.9
Crosswalk Circulation Code	A	A	F	A
Pedestrian Delay (s/p)	54.8	54.8	54.8	54.8
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.04	3.45	3.64	3.15
Pedestrian Crosswalk LOS	B	C	D	C

HCM 6th Signals-Pedestrians
6: Long Street & Tank Farm Road

05/08/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	60.0	60.0	24.1	24.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	5	5	2	2
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	45	45	25	25
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	40.0	40.0	40.0	40.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.95	3.02	1.89	1.84
Pedestrian Crosswalk LOS	C	C	B	B

HCM 6th Edition TWSC-Pedestrians
7: Santa Fe Road & Tank Farm Road 02/05/2020

Approach	
Approach Direction	EB
Median Present?	No
Approach Delay(s)	468191.6
Level of Service	F

Crosswalk	
Length (ft)	53
Lanes Crossed	2
Veh Vol Crossed	2520
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	18.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	468193.06
Avg Ped Delay (s)	468191.63

Approach	
Approach Direction	WB
Median Present?	No
Approach Delay(s)	INF
Level of Service	F

Crosswalk	
Length (ft)	62
Lanes Crossed	2
Veh Vol Crossed	2520
Ped Vol Crossed	1
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	20.71
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	1.00
Delay for adq Gap	INF
Avg Ped Delay (s)	INF

HCM 6th Signals-Pedestrians
8: Mindbody Entrance & Tank Farm Road 05/08/2020

Approach	EB	WB	NB
Crosswalk Length (ft)	48.1	48.9	36.4
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	4	4	3
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	6	8	2
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	0	0	1
Ped. Right-Left Flow Rate (p/h)	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	24	72	0
Veh. Perm. R. Flow in Walk (v/h)	1	0	27
Veh. RTOR Flow in Walk (v/h)	0	0	0
85th percentile speed (mph)	40	40	25
Right Corner Area per Ped (sq.ft)	29301.8	0.0	29358.0
Right Corner Quality of Service	A	-	A
Ped. Circulation Area (sq.ft)	0.0	0.0	0.3
Crosswalk Circulation Code	-	-	F
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	3.16	3.16	2.10
Pedestrian Crosswalk LOS	C	C	B

HCM 6th Signals-Pedestrians
9: Broad Street (SR 227) & Tank Farm Road 05/08/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	85.2	71.4	72.3	83.5
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	7	6	7	7
Number of Right-Turn Islands	0	0	0	0
Type of Control	No signal	No signal	Actuated	Actuated
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	24.0	31.0	9.0	9.0
Right Corner Size A (ft)	9.0	12.0	12.0	7.0
Right Corner Size B (ft)	7.0	7.0	7.0	7.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	14.62	35.62	35.62	0.62
Ped. Left-Right Flow Rate (p/h)	0	1	2	2
Ped. Right-Left Flow Rate (p/h)	1	4	1	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	12
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	369	201	297	771
Veh. RTOR Flow in Walk (v/h)	94	51	54	206
85th percentile speed (mph)	40	40	45	45
Right Corner Area per Ped (sq.ft)	3259.2	4552.9	3998.5	37.2
Right Corner Quality of Service	A	A	A	C
Ped. Circulation Area (sq.ft)	29200.4	8181.7	2371.3	0.1
Crosswalk Circulation Code	A	A	A	F
Pedestrian Delay (s/p)	24.2	19.3	36.5	36.5
Pedestrian Compliance Code	Fair	Fair	Poor	Poor
Pedestrian Crosswalk Score	3.27	2.90	3.37	3.64
Pedestrian Crosswalk LOS	C	C	C	D

HCM 6th Edition TWSC-Pedestrians
10: Broad Street (SR 227) & Aerovista Place 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	42317588.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2777
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	42317592.00
Avg Ped Delay (s)	42317588.00

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	42317588.0
Level of Service	F

Crosswalk	
Length (ft)	68
Lanes Crossed	4
Veh Vol Crossed	2777
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	22.43
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	42317592.00
Avg Ped Delay (s)	42317588.00

HCM 6th Signals-Pedestrians
11: Broad Street (SR 227) & Aero Drive 05/08/2020

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	80.0	40.0	80.0	85.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	3	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	Actuated	Actuated	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	9.0	9.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	15.0	15.0	15.0	15.0
Right Corner Total Area (sq.ft)	32.62	32.62	32.62	32.62
Ped. Left-Right Flow Rate (p/h)	1	1	0	0
Ped. Right-Left Flow Rate (p/h)	0	1	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	1	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	36	36	3	119
Veh. RTOR Flow in Walk (v/h)	23	1	0	18
85th percentile speed (mph)	25	25	45	45
Right Corner Area per Ped (sq.ft)	29358.0	9765.6	14648.5	29296.9
Right Corner Quality of Service	A	A	A	A
Ped. Circulation Area (sq.ft)	9714.2	4029.8	0.0	0.0
Crosswalk Circulation Code	A	A	-	-
Pedestrian Delay (s/p)	48.9	48.9	57.5	57.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	2.12	2.09	3.03	3.24
Pedestrian Crosswalk LOS	B	B	C	C

HCM 6th Edition TWSC-Pedestrians
12: Edna Road (SR 227)/Broad Street (SR 227) & Airport Drive 02/05/2020

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	2432.6
Level of Service	F

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	2162
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.97
Delay for adq Gap	2434.22
Avg Ped Delay (s)	2432.56

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	19158.6
Level of Service	F

Crosswalk	
Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	2162
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	15.57
Prob of Delayed X-ing	1.00
Prob of Blocked Lane	0.99
Delay for adq Gap	19160.29
Avg Ped Delay (s)	19158.62

HCM 6th Signals-Bicycles
2: Broad Street (SR 227) & Industrial 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	3	8	19
Total Flow Rate (veh/h)	28	233	1119	1337
Effct. Green for Bike (s)	6.5	11.6	47.8	48.3
Cross Street Width (ft)	73.1	73.9	37.5	37.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	96	171	703	710
Bicycle Delay (s/bike)	61.7	57.0	28.7	28.5
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.72	3.07	1.77	1.95
Bicycle LOS	C	C	B	B

HCM 6th Signals-Bicycles
5: S. Higuera Street & Tank Farm 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	4	18	6
Total Flow Rate (veh/h)	88	579	1241	542
Effct. Green for Bike (s)	7.8	19.0	18.1	40.4
Cross Street Width (ft)	73.7	62.3	62.3	54.8
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	126	306	292	652
Bicycle Delay (s/bike)	54.6	44.5	45.6	28.3
Bicycle Compliance	Poor	Poor	Poor	Fair
Bicycle LOS Score	1.55	3.47	2.25	1.56
Bicycle LOS	B	C	B	B

HCM 6th Signals-Bicycles
8: Mindbody Entrance & Tank Farm Road 02/05/2020

Approach	EB	WB	NB
Bicycle Flow Rate (bike/h)	5	10	0
Total Flow Rate (veh/h)	851	891	37
Effct. Green for Bike (s)	35.3	39.1	4.8
Cross Street Width (ft)	36.5	47.9	48.9
Through Lanes Number	2	1	1
Through Lane Width (ft)	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0
Curb Is Present?	Yes	No	Yes
On Street Parking?	No	No	No
Bicycle Lane Capacity (bike/h)	784	869	107
Bicycle Delay (s/bike)	16.7	14.5	40.3
Bicycle Compliance	Fair	Fair	Poor
Bicycle LOS Score	1.53	3.76	1.08
Bicycle LOS	B	D	A

HCM 6th Signals-Bicycles
9: Broad Street (SR 227) & Tank Farm Road 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	1	0	10
Total Flow Rate (veh/h)	836	778	1052	1282
Effct. Green for Bike (s)	24.9	32.1	38.3	36.2
Cross Street Width (ft)	72.6	83.8	60.2	85.5
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	5.0	5.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	398	514	613	579
Bicycle Delay (s/bike)	40.1	34.5	30.1	31.7
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	2.29	3.05	2.28	2.85
Bicycle LOS	B	C	B	C

HCM 6th Signals-Bicycles
11: Broad Street (SR 227) & Aero Drive 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	7	5
Total Flow Rate (veh/h)	68	69	1252	823
Effct. Green for Bike (s)	9.2	6.3	68.3	68.1
Cross Street Width (ft)	58.5	62.5	36.0	36.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	111	76	823	820
Bicycle Delay (s/bike)	74.1	76.8	28.9	28.9
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	1.28	2.63	1.86	1.50
Bicycle LOS	A	C	B	B

HCM 6th Signals-Bicycles
2: Broad Street (SR 227) & Industrial Way 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	175	489	1396	1444
Effct. Green for Bike (s)	11.5	17.0	36.7	36.9
Cross Street Width (ft)	73.1	72.1	37.5	49.1
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	187	276	597	600
Bicycle Delay (s/bike)	50.5	45.7	30.3	30.1
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	2.97	3.47	3.29	3.50
Bicycle LOS	C	C	C	D

HCM 6th Signals-Bicycles
5: S. Higuera Street & Tank Farm Road 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	2	10	11
Total Flow Rate (veh/h)	52	989	1022	1173
Effct. Green for Bike (s)	6.9	26.1	20.0	42.6
Cross Street Width (ft)	74.0	62.2	50.0	45.4
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	107	405	310	660
Bicycle Delay (s/bike)	57.8	41.1	46.3	29.1
Bicycle Compliance	Poor	Poor	Poor	Fair
Bicycle LOS Score	1.49	4.14	1.88	1.94
Bicycle LOS	A	D	B	B

HCM 6th Signals-Bicycles
8: Mindbody Entrance & Tank Farm Road 02/05/2020

Approach	EB	WB	NB
Bicycle Flow Rate (bike/h)	8	2	2
Total Flow Rate (veh/h)	1197	1077	229
Effct. Green for Bike (s)	34.5	36.0	9.8
Cross Street Width (ft)	36.4	48.1	48.9
Through Lanes Number	2	1	1
Through Lane Width (ft)	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0
Curb Is Present?	Yes	No	Yes
On Street Parking?	No	No	No
Bicycle Lane Capacity (bike/h)	767	800	218
Bicycle Delay (s/bike)	17.2	16.2	35.8
Bicycle Compliance	Fair	Fair	Poor
Bicycle LOS Score	1.82	4.07	1.40
Bicycle LOS	B	D	A

HCM 6th Signals-Bicycles
9: Broad Street (SR 227) & Tank Farm Road 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	0	5	0
Total Flow Rate (veh/h)	1235	553	1429	1526
Effct. Green for Bike (s)	19.4	13.7	21.2	20.5
Cross Street Width (ft)	72.9	83.7	60.0	85.1
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	5.0	5.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	431	304	471	456
Bicycle Delay (s/bike)	27.8	32.3	26.4	26.8
Bicycle Compliance	Fair	Poor	Fair	Fair
Bicycle LOS Score	2.62	2.68	2.58	3.05
Bicycle LOS	C	C	C	C

HCM 6th Signals-Bicycles
11: Broad Street (SR 227) & Aero Drive 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	6	2
Total Flow Rate (veh/h)	278	43	865	1061
Effct. Green for Bike (s)	18.4	6.4	65.5	57.8
Cross Street Width (ft)	60.1	61.3	36.5	36.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	254	88	903	797
Bicycle Delay (s/bike)	55.3	66.2	21.9	26.2
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	1.65	2.57	1.55	1.70
Bicycle LOS	B	C	B	B

HCM 6th Signals-Bicycles
2: Broad Street (SR 227) & Industrial 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	3	8	19
Total Flow Rate (veh/h)	28	233	1141	1374
Effct. Green for Bike (s)	6.5	11.6	47.8	48.3
Cross Street Width (ft)	73.1	73.9	37.5	37.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	96	171	703	710
Bicycle Delay (s/bike)	61.7	57.0	28.7	28.5
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.72	3.07	1.79	1.98
Bicycle LOS	C	C	B	B

HCM 6th Signals-Bicycles
5: S. Higuera Street & Tank Farm 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	4	18	6
Total Flow Rate (veh/h)	88	590	1254	545
Effct. Green for Bike (s)	7.8	20.4	18.2	40.6
Cross Street Width (ft)	73.7	62.3	62.3	54.8
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	126	329	294	655
Bicycle Delay (s/bike)	54.6	43.4	45.5	28.1
Bicycle Compliance	Poor	Poor	Poor	Fair
Bicycle LOS Score	1.55	3.49	2.26	1.56
Bicycle LOS	B	C	B	B

HCM 6th Signals-Bicycles
8: Mindbody Entrance & Tank Farm Road

02/05/2020

Approach	EB	WB	NB
Bicycle Flow Rate (bike/h)	5	10	0
Total Flow Rate (veh/h)	867	902	37
Effct. Green for Bike (s)	35.6	39.4	4.8
Cross Street Width (ft)	36.5	47.9	48.9
Through Lanes Number	2	1	1
Through Lane Width (ft)	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0
Curb Is Present?	Yes	No	Yes
On Street Parking?	No	No	No
Bicycle Lane Capacity (bike/h)	791	876	107
Bicycle Delay (s/bike)	16.5	14.3	40.3
Bicycle Compliance	Fair	Fair	Poor
Bicycle LOS Score	1.55	3.78	1.08
Bicycle LOS	B	D	A

HCM 6th Signals-Bicycles
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	1	0	10
Total Flow Rate (veh/h)	853	783	1089	1320
Effct. Green for Bike (s)	26.9	34.1	38.2	36.2
Cross Street Width (ft)	72.6	83.8	60.2	85.5
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	5.0	5.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	430	546	611	579
Bicycle Delay (s/bike)	38.5	33.1	30.1	31.7
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	2.30	3.06	2.31	2.88
Bicycle LOS	B	C	B	C

HCM 6th Signals-Bicycles
11: Broad Street (SR 227) & Aero Drive 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	7	5
Total Flow Rate (veh/h)	117	69	1263	868
Effct. Green for Bike (s)	11.7	6.3	66.5	65.7
Cross Street Width (ft)	58.5	62.5	36.0	36.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	141	76	801	792
Bicycle Delay (s/bike)	71.7	76.8	29.9	30.4
Bicycle Compliance	Poor	Poor	Fair	Poor
Bicycle LOS Score	1.36	2.63	1.87	1.54
Bicycle LOS	A	C	B	B

HCM 6th Signals-Bicycles
2: Broad Street (SR 227) & Industrial Way 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	175	489	1426	1475
Effct. Green for Bike (s)	11.5	17.0	36.7	36.9
Cross Street Width (ft)	73.1	73.9	37.5	37.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	187	276	597	600
Bicycle Delay (s/bike)	50.5	45.7	30.3	30.1
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	2.97	3.50	3.31	3.35
Bicycle LOS	C	C	C	C

HCM 6th Signals-Bicycles
5: S. Higuera Street & Tank Farm Road 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	2	10	11
Total Flow Rate (veh/h)	52	1005	1035	1176
Effct. Green for Bike (s)	6.9	26.3	20.0	42.5
Cross Street Width (ft)	74.0	62.2	50.0	45.4
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	107	408	310	659
Bicycle Delay (s/bike)	57.8	40.9	46.3	29.2
Bicycle Compliance	Poor	Poor	Poor	Fair
Bicycle LOS Score	1.49	4.17	1.89	1.94
Bicycle LOS	A	D	B	B

HCM 6th Signals-Bicycles
8: Mindbody Entrance & Tank Farm Road 02/05/2020

Approach	EB	WB	NB
Bicycle Flow Rate (bike/h)	8	2	2
Total Flow Rate (veh/h)	1214	1094	229
Effct. Green for Bike (s)	34.7	36.3	9.9
Cross Street Width (ft)	36.4	48.1	48.9
Through Lanes Number	2	1	1
Through Lane Width (ft)	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0
Curb Is Present?	Yes	No	Yes
On Street Parking?	No	No	No
Bicycle Lane Capacity (bike/h)	771	807	220
Bicycle Delay (s/bike)	17.1	16.0	35.7
Bicycle Compliance	Fair	Fair	Poor
Bicycle LOS Score	1.83	4.10	1.40
Bicycle LOS	B	D	A

HCM 6th Signals-Bicycles
9: Broad Street (SR 227) & Tank Farm Road 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	0	5	0
Total Flow Rate (veh/h)	1251	561	1489	1556
Effct. Green for Bike (s)	19.2	13.7	21.2	20.3
Cross Street Width (ft)	72.9	83.7	60.0	85.1
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	5.0	5.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	427	304	471	451
Bicycle Delay (s/bike)	28.0	32.3	26.4	27.0
Bicycle Compliance	Fair	Poor	Fair	Fair
Bicycle LOS Score	2.64	2.69	2.63	3.07
Bicycle LOS	C	C	C	C

HCM 6th Signals-Bicycles
11: Broad Street (SR 227) & Aero Drive 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	6	2
Total Flow Rate (veh/h)	364	43	883	1103
Effct. Green for Bike (s)	23.2	6.4	64.7	56.8
Cross Street Width (ft)	60.1	61.3	36.5	36.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	320	88	892	783
Bicycle Delay (s/bike)	51.2	66.2	22.3	26.9
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	1.79	2.57	1.56	1.73
Bicycle LOS	B	C	B	B

HCM 6th Signals-Bicycles
2: Broad Street (SR 227) & Industrial 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	3	8	19
Total Flow Rate (veh/h)	30	178	1406	1794
Effct. Green for Bike (s)	6.5	10.0	48.3	51.3
Cross Street Width (ft)	73.1	73.9	37.5	37.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	96	147	710	754
Bicycle Delay (s/bike)	61.7	58.5	28.4	26.6
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.73	2.98	2.01	2.33
Bicycle LOS	C	C	B	B

HCM 6th Signals-Bicycles
5: S. Higuera Street & Tank Farm 05/08/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	4	18	6
Total Flow Rate (veh/h)	74	588	1400	960
Effct. Green for Bike (s)	6.8	17.4	18.8	35.2
Cross Street Width (ft)	85.8	75.7	62.2	54.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	6.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	124	316	342	640
Bicycle Delay (s/bike)	48.6	39.1	38.1	25.5
Bicycle Compliance	Poor	Poor	Poor	Fair
Bicycle LOS Score	1.71	2.40	2.38	1.89
Bicycle LOS	B	B	B	B

HCM 6th Signals-Bicycles
6: Long Street & Tank Farm Road 05/08/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	1411	780	140	90
Effct. Green for Bike (s)	36.5	40.7	7.8	7.9
Cross Street Width (ft)	24.2	24.2	60.2	60.2
Through Lanes Number	2	2	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	6.0	0.0	0.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	811	904	173	176
Bicycle Delay (s/bike)	15.9	13.5	37.5	37.4
Bicycle Compliance	Fair	Fair	Poor	Poor
Bicycle LOS Score	1.81	1.29	2.71	2.63
Bicycle LOS	B	A	C	C

HCM 6th Signals-Bicycles
8: Mindbody Entrance & Tank Farm Road 05/08/2020

Approach	EB	WB	NB
Bicycle Flow Rate (bike/h)	5	10	0
Total Flow Rate (veh/h)	1360	1500	70
Effct. Green for Bike (s)	41.4	53.5	5.9
Cross Street Width (ft)	36.5	59.2	48.9
Through Lanes Number	2	1	1
Through Lane Width (ft)	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0
Curb Is Present?	Yes	No	Yes
On Street Parking?	No	No	No
Bicycle Lane Capacity (bike/h)	920	1189	131
Bicycle Delay (s/bike)	13.2	7.4	39.3
Bicycle Compliance	Fair	Good	Poor
Bicycle LOS Score	1.95	3.65	1.14
Bicycle LOS	B	D	A

HCM 6th Signals-Bicycles
9: Broad Street (SR 227) & Tank Farm Road 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	1	0	10
Total Flow Rate (veh/h)	930	899	1420	1700
Effct. Green for Bike (s)	33.6	30.2	37.4	31.8
Cross Street Width (ft)	72.6	83.8	60.2	85.5
Through Lanes Number	2	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	5.0	5.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	538	483	598	509
Bicycle Delay (s/bike)	33.4	36.0	30.7	34.9
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	2.37	3.25	2.58	3.20
Bicycle LOS	B	C	C	C

HCM 6th Signals-Bicycles
11: Broad Street (SR 227) & Aero Drive 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	7	5
Total Flow Rate (veh/h)	110	150	1519	970
Effct. Green for Bike (s)	9.7	7.3	66.0	65.5
Cross Street Width (ft)	58.5	62.5	36.0	36.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	117	88	795	789
Bicycle Delay (s/bike)	73.6	75.9	30.2	30.5
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	1.35	2.76	2.08	1.62
Bicycle LOS	A	C	B	B

HCM 6th Signals-Bicycles
2: Broad Street (SR 227) & Industrial Way 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	170	462	1893	1651
Effct. Green for Bike (s)	12.0	15.5	42.1	44.1
Cross Street Width (ft)	73.1	73.9	37.5	37.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	195	252	685	717
Bicycle Delay (s/bike)	50.1	47.0	26.6	25.3
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.96	3.45	3.70	3.50
Bicycle LOS	C	C	D	C

HCM 6th Signals-Bicycles
5: S. Higuera Street & Tank Farm Road 05/08/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	2	10	11
Total Flow Rate (veh/h)	52	1220	1275	1340
Effct. Green for Bike (s)	7.2	25.1	27.5	44.3
Cross Street Width (ft)	86.1	75.4	50.1	45.1
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	6.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	115	402	440	709
Bicycle Delay (s/bike)	55.5	40.0	38.2	26.2
Bicycle Compliance	Poor	Poor	Poor	Fair
Bicycle LOS Score	1.68	3.44	2.09	2.07
Bicycle LOS	B	C	B	B

HCM 6th Signals-Bicycles
6: Long Street & Tank Farm Road 05/08/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	910	1430	210	130
Effct. Green for Bike (s)	23.1	27.5	7.8	8.2
Cross Street Width (ft)	24.1	24.1	60.0	60.0
Through Lanes Number	2	2	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	6.0	0.0	0.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	578	688	195	205
Bicycle Delay (s/bike)	20.2	17.2	32.6	32.2
Bicycle Compliance	Fair	Fair	Poor	Poor
Bicycle LOS Score	1.39	1.82	2.82	2.69
Bicycle LOS	A	B	C	C

HCM 6th Signals-Bicycles
8: Mindbody Entrance & Tank Farm Road 05/08/2020

Approach	EB	WB	NB
Bicycle Flow Rate (bike/h)	8	2	2
Total Flow Rate (veh/h)	1440	1390	350
Effct. Green for Bike (s)	40.4	50.0	13.3
Cross Street Width (ft)	36.3	59.2	48.9
Through Lanes Number	2	1	1
Through Lane Width (ft)	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0
Curb Is Present?	Yes	No	Yes
On Street Parking?	No	No	No
Bicycle Lane Capacity (bike/h)	898	1111	296
Bicycle Delay (s/bike)	13.7	8.9	32.7
Bicycle Compliance	Fair	Good	Poor
Bicycle LOS Score	2.02	3.47	1.60
Bicycle LOS	B	C	B

HCM 6th Signals-Bicycles
9: Broad Street (SR 227) & Tank Farm Road 05/08/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	0	5	0
Total Flow Rate (veh/h)	1569	650	1860	1700
Effct. Green for Bike (s)	19.9	14.1	30.0	24.1
Cross Street Width (ft)	84.6	84.2	73.6	85.2
Through Lanes Number	2	2	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	5.0	5.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	442	313	667	536
Bicycle Delay (s/bike)	27.4	32.0	20.1	24.1
Bicycle Compliance	Fair	Poor	Fair	Fair
Bicycle LOS Score	3.08	2.31	3.15	3.19
Bicycle LOS	C	B	C	C

HCM 6th Signals-Bicycles
11: Broad Street (SR 227) & Aero Drive 05/08/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	6	2
Total Flow Rate (veh/h)	236	387	1061	1425
Effct. Green for Bike (s)	15.0	15.7	55.5	60.0
Cross Street Width (ft)	60.1	61.3	36.5	36.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	261	273	965	1043
Bicycle Delay (s/bike)	43.5	42.9	15.4	13.2
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	1.58	3.14	1.71	2.00
Bicycle LOS	B	C	B	B

HCM 6th Signals-Bicycles
2: Broad Street (SR 227) & Industrial 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	3	8	19
Total Flow Rate (veh/h)	30	178	1427	1824
Effct. Green for Bike (s)	6.5	10.0	48.3	51.3
Cross Street Width (ft)	73.1	73.9	37.5	37.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	96	147	710	754
Bicycle Delay (s/bike)	61.7	58.5	28.4	26.6
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.73	2.98	2.02	2.35
Bicycle LOS	C	C	B	B

HCM 6th Signals-Bicycles
5: S. Higuera Street & Tank Farm 05/08/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	6	4	18	6
Total Flow Rate (veh/h)	74	595	1407	963
Effct. Green for Bike (s)	6.7	18.3	18.9	35.1
Cross Street Width (ft)	85.8	75.7	62.2	54.0
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	6.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	122	333	344	638
Bicycle Delay (s/bike)	48.6	38.3	38.1	25.6
Bicycle Compliance	Poor	Poor	Poor	Fair
Bicycle LOS Score	1.71	2.41	2.39	1.89
Bicycle LOS	B	B	B	B

HCM 6th Signals-Bicycles
6: Long Street & Tank Farm Road 05/08/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	1421	787	140	90
Effct. Green for Bike (s)	36.5	40.7	7.8	7.9
Cross Street Width (ft)	24.2	24.2	60.2	60.2
Through Lanes Number	2	2	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	6.0	0.0	0.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	811	904	173	176
Bicycle Delay (s/bike)	15.9	13.5	37.5	37.4
Bicycle Compliance	Fair	Fair	Poor	Poor
Bicycle LOS Score	1.82	1.29	2.71	2.63
Bicycle LOS	B	A	C	C

HCM 6th Signals-Bicycles
8: Mindbody Entrance & Tank Farm Road 05/08/2020

Approach	EB	WB	NB
Bicycle Flow Rate (bike/h)	5	10	0
Total Flow Rate (veh/h)	1370	1507	70
Effct. Green for Bike (s)	41.7	53.9	5.9
Cross Street Width (ft)	36.5	59.2	48.9
Through Lanes Number	2	1	1
Through Lane Width (ft)	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0
Curb Is Present?	Yes	No	Yes
On Street Parking?	No	No	No
Bicycle Lane Capacity (bike/h)	927	1198	131
Bicycle Delay (s/bike)	13.0	7.3	39.3
Bicycle Compliance	Fair	Good	Poor
Bicycle LOS Score	1.96	3.67	1.14
Bicycle LOS	B	D	A

HCM 6th Signals-Bicycles
9: Broad Street (SR 227) & Tank Farm Road 05/08/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	2	1	0	10
Total Flow Rate (veh/h)	940	903	1451	1730
Effct. Green for Bike (s)	26.7	21.7	40.6	31.9
Cross Street Width (ft)	84.4	84.1	73.8	85.6
Through Lanes Number	2	2	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	5.0	5.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	411	334	625	491
Bicycle Delay (s/bike)	41.1	45.1	30.7	37.2
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	2.55	2.52	2.81	3.22
Bicycle LOS	C	C	C	C

HCM 6th Signals-Bicycles
11: Broad Street (SR 227) & Aero Drive 05/07/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	7	5
Total Flow Rate (veh/h)	152	150	1535	1003
Effct. Green for Bike (s)	13.6	7.8	93.3	88.8
Cross Street Width (ft)	58.5	74.4	36.0	38.4
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	164	94	1124	1070
Bicycle Delay (s/bike)	70.0	75.4	16.0	18.0
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	1.42	2.95	2.09	1.69
Bicycle LOS	A	C	B	B

HCM 6th Signals-Bicycles
2: Broad Street (SR 227) & Industrial Way 02/05/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	170	462	1921	1679
Effct. Green for Bike (s)	12.0	15.5	42.1	44.1
Cross Street Width (ft)	73.1	73.9	37.5	37.7
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	195	252	685	717
Bicycle Delay (s/bike)	50.1	47.0	26.6	25.3
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.96	3.45	3.72	3.52
Bicycle LOS	C	C	D	D

HCM 6th Signals-Bicycles
5: S. Higuera Street & Tank Farm Road 05/08/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	1	2	10	11
Total Flow Rate (veh/h)	52	1230	1282	1343
Effct. Green for Bike (s)	7.2	25.3	27.5	44.4
Cross Street Width (ft)	86.1	75.4	50.1	45.1
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	6.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	115	405	440	710
Bicycle Delay (s/bike)	55.5	39.8	38.2	26.1
Bicycle Compliance	Poor	Poor	Poor	Fair
Bicycle LOS Score	1.68	3.46	2.10	2.07
Bicycle LOS	B	C	B	B

HCM 6th Signals-Bicycles
6: Long Street & Tank Farm Road 05/08/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	920	1440	210	130
Effct. Green for Bike (s)	23.1	27.5	7.8	8.2
Cross Street Width (ft)	24.1	24.1	60.0	60.0
Through Lanes Number	2	2	1	1
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	6.0	0.0	0.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	578	688	195	205
Bicycle Delay (s/bike)	20.2	17.2	32.6	32.2
Bicycle Compliance	Fair	Fair	Poor	Poor
Bicycle LOS Score	1.40	1.83	2.82	2.69
Bicycle LOS	A	B	C	C

HCM 6th Signals-Bicycles
8: Mindbody Entrance & Tank Farm Road 05/08/2020

Approach	EB	WB	NB
Bicycle Flow Rate (bike/h)	8	2	2
Total Flow Rate (veh/h)	1450	1400	350
Effct. Green for Bike (s)	40.6	50.2	13.3
Cross Street Width (ft)	36.3	59.2	48.9
Through Lanes Number	2	1	1
Through Lane Width (ft)	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0
Curb Is Present?	Yes	No	Yes
On Street Parking?	No	No	No
Bicycle Lane Capacity (bike/h)	902	1116	296
Bicycle Delay (s/bike)	13.6	8.8	32.7
Bicycle Compliance	Fair	Good	Poor
Bicycle LOS Score	2.02	3.49	1.60
Bicycle LOS	B	C	B

HCM 6th Signals-Bicycles
9: Broad Street (SR 227) & Tank Farm Road 05/08/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	8	0	5	0
Total Flow Rate (veh/h)	1579	657	1904	1728
Effct. Green for Bike (s)	19.8	14.1	31.0	24.0
Cross Street Width (ft)	84.6	84.2	73.6	85.2
Through Lanes Number	2	2	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	5.0	5.0	5.0	5.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	440	313	689	533
Bicycle Delay (s/bike)	27.5	32.0	19.4	24.2
Bicycle Compliance	Fair	Poor	Fair	Fair
Bicycle LOS Score	3.08	2.32	3.18	3.22
Bicycle LOS	C	B	C	C

HCM 6th Signals-Bicycles
11: Broad Street (SR 227) & Aero Drive 05/08/2020

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	6	2
Total Flow Rate (veh/h)	300	387	1082	1458
Effct. Green for Bike (s)	16.0	16.0	55.5	57.7
Cross Street Width (ft)	60.1	73.2	36.5	38.1
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	6.0	0.0	6.0	6.0
Striped Parking Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	Yes	Yes	Yes	Yes
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	278	278	965	1003
Bicycle Delay (s/bike)	42.6	42.6	15.4	14.3
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	1.69	3.32	1.72	2.06
Bicycle LOS	B	C	B	B

Appendix E

Roadway Segment Level of Service Calculations

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HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	AM Existing	Number of Iterations	15
File Name	AM Existing_Broad_1.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Orcutt Road	Industrial Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad Street - Orcutt to Industrial)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	4050	4050	92	86	0	0	50	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.32			45.09		
1	Running Time, s	63.91			63.23		
1	Running Speed, mph	43.21			43.67		
1	Through Delay, s/veh	24.55			1.29		
1	Travel Time, s	88.46			64.52		
1	Travel Speed, mph	31.22			42.80		
1	Stop Rate, stops/veh	0.76			0.28		
1	Spatial Stop Rate, stops/mi	0.99			0.37		
1	Through vol/cap Ratio	0.84			0.39		
1	Percent of Base FFS	68.88			94.93		
1	Level of Service	B			A		
1	Auto Traveler Perception Score	2.29			2.19		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS		F		3.22		C
1	Bicycle Segment LOS Score / LOS	1.96	A		2.62		B
1	Transit Segment LOS Score / LOS	6.68	F		4.60		E

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	140.96	101.63
Facility Travel Speed, mph	24.57	34.08
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	54.06	75.34
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.38	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			3.40	C
Bicycle Facility LOS Score / LOS	1.97	A	2.55	C
Transit Facility LOS Score / LOS	6.44	F	4.75	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	AM Existing	Number of Iterations	15
File Name	AM Existing_Broad_1.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Industrial Road	Tank Farm Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Industrial to Tank Farm)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	2	2	1030	1030	80	100	0	0	70	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	45.99			45.84		
2	Running Time, s	17.65			17.60		
2	Running Speed, mph	39.80			39.90		
2	Through Delay, s/veh	34.85			19.51		
2	Travel Time, s	52.50			37.11		
2	Travel Speed, mph	13.38			18.92		
2	Stop Rate, stops/veh	0.80			0.73		
2	Spatial Stop Rate, stops/mi	4.08			3.74		
2	Through vol/cap Ratio	0.76			0.65		
2	Percent of Base FFS	29.09			41.28		
2	Level of Service	F			D		
2	Auto Traveler Perception Score	2.80			2.74		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	3.79	D		4.11		D
2	Bicycle Segment LOS Score / LOS	2.01	B		2.27		B
2	Transit Segment LOS Score / LOS	5.51	F		5.36		F

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	140.96	101.63
Facility Travel Speed, mph	24.57	34.08
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	54.06	75.34
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.38	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			3.40	C
Bicycle Facility LOS Score / LOS	1.97	A	2.55	C
Transit Facility LOS Score / LOS	6.44	F	4.75	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	AM Existing	Number of Iterations	15
File Name	AM Existing_Broad_2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Tank Farm Road	Aero Drive		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Tank Farm to Aero)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	3000	3000	80	80	0	0	100	80	45.0	45.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.36			45.46		
1	Running Time, s	92.69			92.62		
1	Running Speed, mph	22.07			22.09		
1	Through Delay, s/veh	13.56			65.20		
1	Travel Time, s	106.25			157.82		
1	Travel Speed, mph	19.25			12.96		
1	Stop Rate, stops/veh	0.63			0.97		
1	Spatial Stop Rate, stops/mi	1.11			1.71		
1	Through vol/cap Ratio	0.62			0.96		
1	Percent of Base FFS	42.44			28.51		
1	Level of Service	D			F		
1	Auto Traveler Perception Score	2.41			2.51		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.48	C		2.99	C	
1	Bicycle Segment LOS Score / LOS	1.86	A		1.77	A	
1	Transit Segment LOS Score / LOS	4.97	E		6.45	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	202.73	242.66
Facility Travel Speed, mph	25.22	21.07
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	55.00	45.81
Facility Level of Service	C	D
Facility Auto Traveler Perception Score	2.37	2.41

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.43	A	1.44	A
Transit Facility LOS Score / LOS	6.03	F	6.58	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	AM Existing	Number of Iterations	15
File Name	AM Existing_Broad_2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Aero Drive	Buckley		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Aero to Buckley)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	1	2	4500	4500	55	50	0	0	0	20	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	46.19			46.38		
2	Running Time, s	70.58			69.33		
2	Running Speed, mph	43.47			44.25		
2	Through Delay, s/veh	25.89			15.51		
2	Travel Time, s	96.48			84.84		
2	Travel Speed, mph	31.80			36.17		
2	Stop Rate, stops/veh	0.57			0.63		
2	Spatial Stop Rate, stops/mi	0.67			0.74		
2	Through vol/cap Ratio	0.77			0.82		
2	Percent of Base FFS	68.85			77.98		
2	Level of Service	B			B		
2	Auto Traveler Perception Score	2.34			2.35		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS		F			F	
2	Bicycle Segment LOS Score / LOS	1.15	A		1.22	A	
2	Transit Segment LOS Score / LOS	6.74	F		6.67	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	202.73	242.66
Facility Travel Speed, mph	25.22	21.07
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	55.00	45.81
Facility Level of Service	C	D
Facility Auto Traveler Perception Score	2.37	2.41

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.43	A	1.44	A
Transit Facility LOS Score / LOS	6.03	F	6.58	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction	City of SLO	Time Period	Am Existing	Number of Iterations	15
File Name	AM Existing_TF.xus	Analysis Year	2020	System Cycle Length, s	124
Intersections	S Higuera St	Mindbody Entrance		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Tank Farm - Higuera to MB)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	1	1	8350	8350	45	70	0	0	20	20	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.86			45.86		
1	Running Time, s	132.32			128.74		
1	Running Speed, mph	43.03			44.22		
1	Through Delay, s/veh	9.11			0.00		
1	Travel Time, s	141.43			128.74		
1	Travel Speed, mph	40.25			44.22		
1	Stop Rate, stops/veh	0.42			0.00		
1	Spatial Stop Rate, stops/mi	0.27			0.00		
1	Through vol/cap Ratio	0.88			0.00		
1	Percent of Base FFS	87.77			96.43		
1	Level of Service	A			A		
1	Auto Traveler Perception Score	2.32			2.14		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	4.82	E		3.56	D	
1	Bicycle Segment LOS Score / LOS	2.20	B		2.07	B	
1	Transit Segment LOS Score / LOS	6.66	F		6.54	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	191.38	144.50
Facility Travel Speed, mph	32.78	43.41
Facility Base Free Flow Speed, mph	45.43	45.96
Facility Percent of Base FFS	72.14	94.46
Facility Level of Service	B	A
Facility Auto Traveler Perception Score	2.35	2.14

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	4.65	E	3.69	D
Bicycle Facility LOS Score / LOS	2.16	B	2.05	B
Transit Facility LOS Score / LOS	6.64	F	6.55	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction	City of SLO	Time Period	Am Existing	Number of Iterations	15
File Name	AM Existing_TF.xus	Analysis Year	2020	System Cycle Length, s	124
Intersections	Mindbody Entrance	Broad Street		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Tank Farm - MB to Broad)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	40	45	2	1	850	850	60	45	650	650	100	0	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	41.60			46.94		
2	Running Time, s	16.76			15.36		
2	Running Speed, mph	34.58			37.73		
2	Through Delay, s/veh	33.19			0.40		
2	Travel Time, s	49.95			15.76		
2	Travel Speed, mph	11.60			36.77		
2	Stop Rate, stops/veh	0.60			0.04		
2	Spatial Stop Rate, stops/mi	3.70			0.23		
2	Through vol/cap Ratio	0.21			0.50		
2	Percent of Base FFS	27.89			78.35		
2	Level of Service	F			B		
2	Auto Traveler Perception Score	2.73			2.17		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	3.00	C		5.04	F	
2	Bicycle Segment LOS Score / LOS	1.77	A		1.89	A	
2	Transit Segment LOS Score / LOS	6.42	F		6.70	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	191.38	144.50
Facility Travel Speed, mph	32.78	43.41
Facility Base Free Flow Speed, mph	45.43	45.96
Facility Percent of Base FFS	72.14	94.46
Facility Level of Service	B	A
Facility Auto Traveler Perception Score	2.35	2.14

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	4.65	E	3.69	D
Bicycle Facility LOS Score / LOS	2.16	B	2.05	B
Transit Facility LOS Score / LOS	6.64	F	6.55	F

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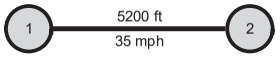
HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	2
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	1
Jurisdiction		Time Period		Number of Iterations	15
File Name	AM Existing_TF_2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Broad Street	UPRR		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Broad to Orcutt)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	40	1	1	5200	5200	78	64	0	0	100	60	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	40.62			43.16		
1	Running Time, s	89.23			85.67		
1	Running Speed, mph	39.73			41.39		
1	Through Delay, s/veh	0.28			28.59		
1	Travel Time, s	89.52			114.26		
1	Travel Speed, mph	39.61			31.03		
1	Stop Rate, stops/veh	0.01			0.65		
1	Spatial Stop Rate, stops/mi	0.01			0.66		
1	Through vol/cap Ratio	0.19			0.41		
1	Percent of Base FFS	97.52			71.90		
1	Level of Service	A			B		
1	Auto Traveler Perception Score	2.14			2.24		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.39	C		4.12	D	
1	Bicycle Segment LOS Score / LOS	2.27	B		2.55	B	
1	Transit Segment LOS Score / LOS	6.43	F		5.15	F	

Facility Output Data	Eastbound		Westbound	
Facility Travel Time, s	89.52		114.26	
Facility Travel Speed, mph	39.61		31.03	
Facility Base Free Flow Speed, mph	40.62		43.16	
Facility Percent of Base FFS	97.52		71.90	
Facility Level of Service	A		B	
Facility Auto Traveler Perception Score	2.14		2.24	
Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.39	C	4.12	D
Bicycle Facility LOS Score / LOS	2.27	C	2.55	C
Transit Facility LOS Score / LOS	6.43	F	5.15	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	PM Existing	Number of Iterations	15
File Name	PM Existing_Broad_1.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Orcutt Road	Industrial Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad Street - Orcutt to Industrial)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	4050	4050	92	86	0	0	50	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.32			45.09		
1	Running Time, s	64.01			63.97		
1	Running Speed, mph	43.14			43.17		
1	Through Delay, s/veh	30.06			1.29		
1	Travel Time, s	94.07			65.26		
1	Travel Speed, mph	29.36			42.31		
1	Stop Rate, stops/veh	0.82			0.23		
1	Spatial Stop Rate, stops/mi	1.07			0.30		
1	Through vol/cap Ratio	0.82			0.54		
1	Percent of Base FFS	64.78			93.85		
1	Level of Service	C			A		
1	Auto Traveler Perception Score	2.30			2.18		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS		F		3.81	D	
1	Bicycle Segment LOS Score / LOS	1.97	A		2.74	B	
1	Transit Segment LOS Score / LOS	6.68	F		4.68	E	

Facility Output Data	Southbound		Northbound	
Facility Travel Time, s	146.13		112.88	
Facility Travel Speed, mph	23.70		30.68	
Facility Base Free Flow Speed, mph	45.45		45.24	
Facility Percent of Base FFS	52.15		67.83	
Facility Level of Service	C		B	
Facility Auto Traveler Perception Score	2.39		2.29	
Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			3.92	D
Bicycle Facility LOS Score / LOS	2.02	B	2.67	C
Transit Facility LOS Score / LOS	6.45	F	4.84	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	PM Existing	Number of Iterations	15
File Name	PM Existing_Broad_1v2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Industrial Road	Tank Farm Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Industrial to Tank Farm)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	2	2	1030	1030	80	100	0	0	70	100	0.0	0.0

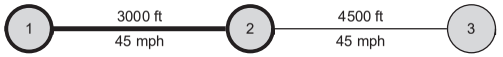
		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	45.99			45.84		
2	Running Time, s	17.70			17.70		
2	Running Speed, mph	39.67			39.68		
2	Through Delay, s/veh	34.36			29.92		
2	Travel Time, s	52.06			47.62		
2	Travel Speed, mph	13.49			14.75		
2	Stop Rate, stops/veh	0.81			0.80		
2	Spatial Stop Rate, stops/mi	4.16			4.12		
2	Through vol/cap Ratio	0.72			0.86		
2	Percent of Base FFS	29.33			32.18		
2	Level of Service	F			E		
2	Auto Traveler Perception Score	2.81			2.81		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	4.23	D		4.00	D	
2	Bicycle Segment LOS Score / LOS	2.24	B		2.40	B	
2	Transit Segment LOS Score / LOS	5.53	F		5.39	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	146.13	112.88
Facility Travel Speed, mph	23.70	30.68
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	52.15	67.83
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.39	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			3.85	D
Bicycle Facility LOS Score / LOS	2.02	B	2.67	C
Transit Facility LOS Score / LOS	6.45	F	4.83	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	PM Existing	Number of Iterations	15
File Name	PM Existing_Broad_2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Tank Farm Road	Aero Drive		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Broad - Tank Farm to Aero)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	3000	3000	80	80	0	0	100	80	45.0	45.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.36			45.46		
1	Running Time, s	92.48			91.84		
1	Running Speed, mph	22.12			22.27		
1	Through Delay, s/veh	18.46			51.70		
1	Travel Time, s	110.95			143.54		
1	Travel Speed, mph	18.44			14.25		
1	Stop Rate, stops/veh	0.68			0.96		
1	Spatial Stop Rate, stops/mi	1.19			1.68		
1	Through vol/cap Ratio	0.85			0.84		
1	Percent of Base FFS	40.64			31.35		
1	Level of Service	D			E		
1	Auto Traveler Perception Score	2.43			2.51		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.30	C		2.63	B	
1	Bicycle Segment LOS Score / LOS	1.90	A		1.67	A	
1	Transit Segment LOS Score / LOS	4.96	E		6.34	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	255.57	224.28
Facility Travel Speed, mph	20.01	22.80
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	43.63	49.56
Facility Level of Service	F	D
Facility Auto Traveler Perception Score	2.41	2.40

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.55	A	1.31	A
Transit Facility LOS Score / LOS	6.07	F	6.47	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	PM Existing	Number of Iterations	15
File Name	PM Existing_Broad_2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Aero Drive	Buckley		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Aero to Buckley)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	1	2	4500	4500	55	50	0	0	0	20	0.0	0.0

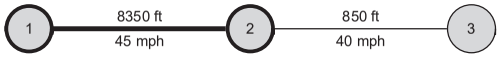
		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	46.19			46.38		
2	Running Time, s	71.65			67.98		
2	Running Speed, mph	42.82			45.13		
2	Through Delay, s/veh	72.98			12.76		
2	Travel Time, s	144.62			80.74		
2	Travel Speed, mph	21.21			38.00		
2	Stop Rate, stops/veh	0.89			0.56		
2	Spatial Stop Rate, stops/mi	1.04			0.66		
2	Through vol/cap Ratio	1.07			0.39		
2	Percent of Base FFS	45.93			81.94		
2	Level of Service	F			A		
2	Auto Traveler Perception Score	2.40			2.34		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS		F			F	
2	Bicycle Segment LOS Score / LOS	1.32	A		1.08	A	
2	Transit Segment LOS Score / LOS	6.81	F		6.55	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	255.57	224.28
Facility Travel Speed, mph	20.01	22.80
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	43.63	49.56
Facility Level of Service	F	D
Facility Auto Traveler Perception Score	2.41	2.40

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.55	A	1.31	A
Transit Facility LOS Score / LOS	6.07	F	6.47	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction	City of SLO	Time Period	PM Existing	Number of Iterations	15
File Name	PM Existing_TF.xus	Analysis Year	2020	System Cycle Length, s	124
Intersections	S Higuera St	Mindbody Entrance		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Higuera to MB)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	1	1	8350	8350	45	70	0	0	20	20	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.86			45.86		
1	Running Time, s	129.33			132.66		
1	Running Speed, mph	44.02			42.92		
1	Through Delay, s/veh	13.51			21.81		
1	Travel Time, s	142.85			154.47		
1	Travel Speed, mph	39.85			36.86		
1	Stop Rate, stops/veh	0.50			0.61		
1	Spatial Stop Rate, stops/mi	0.32			0.39		
1	Through vol/cap Ratio	0.92			0.02		
1	Percent of Base FFS	86.90			80.37		
1	Level of Service	A			A		
1	Auto Traveler Perception Score	2.32			2.20		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	4.19	D		5.01	F	
1	Bicycle Segment LOS Score / LOS	2.11	B		2.24	B	
1	Transit Segment LOS Score / LOS	6.56	F		6.84	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	191.20	173.68
Facility Travel Speed, mph	32.81	36.12
Facility Base Free Flow Speed, mph	45.43	45.96
Facility Percent of Base FFS	72.21	78.59
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.37	2.20

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	4.10	D	5.06	F
Bicycle Facility LOS Score / LOS	2.09	B	2.23	B
Transit Facility LOS Score / LOS	6.55	F	6.84	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction	City of SLO	Time Period	PM Existing	Number of Iterations	15
File Name	PM Existing_TF.xus	Analysis Year	2020	System Cycle Length, s	124
Intersections	Mindbody Entrance	Broad Street		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Tank Farm - MB to Broad)

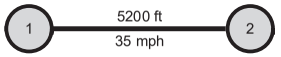
Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	40	45	2	1	850	850	60	45	650	650	100	0	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph		41.60			46.94	
2	Running Time, s		16.80			15.66	
2	Running Speed, mph		34.51			37.01	
2	Through Delay, s/veh		31.55			3.55	
2	Travel Time, s		48.35			19.21	
2	Travel Speed, mph		11.99			30.17	
2	Stop Rate, stops/veh		0.76			0.11	
2	Spatial Stop Rate, stops/mi		4.70			0.70	
2	Through vol/cap Ratio		0.61			0.79	
2	Percent of Base FFS		28.82			64.28	
2	Level of Service		F			C	
2	Auto Traveler Perception Score		2.91			2.24	
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	3.19	C		5.62	F	
2	Bicycle Segment LOS Score / LOS	1.88	A		2.07	B	
2	Transit Segment LOS Score / LOS	6.43	F		6.80	F	

Facility Output Data	Eastbound		Westbound	
Facility Travel Time, s	191.20		173.68	
Facility Travel Speed, mph	32.81		36.12	
Facility Base Free Flow Speed, mph	45.43		45.96	
Facility Percent of Base FFS	72.21		78.59	
Facility Level of Service	B		B	
Facility Auto Traveler Perception Score	2.37		2.20	
Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	4.10	D	5.06	F
Bicycle Facility LOS Score / LOS	2.09	B	2.23	B
Transit Facility LOS Score / LOS	6.55	F	6.84	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	2
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	1
Jurisdiction		Time Period		Number of Iterations	15
File Name	PM Existing_TF_2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Broad Street	UPRR		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Broad to Orcutt)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	40	1	1	5200	5200	78	64	0	0	100	60	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph		40.62			43.16	
1	Running Time, s		92.46			84.95	
1	Running Speed, mph		38.35			41.74	
1	Through Delay, s/veh		0.71			38.12	
1	Travel Time, s		93.16			123.07	
1	Travel Speed, mph		38.06			28.81	
1	Stop Rate, stops/veh		0.01			0.81	
1	Spatial Stop Rate, stops/mi		0.01			0.83	
1	Through vol/cap Ratio		0.48			0.58	
1	Percent of Base FFS		93.70			66.76	
1	Level of Service		A			C	
1	Auto Traveler Perception Score		2.14			2.26	
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	4.12	D		3.87	D	
1	Bicycle Segment LOS Score / LOS	2.62	B		2.46	B	
1	Transit Segment LOS Score / LOS	6.60	F		5.13	F	

Facility Output Data	Eastbound		Westbound	
Facility Travel Time, s	93.16		123.07	
Facility Travel Speed, mph	38.06		28.81	
Facility Base Free Flow Speed, mph	40.62		43.16	
Facility Percent of Base FFS	93.70		66.76	
Facility Level of Service	A		C	
Facility Auto Traveler Perception Score	2.14		2.26	
Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	4.12	D	3.87	D
Bicycle Facility LOS Score / LOS	2.62	C	2.46	C
Transit Facility LOS Score / LOS	6.60	F	5.13	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	AM Existing+P	Number of Iterations	15
File Name	AM Existing+P_Broad_1.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Orcutt Road	Industrial Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad Street - Orcutt to Industrial)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	4050	4050	92	86	0	0	50	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.32			45.09		
1	Running Time, s	63.91			63.27		
1	Running Speed, mph	43.21			43.64		
1	Through Delay, s/veh	24.67			1.29		
1	Travel Time, s	88.58			64.56		
1	Travel Speed, mph	31.17			42.77		
1	Stop Rate, stops/veh	0.76			0.28		
1	Spatial Stop Rate, stops/mi	0.99			0.36		
1	Through vol/cap Ratio	0.84			0.40		
1	Percent of Base FFS	68.79			94.87		
1	Level of Service	B			A		
1	Auto Traveler Perception Score	2.29			2.19		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS		F		3.24		C
1	Bicycle Segment LOS Score / LOS	1.96	A		2.63		B
1	Transit Segment LOS Score / LOS	6.68	F		4.60		E

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	142.86	101.79
Facility Travel Speed, mph	24.25	34.03
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	53.34	75.22
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.38	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			3.42	C
Bicycle Facility LOS Score / LOS	1.97	A	2.56	C
Transit Facility LOS Score / LOS	6.44	F	4.76	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	AM Existing+P	Number of Iterations	15
File Name	AM Existing+P_Broad_1.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Industrial Road	Tank Farm Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Industrial to Tank Farm)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	2	2	1030	1030	80	100	0	0	70	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	45.99			45.84		
2	Running Time, s	17.65			17.61		
2	Running Speed, mph	39.79			39.87		
2	Through Delay, s/veh	36.63			19.61		
2	Travel Time, s	54.28			37.23		
2	Travel Speed, mph	12.94			18.86		
2	Stop Rate, stops/veh	0.80			0.73		
2	Spatial Stop Rate, stops/mi	4.10			3.73		
2	Through vol/cap Ratio	0.78			0.66		
2	Percent of Base FFS	28.14			41.15		
2	Level of Service	F			D		
2	Auto Traveler Perception Score	2.80			2.74		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	3.79	D		4.12		D
2	Bicycle Segment LOS Score / LOS	2.02	B		2.30		B
2	Transit Segment LOS Score / LOS	5.52	F		5.36		F

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	142.86	101.79
Facility Travel Speed, mph	24.25	34.03
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	53.34	75.22
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.38	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			3.42	C
Bicycle Facility LOS Score / LOS	1.97	A	2.56	C
Transit Facility LOS Score / LOS	6.44	F	4.76	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	AM Existing+P	Number of Iterations	15
File Name	AM Existing+P_Broad_2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Tank Farm Road	Aero Drive		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Tank Farm to Aero)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	3000	3000	80	80	0	0	100	80	45.0	45.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.36			45.46		
1	Running Time, s	92.78			92.67		
1	Running Speed, mph	22.05			22.07		
1	Through Delay, s/veh	14.77			74.52		
1	Travel Time, s	107.55			167.18		
1	Travel Speed, mph	19.02			12.23		
1	Stop Rate, stops/veh	0.65			1.04		
1	Spatial Stop Rate, stops/mi	1.14			1.83		
1	Through vol/cap Ratio	0.66			1.00		
1	Percent of Base FFS	41.92			26.91		
1	Level of Service	D			F		
1	Auto Traveler Perception Score	2.42			2.53		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.53	D		3.05	C	
1	Bicycle Segment LOS Score / LOS	1.88	A		1.78	A	
1	Transit Segment LOS Score / LOS	4.98	E		6.45	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	203.61	252.63
Facility Travel Speed, mph	25.11	20.24
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	54.77	44.00
Facility Level of Service	C	D
Facility Auto Traveler Perception Score	2.37	2.42

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.44	A	1.44	A
Transit Facility LOS Score / LOS	6.04	F	6.58	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	AM Existing+P	Number of Iterations	15
File Name	AM Existing+P_Broad_2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Aero Drive	Buckley		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Aero to Buckley)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	1	2	4500	4500	55	50	0	0	0	20	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	46.19			46.38		
2	Running Time, s	70.57			69.36		
2	Running Speed, mph	43.48			44.24		
2	Through Delay, s/veh	25.50			16.09		
2	Travel Time, s	96.06			85.45		
2	Travel Speed, mph	31.94			35.91		
2	Stop Rate, stops/veh	0.55			0.65		
2	Spatial Stop Rate, stops/mi	0.65			0.76		
2	Through vol/cap Ratio	0.76			0.82		
2	Percent of Base FFS	69.14			77.42		
2	Level of Service	B			B		
2	Auto Traveler Perception Score	2.34			2.36		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS		F			F	
2	Bicycle Segment LOS Score / LOS	1.15	A		1.22	A	
2	Transit Segment LOS Score / LOS	6.74	F		6.67	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	203.61	252.63
Facility Travel Speed, mph	25.11	20.24
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	54.77	44.00
Facility Level of Service	C	D
Facility Auto Traveler Perception Score	2.37	2.42

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.44	A	1.44	A
Transit Facility LOS Score / LOS	6.04	F	6.58	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction	City of SLO	Time Period	Am Existing +P	Number of Iterations	15
File Name	AM Existing+P_TF.xus	Analysis Year	2020	System Cycle Length, s	124
Intersections	S Higuera St	Mindbody Entrance		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Tank Farm - Higuera to MB)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	1	1	8350	8350	45	70	0	0	20	20	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement		2	12	1	6	
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph		45.86			45.86	
1	Running Time, s		132.45			128.82	
1	Running Speed, mph		42.98			44.19	
1	Through Delay, s/veh		9.10			25.90	
1	Travel Time, s		141.55			154.72	
1	Travel Speed, mph		40.22			36.80	
1	Stop Rate, stops/veh		0.42			0.73	
1	Spatial Stop Rate, stops/mi		0.26			0.46	
1	Through vol/cap Ratio		0.89			0.01	
1	Percent of Base FFS		87.70			80.23	
1	Level of Service		A			A	
1	Auto Traveler Perception Score		2.32			2.21	
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	4.84		E	3.59		D
1	Bicycle Segment LOS Score / LOS	2.21		B	2.07		B
1	Transit Segment LOS Score / LOS	6.67		F	6.54		F

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	191.33	170.44
Facility Travel Speed, mph	32.79	36.80
Facility Base Free Flow Speed, mph	45.43	45.96
Facility Percent of Base FFS	72.16	80.08
Facility Level of Service	B	A
Facility Auto Traveler Perception Score	2.35	2.21

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	4.68	E	3.72	D
Bicycle Facility LOS Score / LOS	2.17	B	2.06	B
Transit Facility LOS Score / LOS	6.64	F	6.55	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction	City of SLO	Time Period	Am Existing +P	Number of Iterations	15
File Name	AM Existing+P_TF.xus	Analysis Year	2020	System Cycle Length, s	124
Intersections	Mindbody Entrance	Broad Street		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Tank Farm - MB to Broad)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	40	45	2	1	850	850	60	45	650	650	100	0	0.0	0.0

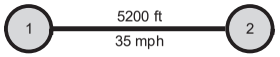
		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph		41.60			46.94	
2	Running Time, s		16.77			15.37	
2	Running Speed, mph		34.56			37.70	
2	Through Delay, s/veh		33.01			0.35	
2	Travel Time, s		49.78			15.72	
2	Travel Speed, mph		11.64			36.87	
2	Stop Rate, stops/veh		0.58			0.03	
2	Spatial Stop Rate, stops/mi		3.62			0.20	
2	Through vol/cap Ratio		0.20			0.50	
2	Percent of Base FFS		27.99			78.55	
2	Level of Service		F			B	
2	Auto Traveler Perception Score		2.72			2.17	
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	3.02		C	5.06		F
2	Bicycle Segment LOS Score / LOS	1.77		A	1.90		A
2	Transit Segment LOS Score / LOS	6.42		F	6.70		F

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	191.33	170.44
Facility Travel Speed, mph	32.79	36.80
Facility Base Free Flow Speed, mph	45.43	45.96
Facility Percent of Base FFS	72.16	80.08
Facility Level of Service	B	A
Facility Auto Traveler Perception Score	2.35	2.21

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	4.68	E	3.72	D
Bicycle Facility LOS Score / LOS	2.17	B	2.06	B
Transit Facility LOS Score / LOS	6.64	F	6.55	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	2
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	1
Jurisdiction		Time Period	Am Existing +P	Number of Iterations	15
File Name	AM Existing+P_TF_2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Broad Street	UPRR		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Broad to Orcutt)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	40	1	1	5200	5200	78	64	0	0	100	60	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	40.62			43.16		
1	Running Time, s	89.25			85.67		
1	Running Speed, mph	39.72			41.39		
1	Through Delay, s/veh	0.28			28.82		
1	Travel Time, s	89.54			114.49		
1	Travel Speed, mph	39.60			30.97		
1	Stop Rate, stops/veh	0.01			0.64		
1	Spatial Stop Rate, stops/mi	0.01			0.65		
1	Through vol/cap Ratio	0.19			0.40		
1	Percent of Base FFS	97.50			71.76		
1	Level of Service	A			B		
1	Auto Traveler Perception Score	2.14			2.24		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.40	C		4.12	D	
1	Bicycle Segment LOS Score / LOS	2.28	B		2.55	B	
1	Transit Segment LOS Score / LOS	6.43	F		5.15	F	

Facility Output Data	Eastbound		Westbound	
Facility Travel Time, s	89.54		114.49	
Facility Travel Speed, mph	39.60		30.97	
Facility Base Free Flow Speed, mph	40.62		43.16	
Facility Percent of Base FFS	97.50		71.76	
Facility Level of Service	A		B	
Facility Auto Traveler Perception Score	2.14		2.24	
Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.40	C	4.12	D
Bicycle Facility LOS Score / LOS	2.28	C	2.55	C
Transit Facility LOS Score / LOS	6.43	F	5.15	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	PM Existing+P	Number of Iterations	15
File Name	PM Existing+P_Broad_1.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Orcutt Road	Industrial Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad Street - Orcutt to Industrial)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	4050	4050	92	86	0	0	50	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.32			45.09		
1	Running Time, s	64.01			64.03		
1	Running Speed, mph	43.14			43.13		
1	Through Delay, s/veh	30.10			1.29		
1	Travel Time, s	94.10			65.32		
1	Travel Speed, mph	29.34			42.27		
1	Stop Rate, stops/veh	0.82			0.22		
1	Spatial Stop Rate, stops/mi	1.07			0.29		
1	Through vol/cap Ratio	0.82			0.55		
1	Percent of Base FFS	64.75			93.77		
1	Level of Service	C			A		
1	Auto Traveler Perception Score	2.30			2.18		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS		F		3.85	D	
1	Bicycle Segment LOS Score / LOS	1.97	A		2.75	C	
1	Transit Segment LOS Score / LOS	6.68	F		4.69	E	

Facility Output Data	Southbound		Northbound	
Facility Travel Time, s	147.17		113.32	
Facility Travel Speed, mph	23.54		30.57	
Facility Base Free Flow Speed, mph	45.45		45.24	
Facility Percent of Base FFS	51.78		67.57	
Facility Level of Service	C		B	
Facility Auto Traveler Perception Score	2.39		2.29	
Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			3.95	D
Bicycle Facility LOS Score / LOS	2.03	B	2.68	C
Transit Facility LOS Score / LOS	6.45	F	4.84	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	PM Existing+P	Number of Iterations	15
File Name	PM Existing+P_Broad_1v2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Industrial Road	Tank Farm Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Industrial to Tank Farm)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	2	2	1030	1030	80	100	0	0	70	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	45.99			45.84		
2	Running Time, s	17.70			17.71		
2	Running Speed, mph	39.67			39.64		
2	Through Delay, s/veh	35.36			30.28		
2	Travel Time, s	53.06			48.00		
2	Travel Speed, mph	13.23			14.63		
2	Stop Rate, stops/veh	0.82			0.81		
2	Spatial Stop Rate, stops/mi	4.23			4.13		
2	Through vol/cap Ratio	0.75			0.87		
2	Percent of Base FFS	28.78			31.92		
2	Level of Service	F			E		
2	Auto Traveler Perception Score	2.83			2.81		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	4.25	D		4.03	D	
2	Bicycle Segment LOS Score / LOS	2.25	B		2.42	B	
2	Transit Segment LOS Score / LOS	5.53	F		5.40	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	147.17	113.32
Facility Travel Speed, mph	23.54	30.57
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	51.78	67.57
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.39	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			3.88	D
Bicycle Facility LOS Score / LOS	2.03	B	2.68	C
Transit Facility LOS Score / LOS	6.45	F	4.83	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	PM Existing+P	Number of Iterations	15
File Name	PM Existing+P_Broad_2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Tank Farm Road	Aero Drive		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Tank Farm to Aero)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	3000	3000	80	80	0	0	100	80	45.0	45.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.36			45.46		
1	Running Time, s	92.57			91.89		
1	Running Speed, mph	22.10			22.26		
1	Through Delay, s/veh	20.86			57.62		
1	Travel Time, s	113.43			149.52		
1	Travel Speed, mph	18.03			13.68		
1	Stop Rate, stops/veh	0.72			1.01		
1	Spatial Stop Rate, stops/mi	1.26			1.77		
1	Through vol/cap Ratio	0.87			0.88		
1	Percent of Base FFS	39.75			30.10		
1	Level of Service	E			E		
1	Auto Traveler Perception Score	2.44			2.52		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.37	C		2.76	C	
1	Bicycle Segment LOS Score / LOS	1.92	A		1.71	A	
1	Transit Segment LOS Score / LOS	4.98	E		6.35	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	258.65	231.15
Facility Travel Speed, mph	19.77	22.12
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	43.11	48.09
Facility Level of Service	F	D
Facility Auto Traveler Perception Score	2.42	2.41

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.56	A	1.33	A
Transit Facility LOS Score / LOS	6.08	F	6.47	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	PM Existing+P	Number of Iterations	15
File Name	PM Existing+P_Broad_2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Aero Drive	Buckley		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Aero to Buckley)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	1	2	4500	4500	55	50	0	0	0	20	0.0	0.0

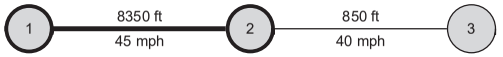
		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	46.19			46.38		
2	Running Time, s	71.66			67.98		
2	Running Speed, mph	42.81			45.13		
2	Through Delay, s/veh	73.56			13.66		
2	Travel Time, s	145.22			81.64		
2	Travel Speed, mph	21.13			37.58		
2	Stop Rate, stops/veh	0.89			0.54		
2	Spatial Stop Rate, stops/mi	1.05			0.63		
2	Through vol/cap Ratio	1.07			0.37		
2	Percent of Base FFS	45.74			81.03		
2	Level of Service	F			A		
2	Auto Traveler Perception Score	2.40			2.34		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS		F			F	
2	Bicycle Segment LOS Score / LOS	1.33	A		1.08	A	
2	Transit Segment LOS Score / LOS	6.81	F		6.55	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	258.65	231.15
Facility Travel Speed, mph	19.77	22.12
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	43.11	48.09
Facility Level of Service	F	D
Facility Auto Traveler Perception Score	2.42	2.41

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.56	A	1.33	A
Transit Facility LOS Score / LOS	6.08	F	6.47	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction	City of SLO	Time Period	PM Existing +P	Number of Iterations	15
File Name	PM Existing+P_TF.xus	Analysis Year	2020	System Cycle Length, s	124
Intersections	S Higuera St	Mindbody Entrance		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Higuera to MB)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	1	1	8350	8350	45	70	0	0	20	20	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement		2	12	1	6	
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.86			45.86		
1	Running Time, s	129.46			132.83		
1	Running Speed, mph	43.97			42.86		
1	Through Delay, s/veh	14.20			22.11		
1	Travel Time, s	143.66			154.94		
1	Travel Speed, mph	39.63			36.75		
1	Stop Rate, stops/veh	0.51			0.61		
1	Spatial Stop Rate, stops/mi	0.32			0.39		
1	Through vol/cap Ratio	0.93			0.02		
1	Percent of Base FFS	86.41			80.13		
1	Level of Service	A			A		
1	Auto Traveler Perception Score	2.32			2.20		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	4.22	D		5.05	F	
1	Bicycle Segment LOS Score / LOS	2.12	B		2.25	B	
1	Transit Segment LOS Score / LOS	6.56	F		6.85	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	192.41	174.27
Facility Travel Speed, mph	32.60	35.99
Facility Base Free Flow Speed, mph	45.43	45.96
Facility Percent of Base FFS	71.76	78.32
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.37	2.20

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	4.13	D	5.10	F
Bicycle Facility LOS Score / LOS	2.10	B	2.23	B
Transit Facility LOS Score / LOS	6.55	F	6.84	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction	City of SLO	Time Period	PM Existing +P	Number of Iterations	15
File Name	PM Existing+P_TF.xus	Analysis Year	2020	System Cycle Length, s	124
Intersections	Mindbody Entrance	Broad Street		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Tank Farm - MB to Broad)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	40	45	2	1	850	850	60	45	650	650	100	0	0.0	0.0

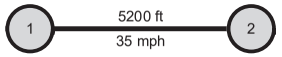
Segment Output Data		Eastbound			Westbound		
Segment	Movement	EBL	EBT	EBR	WBL	WBT	WBR
2	Bay/Lane Spillback Time, h			12	1	6	
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph		41.60			46.94	
2	Running Time, s		16.80			15.68	
2	Running Speed, mph		34.49			36.97	
2	Through Delay, s/veh		31.95			3.66	
2	Travel Time, s		48.75			19.33	
2	Travel Speed, mph		11.89			29.97	
2	Stop Rate, stops/veh		0.76			0.11	
2	Spatial Stop Rate, stops/mi		4.73			0.68	
2	Through vol/cap Ratio		0.63			0.80	
2	Percent of Base FFS		28.58			63.86	
2	Level of Service		F			C	
2	Auto Traveler Perception Score		2.92			2.24	
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	3.22	C		5.65	F	
2	Bicycle Segment LOS Score / LOS	1.88	A		2.08	B	
2	Transit Segment LOS Score / LOS	6.43	F		6.80	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	192.41	174.27
Facility Travel Speed, mph	32.60	35.99
Facility Base Free Flow Speed, mph	45.43	45.96
Facility Percent of Base FFS	71.76	78.32
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.37	2.20

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	4.13	D	5.10	F
Bicycle Facility LOS Score / LOS	2.10	B	2.23	B
Transit Facility LOS Score / LOS	6.55	F	6.84	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	2
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	1
Jurisdiction		Time Period	PM Existing+P	Number of Iterations	15
File Name	PM Existing+P_TF_2.xus	Analysis Year	2020	System Cycle Length, s	120
Intersections	Broad Street	UPRR		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Broad to Orcutt)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	40	1	1	5200	5200	78	64	0	0	100	60	0.0	0.0

Segment Output Data		Eastbound			Westbound		
Segment	Movement	EBL	EBT	EBR	WBL	WBT	WBR
1	Bay/Lane Spillback Time, h	5	2	12	1	6	16
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph		40.62			43.16	
1	Running Time, s		92.49			84.95	
1	Running Speed, mph		38.33			41.74	
1	Through Delay, s/veh		0.70			37.90	
1	Travel Time, s		93.19			122.85	
1	Travel Speed, mph		38.05			28.86	
1	Stop Rate, stops/veh		0.01			0.81	
1	Spatial Stop Rate, stops/mi		0.01			0.82	
1	Through vol/cap Ratio		0.48			0.57	
1	Percent of Base FFS		93.67			66.87	
1	Level of Service		A			C	
1	Auto Traveler Perception Score		2.14			2.26	
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	4.12	D		3.87	D	
1	Bicycle Segment LOS Score / LOS	2.62	B		2.46	B	
1	Transit Segment LOS Score / LOS	6.60	F		5.13	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	93.19	122.85
Facility Travel Speed, mph	38.05	28.86
Facility Base Free Flow Speed, mph	40.62	43.16
Facility Percent of Base FFS	93.67	66.87
Facility Level of Service	A	C
Facility Auto Traveler Perception Score	2.14	2.26

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	4.12	D	3.87	D
Bicycle Facility LOS Score / LOS	2.62	C	2.46	C
Transit Facility LOS Score / LOS	6.60	F	5.13	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	AM Future+P	Number of Iterations	15
File Name	AM Future_Broad_1.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Orcutt Road	Industrial Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad Street - Orcutt to Industrial)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	4050	4050	92	86	0	0	50	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.32			45.09		
1	Running Time, s	63.71			63.86		
1	Running Speed, mph	43.34			43.24		
1	Through Delay, s/veh	25.08			1.37		
1	Travel Time, s	88.79			65.24		
1	Travel Speed, mph	31.10			42.33		
1	Stop Rate, stops/veh	0.77			0.27		
1	Spatial Stop Rate, stops/mi	1.01			0.35		
1	Through vol/cap Ratio	0.81			0.49		
1	Percent of Base FFS	68.63			93.89		
1	Level of Service	B			A		
1	Auto Traveler Perception Score	2.29			2.19		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS		F		3.59		D
1	Bicycle Segment LOS Score / LOS	1.93	A		2.72		B
1	Transit Segment LOS Score / LOS	6.66	F		4.66		E

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	143.03	106.30
Facility Travel Speed, mph	24.22	32.58
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	53.28	72.03
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.37	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			3.68	D
Bicycle Facility LOS Score / LOS	1.99	A	2.67	C
Transit Facility LOS Score / LOS	6.43	F	4.80	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	AM Future+P	Number of Iterations	15
File Name	AM Future_Broad_1.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Industrial Road	Tank Farm Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Industrial to Tank Farm)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	2	2	1030	1030	80	100	0	0	70	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	45.99			45.84		
2	Running Time, s	17.67			17.76		
2	Running Speed, mph	39.74			39.55		
2	Through Delay, s/veh	36.56			23.30		
2	Travel Time, s	54.23			41.06		
2	Travel Speed, mph	12.95			17.10		
2	Stop Rate, stops/veh	0.71			0.75		
2	Spatial Stop Rate, stops/mi	3.64			3.86		
2	Through vol/cap Ratio	0.55			0.83		
2	Percent of Base FFS	28.16			37.31		
2	Level of Service	F			E		
2	Auto Traveler Perception Score	2.72			2.76		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	3.98	D		4.05		D
2	Bicycle Segment LOS Score / LOS	2.21	B		2.45		B
2	Transit Segment LOS Score / LOS	5.53	F		5.38		F

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	143.03	106.30
Facility Travel Speed, mph	24.22	32.58
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	53.28	72.03
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.37	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			3.68	D
Bicycle Facility LOS Score / LOS	1.99	A	2.67	C
Transit Facility LOS Score / LOS	6.43	F	4.80	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	AM Future	Number of Iterations	15
File Name	AM Future_Broad_2.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Tank Farm Road	Aero Drive		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Tank Farm to Aero)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	3000	3000	80	80	0	0	100	80	45.0	45.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.36			45.46		
1	Running Time, s	92.97			92.88		
1	Running Speed, mph	22.00			22.02		
1	Through Delay, s/veh	17.21			92.83		
1	Travel Time, s	110.18			185.71		
1	Travel Speed, mph	18.56			11.01		
1	Stop Rate, stops/veh	0.69			1.17		
1	Spatial Stop Rate, stops/mi	1.22			2.06		
1	Through vol/cap Ratio	0.73			1.06		
1	Percent of Base FFS	40.92			24.23		
1	Level of Service	D			F		
1	Auto Traveler Perception Score	2.43			2.57		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.63	D		3.33	C	
1	Bicycle Segment LOS Score / LOS	1.94	A		1.86	A	
1	Transit Segment LOS Score / LOS	5.01	F		6.48	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	208.98	273.91
Facility Travel Speed, mph	24.47	18.67
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	53.36	40.58
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.53	A	1.49	A
Transit Facility LOS Score / LOS	6.09	F	6.60	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	AM Future	Number of Iterations	15
File Name	AM Future_Broad_2.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Aero Drive	Buckley		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Aero to Buckley)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	1	2	4500	4500	55	50	0	0	0	20	0.0	0.0

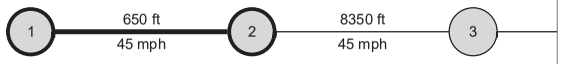
		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	46.19			46.38		
2	Running Time, s	71.59			69.51		
2	Running Speed, mph	42.86			44.14		
2	Through Delay, s/veh	27.22			18.68		
2	Travel Time, s	98.80			88.20		
2	Travel Speed, mph	31.05			34.79		
2	Stop Rate, stops/veh	0.53			0.69		
2	Spatial Stop Rate, stops/mi	0.63			0.82		
2	Through vol/cap Ratio	0.80			0.84		
2	Percent of Base FFS	67.22			75.01		
2	Level of Service	B			B		
2	Auto Traveler Perception Score	2.34			2.37		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS		F			F	
2	Bicycle Segment LOS Score / LOS	1.27	A		1.24	A	
2	Transit Segment LOS Score / LOS	6.81	F		6.68	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	208.98	273.91
Facility Travel Speed, mph	24.47	18.67
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	53.36	40.58
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.53	A	1.49	A
Transit Facility LOS Score / LOS	6.09	F	6.60	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	4
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	3
Jurisdiction	City of SLO	Time Period	Am Future	Number of Iterations	15
File Name	AM Future_TF.xus	Analysis Year	2040	System Cycle Length, s	124
Intersections	S Higuera St	Long Street		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Higuera to Long)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	2	1	650	650	75	75	0	0	100	100	0.0	0.0

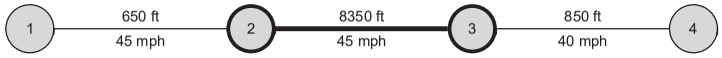
		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.92			45.56		
1	Running Time, s	12.59			12.82		
1	Running Speed, mph	35.19			34.57		
1	Through Delay, s/veh	20.04			31.08		
1	Travel Time, s	32.63			43.90		
1	Travel Speed, mph	13.58			10.10		
1	Stop Rate, stops/veh	0.71			0.68		
1	Spatial Stop Rate, stops/mi	5.75			5.51		
1	Through vol/cap Ratio	0.83			0.04		
1	Percent of Base FFS	29.58			22.16		
1	Level of Service	F			F		
1	Auto Traveler Perception Score	3.11			3.06		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.37	C		3.41	C	
1	Bicycle Segment LOS Score / LOS	2.48	B		2.02	B	
1	Transit Segment LOS Score / LOS	6.45	F		6.57	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	229.75	202.74
Facility Travel Speed, mph	29.23	33.13
Facility Base Free Flow Speed, mph	45.93	46.41
Facility Percent of Base FFS	63.65	71.38
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.46	2.33

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.90	D	3.89	D
Bicycle Facility LOS Score / LOS	3.03	C	2.86	C
Transit Facility LOS Score / LOS	1.55	A	1.43	A

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	4
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	3
Jurisdiction	City of SLO	Time Period	Am Future	Number of Iterations	15
File Name	AM Future_TF.xus	Analysis Year	2040	System Cycle Length, s	124
Intersections	Long Street	Mindbody Entrance		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	45	45	1	2	8350	8350	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	131.36			126.69		
2	Running Speed, mph	43.34			44.94		
2	Through Delay, s/veh	11.91			14.77		
2	Travel Time, s	143.27			141.46		
2	Travel Speed, mph	39.74			40.25		
2	Stop Rate, stops/veh	0.49			0.67		
2	Spatial Stop Rate, stops/mi	0.31			0.43		
2	Through vol/cap Ratio	0.90			0.57		
2	Percent of Base FFS	85.60			86.70		
2	Level of Service	A			A		
2	Auto Traveler Perception Score	2.39			2.31		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	4.03	D		3.70	D	
2	Bicycle Segment LOS Score / LOS	3.19	C		2.97	C	
2	Transit Segment LOS Score / LOS	0.67	A		0.48	A	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	229.75	202.74
Facility Travel Speed, mph	29.23	33.13
Facility Base Free Flow Speed, mph	45.93	46.41
Facility Percent of Base FFS	63.65	71.38
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.46	2.33

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.90	D	3.89	D
Bicycle Facility LOS Score / LOS	3.03	C	2.86	C
Transit Facility LOS Score / LOS	1.55	A	1.43	A

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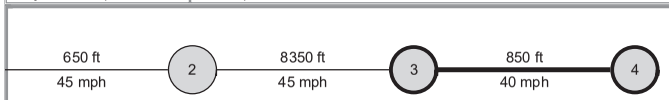
HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	4
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	3
Jurisdiction	City of SLO	Time Period	Am Future	Number of Iterations	15
File Name	AM Future_TF.xus	Analysis Year	2040	System Cycle Length, s	124
Intersections	Mindbody Entrance	Broad Street		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - MB to Broad)

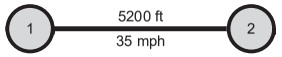
Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
3	40	45	2	1	850	850	60	45	650	650	100	0	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement		2	12	1	6	
3	Bay/Lane Spillback Time, h						
3	Shared Lane Spillback Time, h						
3	Base Free-Flow Speed, mph		41.60			46.94	
3	Running Time, s		16.77			16.03	
3	Running Speed, mph		34.57			36.16	
3	Through Delay, s/veh		37.08			1.36	
3	Travel Time, s		53.85			17.39	
3	Travel Speed, mph		10.76			33.33	
3	Stop Rate, stops/veh		0.64			0.03	
3	Spatial Stop Rate, stops/mi		3.97			0.21	
3	Through vol/cap Ratio		0.27			0.89	
3	Percent of Base FFS		25.87			71.01	
3	Level of Service		F			B	
3	Auto Traveler Perception Score		2.78			2.17	
Multimodal Results (Segment)							
3	Pedestrian Segment LOS Score / LOS	3.12	C		6.20	F	
3	Bicycle Segment LOS Score / LOS	1.81	A		2.45	B	
3	Transit Segment LOS Score / LOS	6.42	F		6.89	F	

Facility Output Data	Eastbound		Westbound	
Facility Travel Time, s	229.75		202.74	
Facility Travel Speed, mph	29.23		33.13	
Facility Base Free Flow Speed, mph	45.93		46.41	
Facility Percent of Base FFS	63.65		71.38	
Facility Level of Service	C		B	
Facility Auto Traveler Perception Score	2.46		2.33	
Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.90	D	3.89	D
Bicycle Facility LOS Score / LOS	3.03	C	2.86	C
Transit Facility LOS Score / LOS	1.55	A	1.43	A

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	2
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	1
Jurisdiction		Time Period	AM Future	Number of Iterations	15
File Name	AM Future_TF_2.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Broad Street	UPRR		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Broad to Orcutt)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	40	1	1	5200	5200	78	64	0	0	100	60	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph		40.62			43.16	
1	Running Time, s		89.71			85.89	
1	Running Speed, mph		39.52			41.28	
1	Through Delay, s/veh		0.34			40.96	
1	Travel Time, s		90.05			126.86	
1	Travel Speed, mph		39.37			27.95	
1	Stop Rate, stops/veh		0.01			0.73	
1	Spatial Stop Rate, stops/mi		0.01			0.74	
1	Through vol/cap Ratio		0.24			0.58	
1	Percent of Base FFS		96.94			64.76	
1	Level of Service		A			C	
1	Auto Traveler Perception Score		2.14			2.25	
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.56	D		4.20	D	
1	Bicycle Segment LOS Score / LOS	2.34	B		2.57	B	
1	Transit Segment LOS Score / LOS	6.46	F		5.19	F	

Facility Output Data	Eastbound		Westbound	
Facility Travel Time, s	90.05		126.86	
Facility Travel Speed, mph	39.37		27.95	
Facility Base Free Flow Speed, mph	40.62		43.16	
Facility Percent of Base FFS	96.94		64.76	
Facility Level of Service	A		C	
Facility Auto Traveler Perception Score	2.14		2.25	
Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.56	D	4.20	D
Bicycle Facility LOS Score / LOS	2.34	C	2.57	C
Transit Facility LOS Score / LOS	6.46	F	5.19	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	PM Future	Number of Iterations	15
File Name	PM Future_Broad_1.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Orcutt Road	Industrial Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad Street - Orcutt to Industrial)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	4050	4050	92	86	0	0	50	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.32			45.09		
1	Running Time, s	63.80			65.12		
1	Running Speed, mph	43.28			42.41		
1	Through Delay, s/veh	27.19			1.33		
1	Travel Time, s	90.99			66.44		
1	Travel Speed, mph	30.35			41.56		
1	Stop Rate, stops/veh	0.68			0.19		
1	Spatial Stop Rate, stops/mi	0.89			0.25		
1	Through vol/cap Ratio	0.71			0.67		
1	Percent of Base FFS	66.97			92.18		
1	Level of Service	C			A		
1	Auto Traveler Perception Score	2.27			2.18		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS		F		4.55	E	
1	Bicycle Segment LOS Score / LOS	1.94	A		2.85	C	
1	Transit Segment LOS Score / LOS	6.67	F		4.77	E	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	149.01	134.23
Facility Travel Speed, mph	23.24	25.80
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	51.14	57.04
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.37	2.30

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			4.53	E
Bicycle Facility LOS Score / LOS	2.01	B	2.81	C
Transit Facility LOS Score / LOS	6.44	F	4.93	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	PM Future	Number of Iterations	15
File Name	PM Future_Broad_1.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Industrial Road	Tank Farm Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Industrial to Tank Farm)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	2	2	1030	1030	80	100	0	0	70	100	0.0	0.0

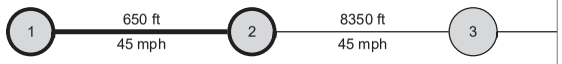
		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	45.99			45.84		
2	Running Time, s	17.70			17.95		
2	Running Speed, mph	39.67			39.12		
2	Through Delay, s/veh	40.32			49.84		
2	Travel Time, s	58.02			67.79		
2	Travel Speed, mph	12.10			10.36		
2	Stop Rate, stops/veh	0.87			0.95		
2	Spatial Stop Rate, stops/mi	4.47			4.84		
2	Through vol/cap Ratio	0.83			1.02		
2	Percent of Base FFS	26.32			22.60		
2	Level of Service	F			F		
2	Auto Traveler Perception Score	2.87			2.94		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	4.62	E		4.44	E	
2	Bicycle Segment LOS Score / LOS	2.28	B		2.65	B	
2	Transit Segment LOS Score / LOS	5.55	F		5.56	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	149.01	134.23
Facility Travel Speed, mph	23.24	25.80
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	51.14	57.04
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.37	2.30

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			4.53	E
Bicycle Facility LOS Score / LOS	2.01	B	2.81	C
Transit Facility LOS Score / LOS	6.44	F	4.93	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	4
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	3
Jurisdiction	City of SLO	Time Period	PM Future	Number of Iterations	15
File Name	PM Future_TF.xus	Analysis Year	2040	System Cycle Length, s	124
Intersections	S Higuera St	Long Street		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Higuera to Long)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	2	1	650	650	75	75	0	0	100	100	0.0	0.0

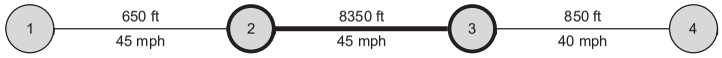
Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.92			45.56		
1	Running Time, s	12.53			12.65		
1	Running Speed, mph	35.38			35.03		
1	Through Delay, s/veh	25.39			26.46		
1	Travel Time, s	37.92			39.11		
1	Travel Speed, mph	11.69			11.33		
1	Stop Rate, stops/veh	0.78			0.70		
1	Spatial Stop Rate, stops/mi	6.32			5.68		
1	Through vol/cap Ratio	0.73			0.03		
1	Percent of Base FFS	25.45			24.87		
1	Level of Service	F			F		
1	Auto Traveler Perception Score	3.21			3.09		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.20	C		3.31	C	
1	Bicycle Segment LOS Score / LOS	2.22	B		1.99	A	
1	Transit Segment LOS Score / LOS	6.41	F		6.48	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	244.29	605.09
Facility Travel Speed, mph	27.49	11.10
Facility Base Free Flow Speed, mph	45.93	46.41
Facility Percent of Base FFS	59.86	23.92
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.49	2.40

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.93	D	5.36	F
Bicycle Facility LOS Score / LOS	2.98	C	3.11	C
Transit Facility LOS Score / LOS	1.65	A	1.55	A

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	4
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	3
Jurisdiction	City of SLO	Time Period	PM Future	Number of Iterations	15
File Name	PM Future_TF.xus	Analysis Year	2040	System Cycle Length, s	124
Intersections	Long Street	Mindbody Entrance		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Long to MB)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	45	45	1	1	8350	8350	50	50	0	0	70	70	0.0	0.0

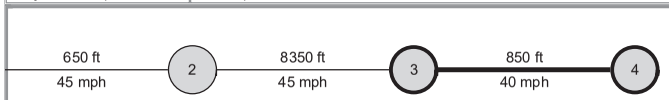
Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	129.70			134.16		
2	Running Speed, mph	43.89			42.44		
2	Through Delay, s/veh	54.54			405.83		
2	Travel Time, s	184.24			539.98		
2	Travel Speed, mph	30.90			10.54		
2	Stop Rate, stops/veh	0.94			2.43		
2	Spatial Stop Rate, stops/mi	0.59			1.53		
2	Through vol/cap Ratio	1.05			1.84		
2	Percent of Base FFS	66.56			22.71		
2	Level of Service	F			F		
2	Auto Traveler Perception Score	2.44			2.37		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	4.03	D		5.60	F	
2	Bicycle Segment LOS Score / LOS	3.14	C		3.27	C	
2	Transit Segment LOS Score / LOS	1.11	A		0.62	A	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	271.04	602.12
Facility Travel Speed, mph	24.78	11.15
Facility Base Free Flow Speed, mph	45.93	46.41
Facility Percent of Base FFS	53.95	24.03
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.51	2.40

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.94	D	5.49	F
Bicycle Facility LOS Score / LOS	2.98	C	3.11	C
Transit Facility LOS Score / LOS	1.92	A	1.55	A

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	4
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	3
Jurisdiction	City of SLO	Time Period	PM Future	Number of Iterations	15
File Name	PM Future_TF.xus	Analysis Year	2040	System Cycle Length, s	124
Intersections	Mindbody Entrance	Broad Street		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - MB to Broad)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
3	40	45	2	1	850	850	60	45	650	650	100	0	0.0	0.0

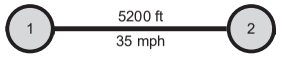
		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement		2	12	1	6	
3	Bay/Lane Spillback Time, h						
3	Shared Lane Spillback Time, h						
3	Base Free-Flow Speed, mph		41.60			46.94	
3	Running Time, s		16.83			15.95	
3	Running Speed, mph		34.44			36.34	
3	Through Delay, s/veh		32.16			10.31	
3	Travel Time, s		48.99			26.26	
3	Travel Speed, mph		11.83			22.07	
3	Stop Rate, stops/veh		0.71			0.15	
3	Spatial Stop Rate, stops/mi		4.42			0.94	
3	Through vol/cap Ratio		0.55			0.94	
3	Percent of Base FFS		28.44			47.02	
3	Level of Service		F			D	
3	Auto Traveler Perception Score		2.86			2.28	
Multimodal Results (Segment)							
3	Pedestrian Segment LOS Score / LOS	3.50	D		6.07	F	
3	Bicycle Segment LOS Score / LOS	2.04	B		2.36	B	
3	Transit Segment LOS Score / LOS	6.44	F		6.88	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	244.29	605.09
Facility Travel Speed, mph	27.49	11.10
Facility Base Free Flow Speed, mph	45.93	46.41
Facility Percent of Base FFS	59.86	23.92
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.49	2.40

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.93	D	5.36	F
Bicycle Facility LOS Score / LOS	2.98	C	3.11	C
Transit Facility LOS Score / LOS	1.65	A	1.55	A

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	2
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	1
Jurisdiction		Time Period	PM Future	Number of Iterations	15
File Name	PM Future_TF_2.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Broad Street	UPRR		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Broad to Orcutt)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	40	1	1	5200	5200	78	64	0	0	100	60	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph		40.62			43.16	
1	Running Time, s		93.85			85.11	
1	Running Speed, mph		37.78			41.66	
1	Through Delay, s/veh		0.43			52.79	
1	Travel Time, s		94.28			137.90	
1	Travel Speed, mph		37.60			25.71	
1	Stop Rate, stops/veh		0.00			0.94	
1	Spatial Stop Rate, stops/mi		0.00			0.96	
1	Through vol/cap Ratio		0.58			0.79	
1	Percent of Base FFS		92.59			59.57	
1	Level of Service		A			C	
1	Auto Traveler Perception Score		2.14			2.28	
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	4.53	E		3.93	D	
1	Bicycle Segment LOS Score / LOS	2.68	B		2.49	B	
1	Transit Segment LOS Score / LOS	6.66	F		5.17	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	94.28	137.90
Facility Travel Speed, mph	37.60	25.71
Facility Base Free Flow Speed, mph	40.62	43.16
Facility Percent of Base FFS	92.59	59.57
Facility Level of Service	A	C
Facility Auto Traveler Perception Score	2.14	2.28

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	4.53	E	3.93	D
Bicycle Facility LOS Score / LOS	2.68	C	2.49	C
Transit Facility LOS Score / LOS	6.66	F	5.17	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	AM Future+P	Number of Iterations	15
File Name	AM Future+P_Broad_1.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Orcutt Road	Industrial Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad Street - Orcutt to Industrial)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	4050	4050	92	86	0	0	50	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.32			45.09		
1	Running Time, s	63.71			63.90		
1	Running Speed, mph	43.34			43.22		
1	Through Delay, s/veh	24.98			1.37		
1	Travel Time, s	88.69			65.27		
1	Travel Speed, mph	31.13			42.31		
1	Stop Rate, stops/veh	0.77			0.27		
1	Spatial Stop Rate, stops/mi	1.01			0.35		
1	Through vol/cap Ratio	0.81			0.49		
1	Percent of Base FFS	68.70			93.84		
1	Level of Service	B			A		
1	Auto Traveler Perception Score	2.29			2.19		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS		F		3.61	D	
1	Bicycle Segment LOS Score / LOS	1.93	A		2.73	B	
1	Transit Segment LOS Score / LOS	6.66	F		4.66	E	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	143.71	106.56
Facility Travel Speed, mph	24.10	32.50
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	53.03	71.86
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.37	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			3.70	D
Bicycle Facility LOS Score / LOS	1.99	A	2.67	C
Transit Facility LOS Score / LOS	6.43	F	4.81	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	AM Future+P	Number of Iterations	15
File Name	AM Future+P_Broad_1.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Industrial Road	Tank Farm Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Industrial to Tank Farm)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	2	2	1030	1030	80	100	0	0	70	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	45.99			45.84		
2	Running Time, s	17.67			17.77		
2	Running Speed, mph	39.74			39.53		
2	Through Delay, s/veh	37.34			23.52		
2	Travel Time, s	55.01			41.29		
2	Travel Speed, mph	12.77			17.01		
2	Stop Rate, stops/veh	0.72			0.75		
2	Spatial Stop Rate, stops/mi	3.67			3.86		
2	Through vol/cap Ratio	0.56			0.84		
2	Percent of Base FFS	27.76			37.11		
2	Level of Service	F			E		
2	Auto Traveler Perception Score	2.73			2.76		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	3.98	D		4.07	D	
2	Bicycle Segment LOS Score / LOS	2.22	B		2.46	B	
2	Transit Segment LOS Score / LOS	5.53	F		5.38	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	143.71	106.56
Facility Travel Speed, mph	24.10	32.50
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	53.03	71.86
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.37	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			3.70	D
Bicycle Facility LOS Score / LOS	1.99	A	2.67	C
Transit Facility LOS Score / LOS	6.43	F	4.81	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	AM Future+P	Number of Iterations	15
File Name	AM Future+P_Broad_2.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Tank Farm Road	Aero Drive		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Tank Farm to Aero)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	3000	3000	80	80	0	0	100	80	45.0	45.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.36			45.46		
1	Running Time, s	93.05			92.91		
1	Running Speed, mph	21.98			22.01		
1	Through Delay, s/veh	18.47			100.56		
1	Travel Time, s	111.51			193.47		
1	Travel Speed, mph	18.34			10.57		
1	Stop Rate, stops/veh	0.70			1.22		
1	Spatial Stop Rate, stops/mi	1.24			2.15		
1	Through vol/cap Ratio	0.77			1.08		
1	Percent of Base FFS	40.43			23.26		
1	Level of Service	D			F		
1	Auto Traveler Perception Score	2.43			2.58		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.67	D		3.37	C	
1	Bicycle Segment LOS Score / LOS	1.95	A		1.87	A	
1	Transit Segment LOS Score / LOS	5.02	F		6.48	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	210.19	282.17
Facility Travel Speed, mph	24.33	18.12
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	53.05	39.39
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.37	2.45

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.54	A	1.50	A
Transit Facility LOS Score / LOS	6.10	F	6.60	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	AM Future+P	Number of Iterations	15
File Name	AM Future+P_Broad_2.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Aero Drive	Buckley		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Aero to Buckley)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	1	2	4500	4500	55	50	0	0	0	20	0.0	0.0

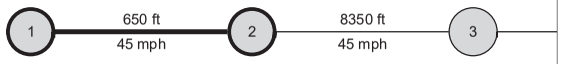
		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	46.19			46.38		
2	Running Time, s	71.60			69.52		
2	Running Speed, mph	42.85			44.13		
2	Through Delay, s/veh	27.08			19.17		
2	Travel Time, s	98.68			88.70		
2	Travel Speed, mph	31.09			34.59		
2	Stop Rate, stops/veh	0.54			0.70		
2	Spatial Stop Rate, stops/mi	0.63			0.82		
2	Through vol/cap Ratio	0.80			0.84		
2	Percent of Base FFS	67.31			74.59		
2	Level of Service	B			B		
2	Auto Traveler Perception Score	2.34			2.37		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS		F			F	
2	Bicycle Segment LOS Score / LOS	1.27	A		1.25	A	
2	Transit Segment LOS Score / LOS	6.81	F		6.69	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	210.19	282.17
Facility Travel Speed, mph	24.33	18.12
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	53.05	39.39
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.37	2.45

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.54	A	1.50	A
Transit Facility LOS Score / LOS	6.10	F	6.60	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	4
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	3
Jurisdiction	City of SLO	Time Period	Am Future+P	Number of Iterations	15
File Name	AM Future+P_TF.xus	Analysis Year	2040	System Cycle Length, s	124
Intersections	S Higuera St	Long Street		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Higuera to Long)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	2	1	650	650	75	75	0	0	100	100	0.0	0.0

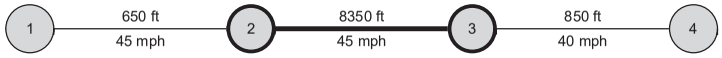
		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.92			45.56		
1	Running Time, s	12.59			12.82		
1	Running Speed, mph	35.19			34.57		
1	Through Delay, s/veh	20.00			31.17		
1	Travel Time, s	32.59			43.99		
1	Travel Speed, mph	13.60			10.07		
1	Stop Rate, stops/veh	0.71			0.68		
1	Spatial Stop Rate, stops/mi	5.75			5.51		
1	Through vol/cap Ratio	0.83			0.04		
1	Percent of Base FFS	29.61			22.11		
1	Level of Service	F			F		
1	Auto Traveler Perception Score	3.11			3.06		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.37	C		3.41	C	
1	Bicycle Segment LOS Score / LOS	2.49	B		2.02	B	
1	Transit Segment LOS Score / LOS	6.45	F		6.57	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	229.84	202.70
Facility Travel Speed, mph	29.22	33.13
Facility Base Free Flow Speed, mph	45.93	46.41
Facility Percent of Base FFS	63.62	71.40
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.46	2.33

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.91	D	3.89	D
Bicycle Facility LOS Score / LOS	3.03	C	2.86	C
Transit Facility LOS Score / LOS	1.55	A	1.43	A

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	4
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	3
Jurisdiction	City of SLO	Time Period	Am Future+P	Number of Iterations	15
File Name	AM Future+P_TF.xus	Analysis Year	2040	System Cycle Length, s	124
Intersections	Long Street	Mindbody Entrance		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	45	45	1	2	8350	8350	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	131.38			126.68		
2	Running Speed, mph	43.33			44.94		
2	Through Delay, s/veh	11.98			14.77		
2	Travel Time, s	143.36			141.45		
2	Travel Speed, mph	39.71			40.25		
2	Stop Rate, stops/veh	0.49			0.67		
2	Spatial Stop Rate, stops/mi	0.31			0.43		
2	Through vol/cap Ratio	0.90			0.57		
2	Percent of Base FFS	85.55			86.70		
2	Level of Service	A			A		
2	Auto Traveler Perception Score	2.39			2.31		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	4.03	D		3.70	D	
2	Bicycle Segment LOS Score / LOS	3.19	C		2.97	C	
2	Transit Segment LOS Score / LOS	0.67	A		0.48	A	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	229.84	202.70
Facility Travel Speed, mph	29.22	33.13
Facility Base Free Flow Speed, mph	45.93	46.41
Facility Percent of Base FFS	63.62	71.40
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.46	2.33

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.91	D	3.89	D
Bicycle Facility LOS Score / LOS	3.03	C	2.86	C
Transit Facility LOS Score / LOS	1.55	A	1.43	A

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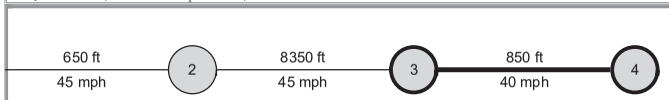
HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	4
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	3
Jurisdiction	City of SLO	Time Period	Am Future+P	Number of Iterations	15
File Name	AM Future+P_TF.xus	Analysis Year	2040	System Cycle Length, s	124
Intersections	Mindbody Entrance	Broad Street		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - MB to Broad)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
3	40	45	2	1	850	850	60	45	650	650	100	0	0.0	0.0

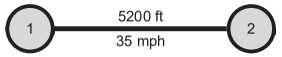
		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement		2	12	1	6	
3	Bay/Lane Spillback Time, h						
3	Shared Lane Spillback Time, h						
3	Base Free-Flow Speed, mph		41.60			46.94	
3	Running Time, s		16.77			16.02	
3	Running Speed, mph		34.56			36.17	
3	Through Delay, s/veh		37.13			1.23	
3	Travel Time, s		53.89			17.25	
3	Travel Speed, mph		10.75			33.60	
3	Stop Rate, stops/veh		0.63			0.03	
3	Spatial Stop Rate, stops/mi		3.93			0.19	
3	Through vol/cap Ratio		0.26			0.89	
3	Percent of Base FFS		25.85			71.58	
3	Level of Service		F			B	
3	Auto Traveler Perception Score		2.77			2.17	
Multimodal Results (Segment)							
3	Pedestrian Segment LOS Score / LOS	3.13	C		6.20	F	
3	Bicycle Segment LOS Score / LOS	1.81	A		2.45	B	
3	Transit Segment LOS Score / LOS	6.42	F		6.89	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	229.84	202.70
Facility Travel Speed, mph	29.22	33.13
Facility Base Free Flow Speed, mph	45.93	46.41
Facility Percent of Base FFS	63.62	71.40
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.46	2.33

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.91	D	3.89	D
Bicycle Facility LOS Score / LOS	3.03	C	2.86	C
Transit Facility LOS Score / LOS	1.55	A	1.43	A

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	2
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	1
Jurisdiction		Time Period	AM Future	Number of Iterations	15
File Name	AM Future+P_TF_2.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Broad Street	UPRR		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Broad to Orcutt)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	40	1	1	5200	5200	78	64	0	0	100	60	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph		40.62			43.16	
1	Running Time, s		89.72			85.89	
1	Running Speed, mph		39.52			41.28	
1	Through Delay, s/veh		0.34			40.44	
1	Travel Time, s		90.06			126.34	
1	Travel Speed, mph		39.37			28.06	
1	Stop Rate, stops/veh		0.01			0.72	
1	Spatial Stop Rate, stops/mi		0.01			0.73	
1	Through vol/cap Ratio		0.24			0.57	
1	Percent of Base FFS		96.93			65.03	
1	Level of Service		A			C	
1	Auto Traveler Perception Score		2.14			2.25	
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.56	D		4.20	D	
1	Bicycle Segment LOS Score / LOS	2.34	B		2.57	B	
1	Transit Segment LOS Score / LOS	6.46	F		5.19	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	90.06	126.34
Facility Travel Speed, mph	39.37	28.06
Facility Base Free Flow Speed, mph	40.62	43.16
Facility Percent of Base FFS	96.93	65.03
Facility Level of Service	A	C
Facility Auto Traveler Perception Score	2.14	2.25

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.56	D	4.20	D
Bicycle Facility LOS Score / LOS	2.34	C	2.57	C
Transit Facility LOS Score / LOS	6.46	F	5.19	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	PM Future	Number of Iterations	15
File Name	PM Future+P_Broad_1.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Orcutt Road	Industrial Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad Street - Orcutt to Industrial)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	4050	4050	92	86	0	0	50	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.32			45.09		
1	Running Time, s	63.80			65.12		
1	Running Speed, mph	43.28			42.41		
1	Through Delay, s/veh	27.28			1.32		
1	Travel Time, s	91.07			66.44		
1	Travel Speed, mph	30.32			41.56		
1	Stop Rate, stops/veh	0.69			0.19		
1	Spatial Stop Rate, stops/mi	0.89			0.24		
1	Through vol/cap Ratio	0.71			0.67		
1	Percent of Base FFS	66.90			92.18		
1	Level of Service	C			A		
1	Auto Traveler Perception Score	2.27			2.18		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS		F		4.55	E	
1	Bicycle Segment LOS Score / LOS	1.94	A		2.85	C	
1	Transit Segment LOS Score / LOS	6.67	F		4.77	E	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	150.07	138.60
Facility Travel Speed, mph	23.08	24.99
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	50.78	55.25
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.37	2.30

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			4.54	E
Bicycle Facility LOS Score / LOS	2.01	B	2.81	C
Transit Facility LOS Score / LOS	6.44	F	4.94	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	PM Future	Number of Iterations	15
File Name	PM Future+P_Broad_1.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Industrial Road	Tank Farm Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Industrial to Tank Farm)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	2	2	1030	1030	80	100	0	0	70	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	45.99			45.84		
2	Running Time, s	17.71			17.96		
2	Running Speed, mph	39.66			39.09		
2	Through Delay, s/veh	41.28			54.19		
2	Travel Time, s	58.99			72.15		
2	Travel Speed, mph	11.90			9.73		
2	Stop Rate, stops/veh	0.88			0.98		
2	Spatial Stop Rate, stops/mi	4.50			5.02		
2	Through vol/cap Ratio	0.84			1.03		
2	Percent of Base FFS	25.89			21.23		
2	Level of Service	F			F		
2	Auto Traveler Perception Score	2.88			2.97		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	4.62	E		4.46	E	
2	Bicycle Segment LOS Score / LOS	2.29	B		2.66	B	
2	Transit Segment LOS Score / LOS	5.56	F		5.58	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	150.07	138.60
Facility Travel Speed, mph	23.08	24.99
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	50.78	55.25
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.37	2.30

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			4.54	E
Bicycle Facility LOS Score / LOS	2.01	B	2.81	C
Transit Facility LOS Score / LOS	6.44	F	4.94	E

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	PM Future+P	Number of Iterations	15
File Name	PM Future+P_Broad_2.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Tank Farm Road	Aero Drive		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Tank Farm to Aero)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	3000	3000	80	80	0	0	100	80	45.0	45.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.36			45.46		
1	Running Time, s	92.64			92.62		
1	Running Speed, mph	22.08			22.08		
1	Through Delay, s/veh	43.98			275.94		
1	Travel Time, s	136.62			368.56		
1	Travel Speed, mph	14.97			5.55		
1	Stop Rate, stops/veh	0.78			2.15		
1	Spatial Stop Rate, stops/mi	1.37			3.78		
1	Through vol/cap Ratio	0.93			1.50		
1	Percent of Base FFS	33.00			12.21		
1	Level of Service	E			F		
1	Auto Traveler Perception Score	2.45			2.87		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.42	C		3.50	D	
1	Bicycle Segment LOS Score / LOS	2.05	B		2.10	B	
1	Transit Segment LOS Score / LOS	5.07	F		6.45	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	301.47	476.60
Facility Travel Speed, mph	16.96	10.73
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	36.99	23.32
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.44	2.55

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.68	A	1.55	A
Transit Facility LOS Score / LOS	6.13	F	6.53	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	PM Future+P	Number of Iterations	15
File Name	PM Future+P_Broad_2.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Aero Drive	Buckley		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Aero to Buckley)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	1	2	4500	4500	55	50	0	0	0	20	0.0	0.0

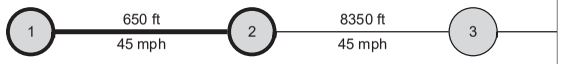
		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	46.19			46.38		
2	Running Time, s	72.00			68.42		
2	Running Speed, mph	42.61			44.85		
2	Through Delay, s/veh	92.85			39.63		
2	Travel Time, s	164.85			108.04		
2	Travel Speed, mph	18.61			28.40		
2	Stop Rate, stops/veh	1.05			0.71		
2	Spatial Stop Rate, stops/mi	1.23			0.84		
2	Through vol/cap Ratio	1.12			0.69		
2	Percent of Base FFS	40.29			61.23		
2	Level of Service	F			C		
2	Auto Traveler Perception Score	2.43			2.37		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS		F			F	
2	Bicycle Segment LOS Score / LOS	1.44	A		1.18	A	
2	Transit Segment LOS Score / LOS	6.83	F		6.59	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	301.47	476.60
Facility Travel Speed, mph	16.96	10.73
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	36.99	23.32
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.44	2.55

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.68	A	1.55	A
Transit Facility LOS Score / LOS	6.13	F	6.53	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	4
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	3
Jurisdiction	City of SLO	Time Period	PM Future+P	Number of Iterations	15
File Name	PM Future+P_TF.xus	Analysis Year	2040	System Cycle Length, s	124
Intersections	S Higuera St	Long Street		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Higuera to Long)

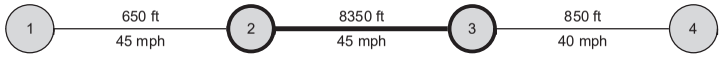
Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	2	1	650	650	75	75	0	0	100	100	0.0	0.0

Segment Output Data		Eastbound			Westbound		
Segment	Movement	EBL	EBT	EBR	WBL	WBT	WBR
1	Bay/Lane Spillback Time, h	5	2	12	1	6	16
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph		45.92			45.56	
1	Running Time, s		12.53			12.65	
1	Running Speed, mph		35.37			35.03	
1	Through Delay, s/veh		25.57			26.56	
1	Travel Time, s		38.10			39.21	
1	Travel Speed, mph		11.63			11.30	
1	Stop Rate, stops/veh		0.78			0.70	
1	Spatial Stop Rate, stops/mi		6.32			5.68	
1	Through vol/cap Ratio		0.73			0.02	
1	Percent of Base FFS		25.33			24.81	
1	Level of Service		F			F	
1	Auto Traveler Perception Score		3.22			3.09	
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.21		C	3.31		C
1	Bicycle Segment LOS Score / LOS	2.23		B	2.00		B
1	Transit Segment LOS Score / LOS	6.41		F	6.48		F

Facility Output Data	Eastbound		Westbound	
Facility Travel Time, s	274.59		609.97	
Facility Travel Speed, mph	24.46		11.01	
Facility Base Free Flow Speed, mph	45.93		46.41	
Facility Percent of Base FFS	53.25		23.73	
Facility Level of Service	F		F	
Facility Auto Traveler Perception Score	2.51		2.40	
Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.95	D	5.51	F
Bicycle Facility LOS Score / LOS	2.99	C	3.11	C
Transit Facility LOS Score / LOS	1.95	A	1.55	A

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	4
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	3
Jurisdiction	City of SLO	Time Period	PM Future+P	Number of Iterations	15
File Name	PM Future+P_TF.xus	Analysis Year	2040	System Cycle Length, s	124
Intersections	Long Street	Mindbody Entrance		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Long to MB)

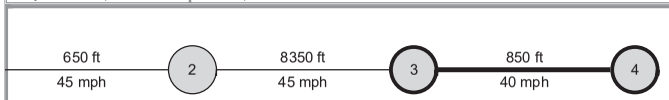
Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	45	45	1	1	8350	8350	50	50	0	0	70	70	0.0	0.0

Segment Output Data		Eastbound			Westbound		
Segment	Movement	EBL	EBT	EBR	WBL	WBT	WBR
2	Bay/Lane Spillback Time, h	5	2	12	1	6	16
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph		46.42			46.42	
2	Running Time, s		129.79			134.28	
2	Running Speed, mph		43.86			42.40	
2	Through Delay, s/veh		57.41			412.96	
2	Travel Time, s		187.21			547.24	
2	Travel Speed, mph		30.41			10.40	
2	Stop Rate, stops/veh		0.96			2.44	
2	Spatial Stop Rate, stops/mi		0.61			1.54	
2	Through vol/cap Ratio		1.06			1.85	
2	Percent of Base FFS		65.51			22.41	
2	Level of Service		F			F	
2	Auto Traveler Perception Score		2.44			2.37	
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	4.04		D	5.62		F
2	Bicycle Segment LOS Score / LOS	3.14		C	3.27		C
2	Transit Segment LOS Score / LOS	1.15		A	0.63		A

Facility Output Data	Eastbound		Westbound	
Facility Travel Time, s	274.59		609.97	
Facility Travel Speed, mph	24.46		11.01	
Facility Base Free Flow Speed, mph	45.93		46.41	
Facility Percent of Base FFS	53.25		23.73	
Facility Level of Service	F		F	
Facility Auto Traveler Perception Score	2.51		2.40	
Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.95	D	5.51	F
Bicycle Facility LOS Score / LOS	2.99	C	3.11	C
Transit Facility LOS Score / LOS	1.95	A	1.55	A

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	4
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	3
Jurisdiction	City of SLO	Time Period	PM Future+P	Number of Iterations	15
File Name	PM Future+P_TF.xus	Analysis Year	2040	System Cycle Length, s	124
Intersections	Mindbody Entrance	Broad Street		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - MB to Broad)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
3	40	45	2	1	850	850	60	45	650	650	100	0	0.0	0.0

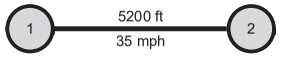
		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement		2	12	1	6	
3	Bay/Lane Spillback Time, h						
3	Shared Lane Spillback Time, h						
3	Base Free-Flow Speed, mph		41.60			46.94	
3	Running Time, s		16.88			15.96	
3	Running Speed, mph		34.33			36.31	
3	Through Delay, s/veh		32.40			7.56	
3	Travel Time, s		49.28			23.52	
3	Travel Speed, mph		11.76			24.64	
3	Stop Rate, stops/veh		0.71			0.11	
3	Spatial Stop Rate, stops/mi		4.39			0.68	
3	Through vol/cap Ratio		0.58			0.92	
3	Percent of Base FFS		28.27			52.49	
3	Level of Service		F			C	
3	Auto Traveler Perception Score		2.85			2.24	
Multimodal Results (Segment)							
3	Pedestrian Segment LOS Score / LOS	3.60	D		6.09	F	
3	Bicycle Segment LOS Score / LOS	2.05	B		2.38	B	
3	Transit Segment LOS Score / LOS	6.46	F		6.88	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	274.59	609.97
Facility Travel Speed, mph	24.46	11.01
Facility Base Free Flow Speed, mph	45.93	46.41
Facility Percent of Base FFS	53.25	23.73
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.51	2.40

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.95	D	5.51	F
Bicycle Facility LOS Score / LOS	2.99	C	3.11	C
Transit Facility LOS Score / LOS	1.95	A	1.55	A

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	2
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	1
Jurisdiction		Time Period	PM Future	Number of Iterations	15
File Name	PM Future+P_TF_2.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Broad Street	UPRR		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				



Basic Segment Information (Tank Farm - Broad to Orcutt)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	40	1	1	5200	5200	78	64	0	0	100	60	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph		40.62			43.16	
1	Running Time, s		93.84			85.11	
1	Running Speed, mph		37.78			41.66	
1	Through Delay, s/veh		0.38			52.14	
1	Travel Time, s		94.22			137.25	
1	Travel Speed, mph		37.63			25.83	
1	Stop Rate, stops/veh		0.00			0.94	
1	Spatial Stop Rate, stops/mi		0.00			0.95	
1	Through vol/cap Ratio		0.58			0.78	
1	Percent of Base FFS		92.65			59.86	
1	Level of Service		A			C	
1	Auto Traveler Perception Score		2.14			2.28	
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	4.53	E		3.93	D	
1	Bicycle Segment LOS Score / LOS	2.68	B		2.49	B	
1	Transit Segment LOS Score / LOS	6.66	F		5.17	F	

Facility Output Data	Eastbound	Westbound
Facility Travel Time, s	94.22	137.25
Facility Travel Speed, mph	37.63	25.83
Facility Base Free Flow Speed, mph	40.62	43.16
Facility Percent of Base FFS	92.65	59.86
Facility Level of Service	A	C
Facility Auto Traveler Perception Score	2.14	2.28

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	4.53	E	3.93	D
Bicycle Facility LOS Score / LOS	2.68	C	2.49	C
Transit Facility LOS Score / LOS	6.66	F	5.17	F

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Appendix F

Queuing Calculations

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Queues
2: Broad Street (SR 227) & Industrial

02/05/2020

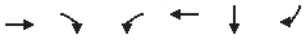
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	18	10	136	97	54	862	203	57	1216	64
v/c Ratio	0.13	0.05	0.53	0.32	0.61	0.41	0.23	0.38	0.57	0.07
Control Delay	39.9	0.6	40.9	10.8	70.1	11.5	4.7	45.4	12.4	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.9	0.6	40.9	10.8	70.1	11.5	4.7	45.4	12.4	2.6
Queue Length 50th (ft)	8	0	60	0	26	103	11	26	147	0
Queue Length 95th (ft)	17	0	97	21	#96	223	56	64	277	13
Internal Link Dist (ft)	288		473			1028			1931	
Turn Bay Length (ft)		100		180	150		175	150		440
Base Capacity (vph)	783	723	721	665	89	2112	892	156	2171	918
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.01	0.19	0.15	0.61	0.41	0.23	0.37	0.56	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
3: LOVR & 101 SB

02/05/2020



Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	802	350	43	1012	486	248
v/c Ratio	0.41	0.35	0.40	0.47	0.93	0.46
Control Delay	11.3	1.6	51.9	10.7	57.2	16.0
Queue Delay	0.3	0.3	0.0	0.0	0.0	0.0
Total Delay	11.6	1.9	51.9	10.7	57.2	16.0
Queue Length 50th (ft)	155	0	24	155	263	56
Queue Length 95th (ft)	153	6	55	187	#446	125
Internal Link Dist (ft)	236			227	198	
Turn Bay Length (ft)		120	225			
Base Capacity (vph)	1944	1007	108	2157	540	555
Starvation Cap Reductn	507	243	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.46	0.40	0.47	0.90	0.45

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
4: 101 NB & LOVR

02/05/2020

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1132	182	106	513	647
v/c Ratio	0.63	0.15	0.46	0.22	0.78
Control Delay	22.5	0.7	51.0	7.8	43.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	22.5	0.7	51.0	7.8	43.5
Queue Length 50th (ft)	288	0	70	65	208
Queue Length 95th (ft)	428	13	117	100	251
Internal Link Dist (ft)	191			529	142
Turn Bay Length (ft)		150	200		
Base Capacity (vph)	1806	1283	229	2378	938
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.63	0.14	0.46	0.22	0.69

Intersection Summary

Queues
5: S. Higuera Street & Tank Farm

02/05/2020

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	59	29	154	158	267	13	410	818	260	282
v/c Ratio	0.36	0.10	0.41	0.42	0.49	0.11	0.54	0.85	0.67	0.17
Control Delay	48.7	0.7	35.3	35.4	7.7	48.1	35.3	15.2	42.7	15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.7	0.7	35.3	35.4	7.7	48.1	35.3	15.2	42.7	15.6
Queue Length 50th (ft)	32	0	77	81	0	7	110	65	136	44
Queue Length 95th (ft)	60	0	156	161	60	28	180	191	252	97
Internal Link Dist (ft)	109			777			1054			1668
Turn Bay Length (ft)					250	140		100	165	
Base Capacity (vph)	626	635	538	540	669	181	1088	1063	567	1941
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.05	0.29	0.29	0.40	0.07	0.38	0.77	0.46	0.15

Intersection Summary

Queues
8: Mindbody Entrance & Tank Farm Road

02/05/2020

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	851	36	855	28	9
v/c Ratio	0.31	0.19	0.53	0.15	0.05
Control Delay	5.9	23.3	4.8	23.2	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	5.9	23.3	4.8	23.2	14.0
Queue Length 50th (ft)	0	9	0	7	0
Queue Length 95th (ft)	138	32	230	21	7
Internal Link Dist (ft)	429		239	814	
Turn Bay Length (ft)		210			125
Base Capacity (vph)	3367	443	1863	564	502
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	0.08	0.46	0.05	0.02

Intersection Summary

Queues
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	251	167	418	278	300	200	227	825	73	796	414
v/c Ratio	0.59	0.22	0.89	0.88	0.58	0.35	0.84	0.71	0.68	0.71	0.50
Control Delay	53.8	36.7	46.2	75.9	40.7	7.3	79.7	38.3	85.1	40.4	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.8	36.7	46.2	75.9	40.7	7.3	79.7	38.3	85.1	40.4	10.6
Queue Length 50th (ft)	92	53	185	205	191	6	88	281	55	280	80
Queue Length 95th (ft)	137	82	308	#328	260	44	#173	393	#115	332	124
Internal Link Dist (ft)		390			770			1836		1028	
Turn Bay Length (ft)	300		100	150		125	250		250		300
Base Capacity (vph)	601	1085	594	325	606	632	270	1157	108	1116	894
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.15	0.70	0.86	0.50	0.32	0.84	0.71	0.68	0.71	0.46

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
11: Broad Street (SR 227) & Aero Drive

02/05/2020

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	63	5	11	58	49	1203	46	777
v/c Ratio	0.40	0.02	0.10	0.33	0.35	0.52	0.33	0.34
Control Delay	55.1	0.2	51.8	9.4	54.6	14.6	54.5	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.1	0.2	51.8	9.4	54.6	14.6	54.5	12.1
Queue Length 50th (ft)	42	0	7	0	32	260	31	141
Queue Length 95th (ft)	83	0	17	0	73	381	66	198
Internal Link Dist (ft)	310		100			211		1092
Turn Bay Length (ft)		75		75	200		200	
Base Capacity (vph)	605	597	602	589	223	2319	223	2281
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.01	0.02	0.10	0.22	0.52	0.21	0.34

Intersection Summary

Queues
13: Edna Road (SR 227) & Buckley Road

02/05/2020

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	74	218	8	223	1228	4	527	52
v/c Ratio	0.45	0.38	0.05	0.85	0.82	0.05	0.44	0.05
Control Delay	68.5	6.3	0.6	85.4	16.1	69.3	14.5	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.5	6.3	0.6	85.4	16.1	69.3	14.5	1.4
Queue Length 50th (ft)	61	0	0	185	391	3	200	0
Queue Length 95th (ft)	109	30	0	#428	#1582	17	332	5
Internal Link Dist (ft)	1017		1172		826		2818	
Turn Bay Length (ft)		145		360		400		400
Base Capacity (vph)	345	579	274	261	1501	209	1444	1209
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.38	0.03	0.85	0.82	0.02	0.36	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
2: Broad Street (SR 227) & Industrial Way

02/05/2020

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	117	58	227	262	94	1104	198	148	1198	98
v/c Ratio	0.53	0.20	0.70	0.55	0.53	0.80	0.32	1.12	0.90	0.16
Control Delay	48.7	1.5	48.9	9.2	52.7	32.1	11.6	157.1	40.9	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.7	1.5	48.9	9.2	52.7	32.1	11.6	157.1	40.9	5.3
Queue Length 50th (ft)	66	0	128	0	53	299	32	~102	~388	0
Queue Length 95th (ft)	106	0	199	50	113	#486	97	#250	#657	36
Internal Link Dist (ft)	288		473			1028			1931	
Turn Bay Length (ft)		100		180	150		175	150		440
Base Capacity (vph)	671	659	438	552	208	1382	617	132	1328	607
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.09	0.52	0.47	0.45	0.80	0.32	1.12	0.90	0.16

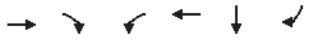
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
3: LOVR & 101 SB

02/05/2020



Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	936	651	63	1348	307	415
v/c Ratio	0.49	0.59	0.40	0.59	0.67	0.93
Control Delay	19.4	8.6	45.7	10.7	37.5	56.1
Queue Delay	1.5	0.8	0.0	0.9	0.0	1.6
Total Delay	20.9	9.4	45.7	11.6	37.5	57.7
Queue Length 50th (ft)	184	35	34	215	154	194
Queue Length 95th (ft)	288	195	73	275	242	#368
Internal Link Dist (ft)	236			227	198	
Turn Bay Length (ft)		120	225			
Base Capacity (vph)	1898	1105	186	2283	481	465
Starvation Cap Reductn	728	195	0	0	0	0
Spillback Cap Reductn	0	0	0	584	0	10
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.72	0.34	0.79	0.64	0.91

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
4: 101 NB & LOVR

02/05/2020

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	837	375	188	971	658
v/c Ratio	0.70	0.32	0.59	0.48	0.65
Control Delay	24.1	1.1	36.7	10.1	25.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	24.1	1.1	36.7	10.1	25.2
Queue Length 50th (ft)	172	0	79	127	125
Queue Length 95th (ft)	231	17	#159	168	202
Internal Link Dist (ft)	191			529	142
Turn Bay Length (ft)		150	200		
Base Capacity (vph)	2080	1201	342	2927	1105
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.40	0.31	0.55	0.33	0.60

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
5: S. Higuera Street & Tank Farm Road

02/05/2020

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	24	28	316	316	357	32	541	449	328	845
v/c Ratio	0.18	0.11	0.68	0.67	0.53	0.33	0.72	0.52	0.76	0.53
Control Delay	49.0	0.9	39.8	39.6	6.4	57.7	41.3	5.4	50.0	23.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.0	0.9	39.8	39.6	6.4	57.7	41.3	5.4	50.0	23.1
Queue Length 50th (ft)	15	0	193	192	0	21	176	33	212	238
Queue Length 95th (ft)	35	0	309	309	70	54	241	70	#338	280
Internal Link Dist (ft)	109			670			1054			1668
Turn Bay Length (ft)					250	140		100	165	
Base Capacity (vph)	601	563	556	558	740	97	936	938	429	1613
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.05	0.57	0.57	0.48	0.33	0.58	0.48	0.76	0.52

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
8: Mindbody Entrance & Tank Farm Road

02/05/2020

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1197	7	1070	184	45
v/c Ratio	0.57	0.06	0.93	0.62	0.15
Control Delay	9.7	29.2	26.8	32.1	9.4
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay	9.7	29.2	27.1	32.1	9.4
Queue Length 50th (ft)	101	2	268	51	0
Queue Length 95th (ft)	245	15	#678	110	17
Internal Link Dist (ft)	372		258	540	
Turn Bay Length (ft)		210			125
Base Capacity (vph)	2970	341	1813	434	422
Starvation Cap Reductn	0	0	240	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.40	0.02	0.68	0.42	0.11

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	503	455	277	200	218	135	430	999	221	740	565
v/c Ratio	0.66	0.55	0.49	0.74	0.71	0.35	0.73	1.12	0.76	0.85	0.72
Control Delay	34.5	30.9	6.7	52.6	47.5	6.8	41.1	100.1	52.8	42.6	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.5	30.9	6.7	52.6	47.5	6.8	41.1	100.1	52.8	42.6	19.4
Queue Length 50th (ft)	129	114	0	105	112	0	114	~342	116	207	179
Queue Length 95th (ft)	181	161	58	#205	190	35	152	#421	#228	#332	299
Internal Link Dist (ft)		429			770			2199		1028	
Turn Bay Length (ft)	300		100	150		125	250		250		300
Base Capacity (vph)	917	1031	639	301	362	421	667	891	322	871	849
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.44	0.43	0.66	0.60	0.32	0.64	1.12	0.69	0.85	0.67

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
11: Broad Street (SR 227) & Aero Drive

02/05/2020

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	225	53	12	31	45	820	4	1057
v/c Ratio	0.72	0.15	0.11	0.16	0.37	0.37	0.04	0.54
Control Delay	55.1	1.1	53.8	1.8	59.2	12.4	53.2	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.1	1.1	53.8	1.8	59.2	12.4	53.2	19.0
Queue Length 50th (ft)	152	0	8	0	31	140	3	268
Queue Length 95th (ft)	193	0	23	0	71	263	15	384
Internal Link Dist (ft)	498		322			255		729
Turn Bay Length (ft)		75		75	200		200	
Base Capacity (vph)	518	528	521	526	138	2225	138	1940
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.10	0.02	0.06	0.33	0.37	0.03	0.54

Intersection Summary

Queues
13: Edna Rd (SR 227)/Edna Road (SR 227) & Buckley Road

02/05/2020

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	41	376	16	74	613	2	1007	34
v/c Ratio	0.21	0.72	0.08	0.34	0.41	0.02	0.87	0.03
Control Delay	57.0	25.7	0.8	59.8	7.1	67.0	27.4	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.0	25.7	0.8	59.8	7.1	67.0	27.4	1.8
Queue Length 50th (ft)	26	93	0	46	87	1	423	0
Queue Length 95th (ft)	76	229	0	124	348	12	1104	9
Internal Link Dist (ft)	2049		536		742		3252	
Turn Bay Length (ft)		145		360		400		400
Base Capacity (vph)	547	675	385	415	1675	644	1732	1444
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.56	0.04	0.18	0.37	0.00	0.58	0.02

Intersection Summary

Queues
2: Broad Street (SR 227) & Industrial

02/05/2020

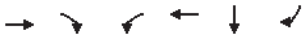
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	18	10	136	97	54	884	203	57	1253	64
v/c Ratio	0.13	0.05	0.53	0.32	0.61	0.42	0.23	0.38	0.59	0.07
Control Delay	39.9	0.6	40.9	10.8	70.1	11.6	4.9	45.4	12.7	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.9	0.6	40.9	10.8	70.1	11.6	4.9	45.4	12.7	2.6
Queue Length 50th (ft)	8	0	60	0	26	106	11	26	155	0
Queue Length 95th (ft)	17	0	97	21	#96	230	57	64	289	13
Internal Link Dist (ft)	288		473			1028			1931	
Turn Bay Length (ft)		100		180	150		175	150		440
Base Capacity (vph)	783	723	721	665	89	2112	891	156	2171	918
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.01	0.19	0.15	0.61	0.42	0.23	0.37	0.58	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
3: LOVR & 101 SB

02/05/2020



Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	805	350	43	1014	490	248
v/c Ratio	0.41	0.35	0.40	0.47	0.94	0.46
Control Delay	11.4	1.6	51.9	10.7	58.1	16.0
Queue Delay	0.3	0.3	0.0	0.0	0.0	0.0
Total Delay	11.7	1.9	51.9	10.7	58.1	16.0
Queue Length 50th (ft)	156	0	24	155	266	56
Queue Length 95th (ft)	154	6	55	188	#451	125
Internal Link Dist (ft)	236			227	198	
Turn Bay Length (ft)		120	225			
Base Capacity (vph)	1942	1006	108	2154	540	555
Starvation Cap Reductn	505	243	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.46	0.40	0.47	0.91	0.45

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
4: 101 NB & LOVR

02/05/2020

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1140	182	109	515	647
v/c Ratio	0.64	0.15	0.46	0.22	0.78
Control Delay	23.0	0.7	50.5	7.8	43.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	23.0	0.7	50.5	7.8	43.5
Queue Length 50th (ft)	294	0	72	65	208
Queue Length 95th (ft)	434	13	119	101	251
Internal Link Dist (ft)	191			529	142
Turn Bay Length (ft)		150	200		
Base Capacity (vph)	1792	1278	236	2378	938
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.64	0.14	0.46	0.22	0.69

Intersection Summary

Queues
5: S. Higuera Street & Tank Farm

02/05/2020

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	59	29	159	162	269	13	410	831	263	282
v/c Ratio	0.36	0.10	0.40	0.41	0.48	0.11	0.55	0.86	0.68	0.17
Control Delay	49.5	0.7	34.9	35.0	7.4	48.6	36.1	15.9	43.7	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.5	0.7	34.9	35.0	7.4	48.6	36.1	15.9	43.7	16.0
Queue Length 50th (ft)	34	0	82	84	0	8	116	73	145	48
Queue Length 95th (ft)	60	0	162	164	60	28	180	#220	255	97
Internal Link Dist (ft)	109			777			1054			1668
Turn Bay Length (ft)					250	140		100	165	
Base Capacity (vph)	611	624	526	527	661	177	1062	1051	553	1905
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.05	0.30	0.31	0.41	0.07	0.39	0.79	0.48	0.15

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
8: Mindbody Entrance & Tank Farm Road

02/05/2020

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	867	36	866	28	9
v/c Ratio	0.32	0.19	0.54	0.15	0.05
Control Delay	5.9	23.5	4.9	23.4	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	5.9	23.5	4.9	23.4	14.0
Queue Length 50th (ft)	0	9	0	7	0
Queue Length 95th (ft)	142	32	236	21	8
Internal Link Dist (ft)	429		239	814	
Turn Bay Length (ft)		210			125
Base Capacity (vph)	3358	441	1863	561	500
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.26	0.08	0.46	0.05	0.02

Intersection Summary

Queues
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	251	167	435	283	300	200	238	851	73	834	414
v/c Ratio	0.59	0.21	0.90	0.90	0.55	0.34	0.90	0.75	0.69	0.76	0.51
Control Delay	54.8	36.2	48.0	80.4	39.7	7.3	89.1	40.6	87.6	43.1	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.8	36.2	48.0	80.4	39.7	7.3	89.1	40.6	87.6	43.1	11.0
Queue Length 50th (ft)	95	53	206	216	191	7	95	304	56	307	85
Queue Length 95th (ft)	137	82	335	#338	260	46	#185	408	#115	350	125
Internal Link Dist (ft)		390			770			1836		1028	
Turn Bay Length (ft)	300		100	150		125	250		250		300
Base Capacity (vph)	590	1064	583	319	601	627	265	1135	106	1094	880
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.16	0.75	0.89	0.50	0.32	0.90	0.75	0.69	0.76	0.47

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
11: Broad Street (SR 227) & Aero Drive

02/05/2020

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	103	14	11	58	60	1203	46	822
v/c Ratio	0.54	0.06	0.11	0.34	0.41	0.56	0.35	0.40
Control Delay	58.4	0.4	54.3	9.5	57.7	16.5	57.2	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.4	0.4	54.3	9.5	57.7	16.5	57.2	14.2
Queue Length 50th (ft)	70	0	8	0	41	277	32	165
Queue Length 95th (ft)	123	0	17	0	88	410	68	233
Internal Link Dist (ft)	310		100			211		1092
Turn Bay Length (ft)		75		75	200		200	
Base Capacity (vph)	569	567	568	560	211	2142	211	2074
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.02	0.02	0.10	0.28	0.56	0.22	0.40

Intersection Summary

Queues
13: Edna Road (SR 227) & Buckley Road

02/05/2020

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	74	218	8	223	1239	4	537	52
v/c Ratio	0.45	0.38	0.05	0.85	0.83	0.05	0.45	0.05
Control Delay	68.5	6.3	0.6	85.4	16.5	69.3	14.6	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.5	6.3	0.6	85.4	16.5	69.3	14.6	1.4
Queue Length 50th (ft)	61	0	0	185	402	3	206	0
Queue Length 95th (ft)	109	30	0	#428	#1606	17	339	5
Internal Link Dist (ft)	1017		1172		826		2818	
Turn Bay Length (ft)		145		360		400		400
Base Capacity (vph)	345	579	274	261	1501	209	1444	1209
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.38	0.03	0.85	0.83	0.02	0.37	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
2: Broad Street (SR 227) & Industrial Way

02/12/2020

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	117	58	227	262	94	1134	198	148	1218	109
v/c Ratio	0.53	0.20	0.70	0.55	0.53	0.82	0.32	1.12	0.88	0.17
Control Delay	48.7	1.5	48.9	9.2	52.7	33.1	11.9	157.1	38.4	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.7	1.5	48.9	9.2	52.7	33.1	11.9	157.1	38.4	5.9
Queue Length 50th (ft)	66	0	128	0	53	312	33	~102	371	0
Queue Length 95th (ft)	106	0	199	50	113	#508	99	#250	#622	39
Internal Link Dist (ft)	288		473			1028			1931	
Turn Bay Length (ft)		100		180	150		175	150		440
Base Capacity (vph)	671	659	438	552	208	1382	615	132	1388	646
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.09	0.52	0.47	0.45	0.82	0.32	1.12	0.88	0.17

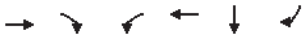
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
3: LOVR & 101 SB

02/12/2020



Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	938	651	63	1351	313	415
v/c Ratio	0.49	0.59	0.40	0.59	0.68	0.93
Control Delay	19.4	8.7	45.7	10.7	38.1	56.1
Queue Delay	1.5	0.8	0.0	0.9	0.0	1.6
Total Delay	20.9	9.4	45.7	11.6	38.1	57.7
Queue Length 50th (ft)	184	35	34	215	157	194
Queue Length 95th (ft)	288	194	73	275	247	#368
Internal Link Dist (ft)	236			227	198	
Turn Bay Length (ft)		120	225			
Base Capacity (vph)	1898	1105	186	2283	481	465
Starvation Cap Reductn	727	195	0	0	0	0
Spillback Cap Reductn	0	0	0	582	0	10
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.72	0.34	0.79	0.65	0.91

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
4: 101 NB & LOVR

02/12/2020

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	844	375	194	973	658
v/c Ratio	0.71	0.32	0.60	0.48	0.65
Control Delay	24.3	1.1	37.4	10.0	25.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	24.3	1.1	37.4	10.0	25.5
Queue Length 50th (ft)	174	0	82	127	126
Queue Length 95th (ft)	234	17	#173	169	203
Internal Link Dist (ft)	191			529	142
Turn Bay Length (ft)		150	200		
Base Capacity (vph)	2062	1198	339	2917	1095
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.41	0.31	0.57	0.33	0.60

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
5: S. Higuera Street & Tank Farm Road

02/12/2020

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	24	28	323	322	360	32	541	462	331	845
v/c Ratio	0.18	0.11	0.69	0.68	0.53	0.33	0.72	0.53	0.78	0.53
Control Delay	49.1	0.9	40.2	39.9	6.4	57.8	41.5	5.7	50.8	23.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.1	0.9	40.2	39.9	6.4	57.8	41.5	5.7	50.8	23.2
Queue Length 50th (ft)	15	0	198	197	0	21	176	37	215	238
Queue Length 95th (ft)	35	0	316	315	71	54	241	74	#342	280
Internal Link Dist (ft)	109			670			1054			1668
Turn Bay Length (ft)					250	140		100	165	
Base Capacity (vph)	599	562	554	556	741	97	933	936	427	1608
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.05	0.58	0.58	0.49	0.33	0.58	0.49	0.78	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
8: Mindbody Entrance & Tank Farm Road

02/12/2020

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1214	7	1087	184	45
v/c Ratio	0.58	0.06	0.94	0.62	0.15
Control Delay	9.7	29.3	28.7	32.3	9.5
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay	9.7	29.3	29.0	32.3	9.5
Queue Length 50th (ft)	103	2	280	51	0
Queue Length 95th (ft)	249	15	#698	111	18
Internal Link Dist (ft)	372		258	540	
Turn Bay Length (ft)		210			125
Base Capacity (vph)	2958	339	1810	432	420
Starvation Cap Reductn	0	0	236	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.41	0.02	0.69	0.43	0.11

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
9: Broad Street (SR 227) & Tank Farm Road

02/12/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	503	455	293	208	218	135	449	1040	221	770	565
v/c Ratio	0.66	0.56	0.51	0.76	0.71	0.35	0.75	1.17	0.76	0.89	0.73
Control Delay	34.5	31.1	6.8	54.0	47.5	6.8	42.0	117.1	52.8	46.6	19.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.5	31.1	6.8	54.0	47.5	6.8	42.0	117.1	52.8	46.6	19.8
Queue Length 50th (ft)	129	114	0	110	112	0	120	~367	116	218	181
Queue Length 95th (ft)	181	161	60	#217	190	35	159	#446	#228	#352	301
Internal Link Dist (ft)		429			770			2199		1028	
Turn Bay Length (ft)	300		100	150		125	250		250		300
Base Capacity (vph)	917	1031	650	301	362	421	667	892	322	863	845
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.44	0.45	0.69	0.60	0.32	0.67	1.17	0.69	0.89	0.67

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
11: Broad Street (SR 227) & Aero Drive

02/12/2020

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	291	73	12	31	63	820	4	1099
v/c Ratio	0.77	0.18	0.11	0.16	0.50	0.39	0.04	0.60
Control Delay	55.3	4.0	56.4	1.9	67.2	14.6	55.8	22.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.3	4.0	56.4	1.9	67.2	14.6	55.8	22.4
Queue Length 50th (ft)	206	0	9	0	46	161	3	316
Queue Length 95th (ft)	246	6	24	0	#96	277	15	428
Internal Link Dist (ft)	498		322			255		729
Turn Bay Length (ft)		75		75	200		200	
Base Capacity (vph)	503	515	506	514	134	2116	134	1828
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.14	0.02	0.06	0.47	0.39	0.03	0.60

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
13: Edna Road (SR 227) & Buckley Road

02/12/2020

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	41	376	16	74	632	2	1023	34
v/c Ratio	0.22	0.74	0.08	0.35	0.42	0.02	0.87	0.03
Control Delay	59.9	28.1	0.9	62.5	7.0	70.0	26.7	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.9	28.1	0.9	62.5	7.0	70.0	26.7	1.8
Queue Length 50th (ft)	27	101	0	48	91	1	445	0
Queue Length 95th (ft)	76	233	0	124	364	12	1145	9
Internal Link Dist (ft)	2049		536		742		3252	
Turn Bay Length (ft)		145		360		400		400
Base Capacity (vph)	525	655	373	399	1664	619	1697	1416
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.57	0.04	0.19	0.38	0.00	0.60	0.02

Intersection Summary

Queues
2: Broad Street (SR 227) & Industrial

02/05/2020

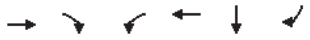
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	20	10	100	78	54	1150	202	90	1600	104
v/c Ratio	0.14	0.05	0.47	0.31	0.64	0.56	0.24	0.61	0.74	0.11
Control Delay	39.9	0.5	42.1	12.3	74.6	13.9	6.2	57.1	15.9	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.9	0.5	42.1	12.3	74.6	13.9	6.2	57.1	15.9	3.0
Queue Length 50th (ft)	10	0	51	0	29	208	24	47	325	2
Queue Length 95th (ft)	33	0	100	39	#93	308	66	#121	483	25
Internal Link Dist (ft)	288		473			1028			1931	
Turn Bay Length (ft)		100		180	150		175	150		440
Base Capacity (vph)	763	689	684	624	85	2037	851	148	2165	925
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.01	0.15	0.13	0.64	0.56	0.24	0.61	0.74	0.11

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
3: LOVR & 101 SB

02/05/2020



Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	816	356	39	992	479	245
v/c Ratio	0.42	0.35	0.36	0.46	0.92	0.45
Control Delay	11.4	1.6	50.3	10.5	55.6	15.2
Queue Delay	0.3	0.3	0.0	0.0	0.0	0.0
Total Delay	11.7	1.9	50.3	10.5	55.6	15.2
Queue Length 50th (ft)	158	0	22	151	258	52
Queue Length 95th (ft)	162	6	54	195	#437	119
Internal Link Dist (ft)	236			227	422	
Turn Bay Length (ft)		120	150			
Base Capacity (vph)	1948	1011	108	2161	540	559
Starvation Cap Reductn	502	241	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.46	0.36	0.46	0.89	0.44

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
4: 101 NB & LOVR

02/05/2020

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1116	179	95	462	664
v/c Ratio	0.61	0.14	0.47	0.20	0.78
Control Delay	21.7	0.6	52.8	7.9	43.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	21.7	0.6	52.8	7.9	43.1
Queue Length 50th (ft)	283	0	64	60	212
Queue Length 95th (ft)	416	12	114	98	257
Internal Link Dist (ft)	191			529	142
Turn Bay Length (ft)		150	200		
Base Capacity (vph)	1838	1298	203	2357	944
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.61	0.14	0.47	0.20	0.70

Intersection Summary

Queues
5: S. Higuera Street & Tank Farm

02/13/2020

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	44	30	150	148	290	20	500	880	500	460
v/c Ratio	0.34	0.11	0.39	0.38	0.51	0.22	0.65	0.94	1.05	0.26
Control Delay	52.4	0.9	37.9	37.7	7.8	53.6	39.4	28.4	91.4	15.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.4	0.9	37.9	37.7	7.8	53.6	39.4	28.4	91.4	15.8
Queue Length 50th (ft)	27	0	86	85	0	12	153	166	~357	78
Queue Length 95th (ft)	64	0	161	158	72	39	214	#404	#610	141
Internal Link Dist (ft)	109			777			1054			1668
Turn Bay Length (ft)					250	140		100	165	
Base Capacity (vph)	508	546	384	386	572	91	955	934	478	1788
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.05	0.39	0.38	0.51	0.22	0.52	0.94	1.05	0.26

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
6: Long Street & Tank Farm Road

02/05/2020

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	61	1350	120	660	140	90
v/c Ratio	0.35	0.77	0.71	0.34	0.53	0.41
Control Delay	37.9	20.9	58.2	12.4	19.2	25.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.9	20.9	58.2	12.4	19.2	25.7
Queue Length 50th (ft)	25	253	53	95	17	21
Queue Length 95th (ft)	66	#470	#148	168	68	65
Internal Link Dist (ft)		777		787	603	450
Turn Bay Length (ft)	225		175			
Base Capacity (vph)	194	1754	169	1945	465	403
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.77	0.71	0.34	0.30	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
8: Mindbody Entrance & Tank Farm Road

02/05/2020

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1360	100	1400	50	20
v/c Ratio	0.61	0.49	0.89	0.31	0.12
Control Delay	10.8	37.5	18.8	36.1	17.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	10.8	37.5	18.8	36.1	17.3
Queue Length 50th (ft)	183	36	~590	18	0
Queue Length 95th (ft)	310	97	#1024	58	20
Internal Link Dist (ft)	429		239	814	
Turn Bay Length (ft)		210			125
Base Capacity (vph)	2656	317	1739	403	370
Starvation Cap Reductn	0	0	5	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.51	0.32	0.81	0.12	0.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	320	210	400	300	420	179	340	1080	100	800	800
v/c Ratio	0.46	0.22	0.73	1.01	0.92	0.35	0.93	1.02	0.93	0.88	1.00
Control Delay	46.0	35.1	30.3	106.1	72.0	7.2	88.1	75.0	128.0	56.1	57.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.0	35.1	30.3	106.1	72.0	7.2	88.1	75.0	128.0	56.1	57.3
Queue Length 50th (ft)	118	68	163	~258	328	0	143	~490	82	329	~529
Queue Length 95th (ft)	165	101	286	#440	#509	56	#236	#627	#195	#437	#592
Internal Link Dist (ft)		390			770			1836		1028	
Turn Bay Length (ft)	300		100	150		125	250		250		300
Base Capacity (vph)	699	1016	571	297	483	534	364	1059	107	913	802
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.21	0.70	1.01	0.87	0.34	0.93	1.02	0.93	0.88	1.00

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
11: Broad Street (SR 227) & Aero Drive

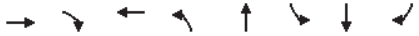
02/05/2020

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	70	40	20	130	59	1460	50	920
v/c Ratio	0.44	0.18	0.17	0.58	0.40	0.68	0.36	0.44
Control Delay	57.2	1.8	53.1	19.5	57.1	18.9	56.8	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.2	1.8	53.1	19.5	57.1	18.9	56.8	14.5
Queue Length 50th (ft)	47	0	14	0	40	367	34	184
Queue Length 95th (ft)	99	0	40	60	87	568	78	296
Internal Link Dist (ft)	310		100			211		1092
Turn Bay Length (ft)		75		75	200		200	
Base Capacity (vph)	583	576	578	597	214	2158	214	2103
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.07	0.03	0.22	0.28	0.68	0.23	0.44

Intersection Summary

Queues
13: Edna Road (SR 227) & Buckley Road

02/05/2020



Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	79	180	5	229	1482	3	682	162
v/c Ratio	0.53	0.33	0.04	0.85	0.95	0.05	0.55	0.15
Control Delay	85.7	6.4	0.6	93.5	27.7	83.0	18.7	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	85.7	6.4	0.6	93.5	27.7	83.0	18.7	2.4
Queue Length 50th (ft)	80	0	0	234	867	3	339	0
Queue Length 95th (ft)	152	55	0	365	#2276	17	700	36
Internal Link Dist (ft)	1017		1172		826		2818	
Turn Bay Length (ft)		145		360		400		400
Base Capacity (vph)	241	639	125	396	1553	65	1245	1082
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.28	0.04	0.58	0.95	0.05	0.55	0.15

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
14: S. Higuera Street & Buckley Road

02/05/2020

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	97	158	499	235	97	358
v/c Ratio	0.29	0.37	0.47	0.23	0.29	0.27
Control Delay	22.7	7.7	12.2	2.4	23.2	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.7	7.7	12.2	2.4	23.2	4.1
Queue Length 50th (ft)	23	0	105	0	23	31
Queue Length 95th (ft)	74	44	224	32	76	73
Internal Link Dist (ft)	1596		529			1539
Turn Bay Length (ft)	150			200	150	
Base Capacity (vph)	774	781	1537	1347	472	1784
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.20	0.32	0.17	0.21	0.20

Intersection Summary

Queues
2: Broad Street (SR 227) & Industrial Way

02/05/2020

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	120	50	204	258	94	1600	199	140	1400	111
v/c Ratio	0.56	0.17	0.73	0.58	0.88	1.06	0.30	0.98	0.89	0.15
Control Delay	51.4	1.3	57.1	10.9	108.1	71.9	10.9	118.8	34.5	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.4	1.3	57.1	10.9	108.1	71.9	10.9	118.8	34.5	4.2
Queue Length 50th (ft)	73	0	124	0	61	~601	36	91	423	0
Queue Length 95th (ft)	130	0	#234	73	#165	#792	93	#226	#618	33
Internal Link Dist (ft)	288		473			1028			1931	
Turn Bay Length (ft)		100		180	150		175	150		440
Base Capacity (vph)	632	630	297	455	107	1503	658	143	1574	720
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.08	0.69	0.57	0.88	1.06	0.30	0.98	0.89	0.15

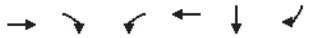
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
3: LOVR & 101 SB

02/05/2020



Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	962	669	65	1386	306	413
v/c Ratio	0.51	0.60	0.41	0.61	0.67	0.92
Control Delay	19.4	9.0	46.1	11.0	37.5	55.7
Queue Delay	1.7	0.8	0.0	1.0	0.0	1.5
Total Delay	21.1	9.8	46.1	12.0	37.5	57.2
Queue Length 50th (ft)	191	40	35	225	153	192
Queue Length 95th (ft)	295	207	75	287	242	#366
Internal Link Dist (ft)	236			227	198	
Turn Bay Length (ft)		120	1000			
Base Capacity (vph)	1900	1106	186	2285	481	465
Starvation Cap Reductn	720	191	0	0	0	0
Spillback Cap Reductn	0	0	0	586	0	10
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.73	0.35	0.82	0.64	0.91

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
4: 101 NB & LOVR

02/05/2020

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	861	386	188	968	628
v/c Ratio	0.70	0.33	0.58	0.47	0.64
Control Delay	23.7	1.1	37.1	9.6	25.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	23.7	1.1	37.1	9.6	25.6
Queue Length 50th (ft)	176	0	79	124	120
Queue Length 95th (ft)	238	17	#171	167	197
Internal Link Dist (ft)	191			529	142
Turn Bay Length (ft)		150	200		
Base Capacity (vph)	2088	1217	343	2919	1108
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.41	0.32	0.55	0.33	0.57

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
5: S. Higuera Street & Tank Farm Road

02/13/2020

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	30	22	312	308	600	32	800	443	450	890
v/c Ratio	0.25	0.09	0.90	0.89	0.76	0.33	0.86	0.56	0.94	0.49
Control Delay	53.2	0.7	72.3	69.6	10.4	59.7	49.2	8.5	67.8	19.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.2	0.7	72.3	69.6	10.4	59.7	49.2	8.5	67.8	19.3
Queue Length 50th (ft)	20	0	227	224	0	22	284	58	311	226
Queue Length 95th (ft)	51	0	#413	#406	118	56	#403	114	#527	299
Internal Link Dist (ft)	109			670			1054			1668
Turn Bay Length (ft)					250	140		100	165	
Base Capacity (vph)	456	468	346	348	788	99	928	795	481	1819
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.05	0.90	0.89	0.76	0.32	0.86	0.56	0.94	0.49

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
6: Long Street & Tank Farm Road

02/05/2020

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	90	820	160	1270	210	130
v/c Ratio	0.62	0.63	0.60	0.82	0.58	0.47
Control Delay	53.0	20.8	38.0	23.4	14.1	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.0	20.8	38.0	23.4	14.1	20.8
Queue Length 50th (ft)	34	134	57	213	11	23
Queue Length 95th (ft)	#115	242	#149	#442	67	72
Internal Link Dist (ft)		747		867	410	362
Turn Bay Length (ft)	225		175			
Base Capacity (vph)	144	1307	288	1548	560	489
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.63	0.56	0.82	0.38	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
8: Mindbody Entrance & Tank Farm Road

02/05/2020

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1440	70	1320	250	100
v/c Ratio	0.77	0.45	1.07	0.80	0.28
Control Delay	18.2	44.5	62.8	53.6	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	18.2	44.5	62.9	53.6	9.8
Queue Length 50th (ft)	280	32	~710	114	0
Queue Length 95th (ft)	403	78	#1032	#280	43
Internal Link Dist (ft)	372		258	540	
Turn Bay Length (ft)		210			125
Base Capacity (vph)	2269	263	1572	335	381
Starvation Cap Reductn	0	0	5	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.63	0.27	0.84	0.75	0.26

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	670	580	319	210	290	150	520	1340	260	860	580
v/c Ratio	1.17	0.82	0.62	0.84	0.89	0.39	0.87	1.12	1.10	0.80	0.76
Control Delay	128.1	45.1	13.4	67.2	66.9	9.0	52.2	92.4	126.0	35.5	23.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	128.1	45.1	13.4	67.2	66.9	9.0	52.2	92.4	126.0	35.5	23.2
Queue Length 50th (ft)	~236	167	28	118	162	0	148	~456	~170	236	211
Queue Length 95th (ft)	#344	#247	112	#236	#304	50	#231	#591	#319	310	338
Internal Link Dist (ft)		429			770			2199		1028	
Turn Bay Length (ft)	300		100	150		125	250		250		300
Base Capacity (vph)	574	710	513	256	332	393	612	1201	237	1077	762
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.17	0.82	0.62	0.82	0.87	0.38	0.85	1.12	1.10	0.80	0.76

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
11: Broad Street (SR 227) & Aero Drive

02/05/2020

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	190	46	37	350	41	1020	100	1325
v/c Ratio	0.71	0.14	0.15	0.86	0.39	0.62	0.85	0.77
Control Delay	65.2	0.9	46.9	38.7	70.1	28.8	107.7	32.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.2	0.9	46.9	38.7	70.1	28.8	107.7	32.4
Queue Length 50th (ft)	141	0	25	97	31	304	78	451
Queue Length 95th (ft)	245	0	60	227	79	506	#221	#785
Internal Link Dist (ft)	498		322			255		729
Turn Bay Length (ft)		75		75	200		200	
Base Capacity (vph)	446	467	449	558	118	1639	118	1727
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.10	0.08	0.63	0.35	0.62	0.85	0.77

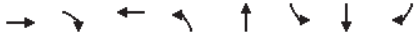
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

13: Edna Road (SR 227) & Buckley Road

02/05/2020



Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	88	347	12	67	752	2	1014	34
v/c Ratio	0.40	0.63	0.07	0.42	0.55	0.02	0.88	0.03
Control Delay	60.1	20.1	0.8	67.0	9.7	69.5	28.9	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.1	20.1	0.8	67.0	9.7	69.5	28.9	1.8
Queue Length 50th (ft)	52	65	0	41	149	1	469	0
Queue Length 95th (ft)	144	210	0	122	524	12	1105	10
Internal Link Dist (ft)	2049		536		742		3252	
Turn Bay Length (ft)		145		360		400		400
Base Capacity (vph)	464	704	340	353	1655	548	1695	1415
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.49	0.04	0.19	0.45	0.00	0.60	0.02

Intersection Summary

Queues

14: S. Higuera Street & Buckley Road

02/05/2020

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	230	424	295	241	243	663
v/c Ratio	0.52	0.60	0.58	0.40	0.56	0.60
Control Delay	25.2	6.6	24.5	5.4	26.4	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.2	6.6	24.5	5.4	26.4	10.1
Queue Length 50th (ft)	61	0	80	0	66	112
Queue Length 95th (ft)	168	66	203	50	180	274
Internal Link Dist (ft)	1771		1152			2493
Turn Bay Length (ft)	150			200	150	
Base Capacity (vph)	922	1027	1006	966	785	1682
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.41	0.29	0.25	0.31	0.39

Intersection Summary

Queues
2: Broad Street (SR 227) & Industrial

02/05/2020

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	20	10	100	78	54	1171	202	90	1630	104
v/c Ratio	0.14	0.05	0.47	0.31	0.64	0.57	0.24	0.61	0.75	0.11
Control Delay	39.9	0.5	42.1	12.3	74.6	14.1	6.3	57.1	16.4	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.9	0.5	42.1	12.3	74.6	14.1	6.3	57.1	16.4	3.1
Queue Length 50th (ft)	10	0	51	0	29	214	24	47	336	2
Queue Length 95th (ft)	33	0	100	39	#93	316	67	#121	500	25
Internal Link Dist (ft)	288		473			1028			1931	
Turn Bay Length (ft)		100		180	150		175	150		440
Base Capacity (vph)	763	689	684	624	85	2037	850	148	2165	924
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.01	0.15	0.13	0.64	0.57	0.24	0.61	0.75	0.11

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
3: LOVR & 101 SB

02/05/2020

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	819	356	39	924	483	245
v/c Ratio	0.42	0.35	0.36	0.43	0.93	0.44
Control Delay	11.5	1.6	50.3	10.2	56.4	13.2
Queue Delay	0.3	0.3	0.0	0.0	0.0	0.0
Total Delay	11.8	1.9	50.3	10.2	56.4	13.2
Queue Length 50th (ft)	160	0	22	137	261	42
Queue Length 95th (ft)	164	6	54	178	#443	107
Internal Link Dist (ft)	236			227	422	
Turn Bay Length (ft)		120	150			
Base Capacity (vph)	1946	1010	108	2158	540	573
Starvation Cap Reductn	501	241	0	0	0	0
Spillback Cap Reductn	0	0	0	6	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.46	0.36	0.43	0.89	0.43

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
4: 101 NB & LOVR

02/05/2020

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1123	179	98	464	664
v/c Ratio	0.62	0.14	0.47	0.20	0.78
Control Delay	22.1	0.6	52.3	7.9	43.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	22.1	0.6	52.3	7.9	43.1
Queue Length 50th (ft)	287	0	65	61	212
Queue Length 95th (ft)	422	12	117	98	257
Internal Link Dist (ft)	191			529	142
Turn Bay Length (ft)		150	200		
Base Capacity (vph)	1824	1292	210	2357	944
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.62	0.14	0.47	0.20	0.70

Intersection Summary

Queues
5: S. Higuera Street & Tank Farm

02/13/2020

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	44	30	152	151	292	20	500	887	503	460
v/c Ratio	0.31	0.11	0.35	0.35	0.48	0.20	0.63	0.88	0.70	0.29
Control Delay	50.2	0.8	31.2	31.2	6.4	51.9	36.8	16.4	42.8	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.2	0.8	31.2	31.2	6.4	51.9	36.8	16.4	42.8	19.5
Queue Length 50th (ft)	26	0	77	76	0	12	141	84	147	83
Queue Length 95th (ft)	64	0	145	143	62	39	217	#212	#261	164
Internal Link Dist (ft)	109			777			1054			1668
Turn Bay Length (ft)					250	140		100	165	
Base Capacity (vph)	568	591	605	608	736	102	1028	1120	717	1632
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.05	0.25	0.25	0.40	0.20	0.49	0.79	0.70	0.28

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
6: Long Street & Tank Farm Road

02/05/2020

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	61	1360	120	667	140	90
v/c Ratio	0.35	0.78	0.71	0.34	0.53	0.41
Control Delay	37.9	21.1	58.2	12.4	19.2	25.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.9	21.1	58.2	12.4	19.2	25.7
Queue Length 50th (ft)	25	256	53	96	17	21
Queue Length 95th (ft)	66	#475	#148	171	68	65
Internal Link Dist (ft)		777		787	603	450
Turn Bay Length (ft)	225		175			
Base Capacity (vph)	194	1754	169	1945	465	403
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.78	0.71	0.34	0.30	0.22

Intersection Summary

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
8: Mindbody Entrance & Tank Farm Road

02/05/2020

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1370	100	1407	50	20
v/c Ratio	0.62	0.49	0.90	0.31	0.12
Control Delay	10.8	37.8	19.1	36.3	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	10.8	37.8	19.1	36.3	17.2
Queue Length 50th (ft)	185	36	~598	18	0
Queue Length 95th (ft)	314	98	#1036	59	20
Internal Link Dist (ft)	429		239	814	
Turn Bay Length (ft)		210			125
Base Capacity (vph)	2646	316	1773	402	369
Starvation Cap Reductn	0	0	5	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.52	0.32	0.80	0.12	0.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	320	210	410	304	420	179	347	1104	100	830	800
v/c Ratio	0.46	0.22	0.75	1.02	0.92	0.35	0.95	1.04	0.93	0.91	1.00
Control Delay	46.0	35.3	32.2	107.0	72.0	7.2	91.8	81.0	128.0	59.5	57.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.0	35.3	32.2	107.0	72.0	7.2	91.8	81.0	128.0	59.5	57.3
Queue Length 50th (ft)	118	68	175	~262	328	0	146	~511	82	345	~529
Queue Length 95th (ft)	165	101	302	#444	#509	56	#242	#649	#195	#465	#592
Internal Link Dist (ft)		390			770			1836		1028	
Turn Bay Length (ft)	300		100	150		125	250		250		300
Base Capacity (vph)	699	1010	567	299	483	534	364	1059	107	913	802
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.21	0.72	1.02	0.87	0.34	0.95	1.04	0.93	0.91	1.00

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
11: Broad Street (SR 227) & Aero Drive

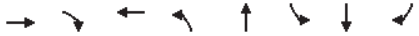
02/05/2020

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	101	51	20	130	75	1460	50	953
v/c Ratio	0.54	0.21	0.17	0.58	0.47	0.71	0.37	0.48
Control Delay	59.5	4.2	55.0	20.0	60.5	21.3	58.8	16.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.5	4.2	55.0	20.0	60.5	21.3	58.8	16.8
Queue Length 50th (ft)	70	0	14	0	52	387	35	208
Queue Length 95th (ft)	134	11	41	61	109	602	80	328
Internal Link Dist (ft)	310		100			211		1092
Turn Bay Length (ft)		75		75	200		200	
Base Capacity (vph)	564	561	560	582	208	2045	208	1965
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.09	0.04	0.22	0.36	0.71	0.24	0.48

Intersection Summary

Queues
13: Edna Road (SR 227) & Buckley Road

02/05/2020



Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	84	180	5	229	1493	3	690	165
v/c Ratio	0.56	0.33	0.04	0.84	0.96	0.05	0.56	0.15
Control Delay	86.5	6.4	0.6	93.4	29.5	83.0	19.0	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	86.5	6.4	0.6	93.4	29.5	83.0	19.0	2.4
Queue Length 50th (ft)	86	0	0	234	927	3	350	0
Queue Length 95th (ft)	159	55	0	365	#2304	17	713	36
Internal Link Dist (ft)	1017		1172		826		2818	
Turn Bay Length (ft)		145		360		400		400
Base Capacity (vph)	240	642	125	395	1549	65	1242	1081
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.28	0.04	0.58	0.96	0.05	0.56	0.15

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
14: S. Higuera Street & Buckley Road

02/05/2020

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	100	158	499	240	97	358
v/c Ratio	0.30	0.37	0.47	0.24	0.29	0.27
Control Delay	22.9	7.7	12.2	2.4	23.4	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.9	7.7	12.2	2.4	23.4	4.1
Queue Length 50th (ft)	25	0	106	0	24	31
Queue Length 95th (ft)	76	44	224	32	77	74
Internal Link Dist (ft)	1596		529			1539
Turn Bay Length (ft)	150			200	150	
Base Capacity (vph)	769	777	1526	1340	470	1780
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.20	0.33	0.18	0.21	0.20

Intersection Summary

Queues
2: Broad Street (SR 227) & Industrial Way

02/05/2020

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	120	50	204	258	94	1628	199	140	1428	111
v/c Ratio	0.56	0.17	0.73	0.58	0.88	1.08	0.30	0.98	0.91	0.15
Control Delay	51.4	1.3	57.1	10.9	108.1	78.5	10.9	118.8	36.1	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.4	1.3	57.1	10.9	108.1	78.5	10.9	118.8	36.1	4.2
Queue Length 50th (ft)	73	0	124	0	61	~621	36	91	437	0
Queue Length 95th (ft)	130	0	#234	73	#165	#812	93	#226	#640	33
Internal Link Dist (ft)	288		473			1028			1931	
Turn Bay Length (ft)		100		180	150		175	150		440
Base Capacity (vph)	632	630	297	455	107	1503	658	143	1574	720
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.08	0.69	0.57	0.88	1.08	0.30	0.98	0.91	0.15

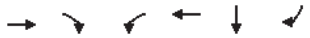
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
3: LOVR & 101 SB

02/05/2020



Lane Group	EBT	EBR	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	964	669	65	1388	311	413
v/c Ratio	0.51	0.61	0.41	0.61	0.68	0.92
Control Delay	19.4	9.0	46.1	11.0	38.0	55.7
Queue Delay	1.7	0.8	0.0	1.0	0.0	1.5
Total Delay	21.1	9.9	46.1	12.0	38.0	57.2
Queue Length 50th (ft)	191	40	35	225	156	192
Queue Length 95th (ft)	295	207	75	287	246	#366
Internal Link Dist (ft)	236			227	198	
Turn Bay Length (ft)		120	1000			
Base Capacity (vph)	1900	1105	186	2285	481	465
Starvation Cap Reductn	719	191	0	0	0	0
Spillback Cap Reductn	0	0	0	586	0	10
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.73	0.35	0.82	0.65	0.91

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
4: 101 NB & LOVR

02/05/2020

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	868	386	193	970	628
v/c Ratio	0.70	0.33	0.60	0.47	0.65
Control Delay	23.7	1.1	37.9	9.6	26.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	23.7	1.1	37.9	9.6	26.0
Queue Length 50th (ft)	178	0	81	124	120
Queue Length 95th (ft)	241	17	#179	167	198
Internal Link Dist (ft)	191			529	142
Turn Bay Length (ft)		150	200		
Base Capacity (vph)	2065	1216	340	2902	1097
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.42	0.32	0.57	0.33	0.57

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
5: S. Higuera Street & Tank Farm Road

02/13/2020

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	30	22	316	311	603	32	800	450	453	890
v/c Ratio	0.25	0.09	0.91	0.89	0.76	0.33	0.86	0.57	0.94	0.49
Control Delay	53.2	0.7	74.2	70.9	10.5	59.7	49.2	8.8	69.0	19.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.2	0.7	74.2	70.9	10.5	59.7	49.2	8.8	69.0	19.3
Queue Length 50th (ft)	20	0	230	226	0	22	284	61	314	226
Queue Length 95th (ft)	51	0	#422	#410	119	56	#403	117	#533	299
Internal Link Dist (ft)	109			670			1054			1668
Turn Bay Length (ft)					250	140		100	165	
Base Capacity (vph)	456	468	346	348	791	99	928	795	481	1819
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.05	0.91	0.89	0.76	0.32	0.86	0.57	0.94	0.49

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
6: Long Street & Tank Farm Road

02/05/2020

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	90	830	160	1280	210	130
v/c Ratio	0.62	0.64	0.60	0.83	0.58	0.47
Control Delay	53.0	21.0	38.0	23.7	14.1	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.0	21.0	38.0	23.7	14.1	20.8
Queue Length 50th (ft)	34	136	57	215	11	23
Queue Length 95th (ft)	#115	246	#149	#447	67	72
Internal Link Dist (ft)		747		867	410	362
Turn Bay Length (ft)	225		175			
Base Capacity (vph)	144	1307	288	1548	560	489
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.64	0.56	0.83	0.38	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
8: Mindbody Entrance & Tank Farm Road

02/05/2020

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1450	70	1330	250	100
v/c Ratio	0.77	0.45	1.08	0.80	0.28
Control Delay	18.3	44.6	65.3	53.9	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	18.3	44.6	65.4	53.9	9.8
Queue Length 50th (ft)	284	32	~722	115	0
Queue Length 95th (ft)	406	78	#1043	#280	43
Internal Link Dist (ft)	372		258	540	
Turn Bay Length (ft)		210			125
Base Capacity (vph)	2266	263	1568	335	380
Starvation Cap Reductn	0	0	5	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.64	0.27	0.85	0.75	0.26

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
9: Broad Street (SR 227) & Tank Farm Road

02/05/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	670	580	329	217	290	150	530	1374	260	888	580
v/c Ratio	1.17	0.82	0.63	0.86	0.89	0.39	0.88	1.15	1.10	0.83	0.76
Control Delay	128.1	45.5	13.5	70.1	66.9	9.0	53.4	103.9	126.0	37.1	23.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	128.1	45.5	13.5	70.1	66.9	9.0	53.4	103.9	126.0	37.1	23.3
Queue Length 50th (ft)	~236	167	28	122	162	0	152	~478	~170	247	212
Queue Length 95th (ft)	#344	#247	114	#245	#304	50	#239	#614	#319	#330	339
Internal Link Dist (ft)		429			770			2199		1028	
Turn Bay Length (ft)	300		100	150		125	250		250		300
Base Capacity (vph)	574	710	520	256	332	393	612	1200	237	1074	760
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.17	0.82	0.63	0.85	0.87	0.38	0.87	1.15	1.10	0.83	0.76

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
11: Broad Street (SR 227) & Aero Drive

02/05/2020

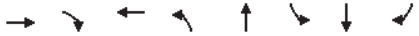
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	234	66	37	350	62	1020	100	1358
v/c Ratio	0.83	0.18	0.14	0.90	0.68	0.65	0.65	0.81
Control Delay	80.0	1.1	50.9	52.4	99.8	34.1	81.3	36.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.0	1.1	50.9	52.4	99.8	34.1	81.3	36.4
Queue Length 50th (ft)	206	0	29	155	57	396	89	561
Queue Length 95th (ft)	#333	0	63	#307	#140	510	157	707
Internal Link Dist (ft)	498		322			255		729
Turn Bay Length (ft)		75		75	200		200	
Base Capacity (vph)	329	402	358	457	92	1563	183	1673
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.16	0.10	0.77	0.67	0.65	0.55	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
13: Edna Road (SR 227) & Buckley Road

02/05/2020



Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	93	347	12	67	768	2	1029	39
v/c Ratio	0.42	0.64	0.07	0.43	0.56	0.02	0.88	0.04
Control Delay	61.1	20.9	0.8	68.3	9.9	70.0	29.2	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.1	20.9	0.8	68.3	9.9	70.0	29.2	2.3
Queue Length 50th (ft)	58	71	0	43	158	1	491	0
Queue Length 95th (ft)	151	213	0	122	544	12	1143	12
Internal Link Dist (ft)	2049		536		742		3252	
Turn Bay Length (ft)		145		360		400		400
Base Capacity (vph)	450	691	332	342	1654	532	1694	1414
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.50	0.04	0.20	0.46	0.00	0.61	0.03

Intersection Summary

Queues
14: S. Higuera Street & Buckley Road

02/05/2020

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	235	424	295	246	243	663
v/c Ratio	0.53	0.59	0.58	0.40	0.56	0.60
Control Delay	25.5	6.6	24.5	5.4	26.7	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.5	6.6	24.5	5.4	26.7	10.2
Queue Length 50th (ft)	65	0	81	0	69	114
Queue Length 95th (ft)	171	67	205	50	181	277
Internal Link Dist (ft)	1771		1152			2493
Turn Bay Length (ft)	150			200	150	
Base Capacity (vph)	913	1022	997	962	778	1679
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.41	0.30	0.26	0.31	0.39

Intersection Summary

Appendix G

Mitigation Results Summary

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Mitigation Summary

Intersection Operation

Existing plus Project Conditions

Queuing

Table 1 – Existing 95th Percentile Queues Exceeding Available Storage

Study Intersection Approach	Available Storage	95th Percentile Queues							
		AM Peak Hour				PM Peak Hour			
		E	E+P	Prj Mit	(+/-)**	E	E+P	Mit	(+/-)**
5. Tank Farm Rd/S Higuera St									
WB Right-Turn	250	60	60	60	-	70	71	-	-
NB Left-Turn	140*	28	28	28	-	54	54	-	-
NB Right-Turn	100	**191**	**220**	**194**	+3	70	74	-	-
SB Left-Turn	165*	**252**	**255**	**258**	+6	**338**	**342**	**-**	**-**
9. Tank Farm Rd/Broad St									
EB Left-Turn	300	137	137	139	+2	181	181	179	-2
EB Right-Turn	100	**308**	**335**	**331**	+23	58	60	60	+2
WB Left-Turn	150*	**328**	**338**	**321**	-7	**205**	**217**	**217**	**+12**
NB Left-Turn	250	173	185	167	-6	152	159	159	+7
SB Left-Turn	250*	115	115	121	+6	228	228	228	-
SB Right-Turn	300	124	125	116	+8	299	**301**	299	-

Notes: All distances are measured in feet; E = existing conditions; E+P = existing plus project conditions; **Bold** text = queue length exceeds available storage; * = Extends into a two-way left-turn lane; ** = Net increase and decrease compared to the exiting without project conditions; Shaded Cell = Queuing Adverse Impact

Roadway Segment Operation

Existing plus Project Conditions

Automobile Operations Analysis

Table 2 – Mitigation for Existing Plus Project Peak Hour Roadway Segment Auto Levels of Service

Study Roadway Segment	Direction	Existing Conditions				Mitigation		
		PM Peak		PM Peak with Project		PM Peak with Project		
		Speed	BFFS/ LOS	Speed	BFFS/ LOS	Speed	(+/-)*	BFFS/ LOS
2. Broad St (SR 227): Tank Farm Rd to City Limits								
A. Tank Farm Rd to Aero Dr	SB	18.4	41/D	18.0	**40/E**	18.2	+0.2	41/D

Notes: BFFS = is the percent of "Base Free Flow Speed"; Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation; * = Net increase is compared to the plus project conditions

Cumulative plus Project Conditions

Pedestrian Analysis

Table 3 – Mitigation for Cumulative Plus Project Roadway Segment Pedestrian Levels of Service

Study Roadway Segment	Direction	Cumulative Conditions				Mitigation		
		PM Peak		PM Peak with Project		PM Peak with Project		
		Score	LOS	Score	LOS	Score	(+/-)	LOS
1. Broad St (SR 227): Orcutt Rd to Tank Farm Rd								
B. Industrial Rd to Tank Farm Rd	NB	**4.44**	**E**	**4.46**	**E**	**4.43**	-0.03	**E**

Notes: BFFS = is the percent of "Base Free Flow Speed"; Speed is measured in miles per hour; LOS = Level of Service; **Bold** text = deficient operation; * = Net increase is compared to the plus project conditions

Queues
5: S. Higuera Street & Tank Farm

05/15/2020

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	59	29	159	162	269	13	410	831	263	282
v/c Ratio	0.36	0.10	0.41	0.42	0.48	0.11	0.54	0.86	0.68	0.17
Control Delay	49.3	0.7	35.3	35.4	7.5	48.4	35.6	15.9	43.5	15.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.3	0.7	35.3	35.4	7.5	48.4	35.6	15.9	43.5	15.8
Queue Length 50th (ft)	34	0	83	84	0	7	114	74	143	46
Queue Length 95th (ft)	60	0	162	164	60	28	177	194	258	97
Internal Link Dist (ft)	109			777			1054			1668
Turn Bay Length (ft)					250	140		100	165	
Base Capacity (vph)	615	627	529	530	664	178	1114	1056	534	1917
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.05	0.30	0.31	0.41	0.07	0.37	0.79	0.49	0.15

Intersection Summary

HCM 6th Signalized Intersection Summary
5: S. Higuera Street & Tank Farm

05/15/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	17	20	280	3	237	12	365	740	255	267	7
Future Volume (veh/h)	23	17	20	280	3	237	12	365	740	255	267	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		1.00	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	25	26	320	0	0	13	410	631	263	275	7
Peak Hour Factor	0.68	0.68	0.68	0.88	0.88	0.88	0.89	0.89	0.89	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	84	161	497	0		28	1065	675	314	1628	41
Arrive On Green	0.11	0.11	0.11	0.14	0.00	0.00	0.02	0.30	0.30	0.18	0.46	0.46
Sat Flow, veh/h	1048	770	1477	3563	0	1585	1781	3554	1513	1781	3537	90
Grp Volume(v), veh/h	59	0	26	320	0	0	13	410	631	263	138	144
Grp Sat Flow(s),veh/h/ln	1818	0	1477	1781	0	1585	1781	1777	1513	1781	1777	1850
Q Serve(g_s), s	2.5	0.0	1.3	7.1	0.0	0.0	0.6	7.6	25.0	11.9	3.8	3.8
Cycle Q Clear(g_c), s	2.5	0.0	1.3	7.1	0.0	0.0	0.6	7.6	25.0	11.9	3.8	3.8
Prop In Lane	0.58		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	198	0	161	497	0		28	1065	675	314	818	851
V/C Ratio(X)	0.30	0.00	0.16	0.64	0.00		0.47	0.39	0.94	0.84	0.17	0.17
Avail Cap(c_a), veh/h	588	0	478	1067	0		171	1065	675	512	818	851
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	0.0	33.7	33.9	0.0	0.0	40.7	23.1	20.1	33.2	13.2	13.2
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.5	0.0	0.0	4.5	0.5	20.9	7.5	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.5	2.9	0.0	0.0	0.3	3.0	16.3	5.4	1.4	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	0.0	33.9	34.5	0.0	0.0	45.2	23.6	41.0	40.7	13.4	13.4
LnGrp LOS	C	A	C	C	A		D	C	D	D	B	B
Approach Vol, veh/h		85			320	A		1054			545	
Approach Delay, s/veh		34.4			34.5			34.3			26.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.7	31.0		15.1	6.3	44.4		17.7				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	24.0	25.0		27.0	8.0	36.0		25.0				
Max Q Clear Time (g_c+I1), s	13.9	27.0		4.5	2.6	5.8		9.1				
Green Ext Time (p_c), s	0.8	0.0		0.2	0.0	3.0		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		32.2	
HCM 6th LOS		C	

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Queues
9: Broad Street (SR 227) & Tank Farm Road

03/10/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	251	167	435	283	500	238	851	73	834	414
v/c Ratio	0.60	0.21	0.89	0.87	0.46	0.77	0.76	0.73	0.82	0.52
Control Delay	55.1	36.0	47.0	73.8	25.0	70.4	41.3	94.6	47.4	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.1	36.0	47.0	73.8	25.0	70.4	41.3	94.6	47.4	10.4
Queue Length 50th (ft)	94	53	202	211	115	93	306	56	318	71
Queue Length 95th (ft)	139	82	331	#321	146	#167	414	#121	363	116
Internal Link Dist (ft)		390			770		1836		1028	
Turn Bay Length (ft)	300		100	150		250		250		300
Base Capacity (vph)	555	1078	591	346	1242	313	1121	100	1021	855
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.15	0.74	0.82	0.40	0.76	0.76	0.73	0.82	0.48

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
9: Broad Street (SR 227) & Tank Farm Road

05/15/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	149	387	229	243	162	221	673	118	58	667	331
Future Volume (veh/h)	223	149	387	229	243	162	221	673	118	58	667	331
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	251	167	350	283	300	51	238	724	109	72	834	340
Peak Hour Factor	0.89	0.89	0.89	0.81	0.81	0.81	0.93	0.93	0.93	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	322	920	405	311	1035	174	294	965	145	92	991	579
Arrive On Green	0.09	0.26	0.26	0.17	0.34	0.34	0.08	0.31	0.31	0.05	0.28	0.28
Sat Flow, veh/h	3456	3554	1563	1781	3040	511	3456	3090	465	1781	3554	1546
Grp Volume(v), veh/h	251	167	350	283	174	177	238	416	417	72	834	340
Grp Sat Flow(s),veh/h/ln	1728	1777	1563	1781	1777	1774	1728	1777	1779	1781	1777	1546
Q Serve(g_s), s	8.4	4.3	25.3	18.5	8.5	8.7	8.0	24.9	24.9	4.7	26.2	21.0
Cycle Q Clear(g_c), s	8.4	4.3	25.3	18.5	8.5	8.7	8.0	24.9	24.9	4.7	26.2	21.0
Prop In Lane	1.00		1.00	1.00		0.29	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	322	920	405	311	605	604	294	555	555	92	991	579
V/C Ratio(X)	0.78	0.18	0.86	0.91	0.29	0.29	0.81	0.75	0.75	0.78	0.84	0.59
Avail Cap(c_a), veh/h	543	1050	462	338	605	604	306	555	555	98	991	579
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	34.1	41.9	48.0	28.6	28.6	53.3	36.6	36.6	55.5	40.3	29.9
Incr Delay (d2), s/veh	4.1	0.1	14.3	26.3	0.3	0.3	14.6	9.0	9.0	31.6	8.6	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	1.9	11.1	10.3	3.6	3.7	4.0	11.8	11.8	2.9	12.2	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.6	34.2	56.2	74.3	28.8	28.9	67.9	45.6	45.6	87.2	48.9	34.3
LnGrp LOS	E	C	E	E	C	C	E	D	D	F	D	C
Approach Vol, veh/h		768			634			1071			1246	
Approach Delay, s/veh		51.5			49.1			50.6			47.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	43.5	26.2	37.2	15.6	39.5	16.6	46.8
Change Period (Y+Rc), s	5.5	6.5	5.5	6.5	5.5	6.5	5.5	* 6.5
Max Green Setting (Gmax), s	6.5	37.0	22.5	35.0	10.5	33.0	18.6	* 40
Max Q Clear Time (g_c+I1), s	6.7	26.9	20.5	27.3	10.0	28.2	10.4	10.7
Green Ext Time (p_c), s	0.0	3.5	0.2	1.6	0.0	2.8	0.6	2.0

Intersection Summary	
HCM 6th Ctrl Delay	49.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Queues
9: Broad Street (SR 227) & Tank Farm Road

05/15/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	503	455	293	208	353	449	1040	221	770	565
v/c Ratio	0.64	0.60	0.53	0.74	0.61	0.73	1.14	0.75	0.87	0.72
Control Delay	33.0	32.5	7.3	51.7	25.9	40.4	105.9	50.5	43.2	18.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	32.5	7.3	51.7	25.9	40.4	105.9	50.5	43.2	18.9
Queue Length 50th (ft)	124	114	0	104	57	113	~343	110	207	172
Queue Length 95th (ft)	179	161	60	#217	103	159	#446	#228	#352	299
Internal Link Dist (ft)		429			770		2199		1028	
Turn Bay Length (ft)	300		100	150		250		250		300
Base Capacity (vph)	982	1057	659	308	716	683	913	330	886	877
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.43	0.44	0.68	0.49	0.66	1.14	0.67	0.87	0.64

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
9: Broad Street (SR 227) & Tank Farm Road

05/15/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	473	428	275	185	194	120	368	664	189	201	701	514
Future Volume (veh/h)	473	428	275	185	194	120	368	664	189	201	701	514
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	503	455	241	208	218	111	449	810	192	221	770	443
Peak Hour Factor	0.94	0.94	0.94	0.89	0.89	0.89	0.82	0.82	0.82	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	651	762	328	252	384	187	564	795	188	266	949	715
Arrive On Green	0.19	0.21	0.21	0.14	0.17	0.17	0.16	0.28	0.28	0.15	0.27	0.27
Sat Flow, veh/h	3456	3554	1528	1781	2288	1113	3456	2827	670	1781	3554	1558
Grp Volume(v), veh/h	503	455	241	208	167	162	449	509	493	221	770	443
Grp Sat Flow(s),veh/h/ln	1728	1777	1528	1781	1777	1624	1728	1777	1720	1781	1777	1558
Q Serve(g_s), s	10.4	8.6	11.0	8.5	6.5	6.9	9.4	21.0	21.0	9.0	15.2	16.2
Cycle Q Clear(g_c), s	10.4	8.6	11.0	8.5	6.5	6.9	9.4	21.0	21.0	9.0	15.2	16.2
Prop In Lane	1.00		1.00	1.00		0.69	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	651	762	328	252	298	272	564	499	483	266	949	715
V/C Ratio(X)	0.77	0.60	0.74	0.83	0.56	0.60	0.80	1.02	1.02	0.83	0.81	0.62
Avail Cap(c_a), veh/h	1061	1139	490	333	356	325	738	499	483	357	949	715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	26.5	27.4	31.3	28.6	28.8	30.1	26.9	26.9	30.9	25.7	15.5
Incr Delay (d2), s/veh	2.0	0.8	3.2	12.1	1.7	2.1	4.6	45.3	46.0	11.6	7.5	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.5	4.0	4.3	2.7	2.7	3.9	14.2	13.8	4.4	6.7	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.9	27.2	30.6	43.3	30.3	30.9	34.7	72.2	72.9	42.6	33.2	19.5
LnGrp LOS	C	C	C	D	C	C	C	F	F	D	C	B
Approach Vol, veh/h		1199			537			1451			1434	
Approach Delay, s/veh		29.4			35.5			60.8			30.4	
Approach LOS		C			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	25.0	14.6	20.1	16.2	24.0	18.1	16.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	21.0	14.0	24.0	16.0	20.0	23.0	15.0
Max Q Clear Time (g_c+I1), s	11.0	23.0	10.5	13.0	11.4	18.2	12.4	8.9
Green Ext Time (p_c), s	0.3	0.0	0.2	3.1	0.9	1.2	1.7	0.9

Intersection Summary	
HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/4/2020	Number of Segments	2
Jurisdiction		Time Period	PM Existing+P	Number of Iterations	15
File Name	PM Existing+P_Broad_2_mitigat	Analysis Year	2020	System Cycle Length, s	120
Intersections	Tank Farm Road	Aero Drive		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Tank Farm to Aero)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
1	45	45	2	2	3000	3000	80	80	0	0	100	80	45.0	45.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	45.36			45.46		
1	Running Time, s	92.57			91.89		
1	Running Speed, mph	22.10			22.26		
1	Through Delay, s/veh	19.93			57.53		
1	Travel Time, s	112.50			149.42		
1	Travel Speed, mph	18.18			13.69		
1	Stop Rate, stops/veh	0.71			1.01		
1	Spatial Stop Rate, stops/mi	1.24			1.77		
1	Through vol/cap Ratio	0.84			0.88		
1	Percent of Base FFS	40.08			30.11		
1	Level of Service	D			E		
1	Auto Traveler Perception Score	2.43			2.52		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	3.37	C		2.73	B	
1	Bicycle Segment LOS Score / LOS	1.92	A		1.71	A	
1	Transit Segment LOS Score / LOS	4.97	E		6.35	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	258.61	231.25
Facility Travel Speed, mph	19.77	22.11
Facility Base Free Flow Speed, mph	45.86	46.01
Facility Percent of Base FFS	43.12	48.07
Facility Level of Service	F	D
Facility Auto Traveler Perception Score	2.42	2.41

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS				
Bicycle Facility LOS Score / LOS	1.57	A	1.33	A
Transit Facility LOS Score / LOS	6.08	F	6.47	F

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency				Number of Intersections	3
Analyst	W-Trans	Analysis Date	2/3/2020	Number of Segments	2
Jurisdiction		Time Period	PM Future	Number of Iterations	15
File Name	PM Future+P_Broad_1_mit.xus	Analysis Year	2040	System Cycle Length, s	120
Intersections	Industrial Road	Tank Farm Road		Analysis Period	1> 7:00
Project Description	SLO Airport Hotels				

Basic Segment Information (Broad - Industrial to Tank Farm)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
2	45	45	2	2	1030	1030	80	100	0	0	70	100	0.0	0.0

		Southbound			Northbound		
Segment Output Data		SBL	SBT	SBR	NBL	NBT	NBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	45.99			45.84		
2	Running Time, s	17.71			17.96		
2	Running Speed, mph	39.66			39.09		
2	Through Delay, s/veh	41.28			54.19		
2	Travel Time, s	58.99			72.15		
2	Travel Speed, mph	11.90			9.73		
2	Stop Rate, stops/veh	0.88			0.98		
2	Spatial Stop Rate, stops/mi	4.50			5.02		
2	Through vol/cap Ratio	0.84			1.03		
2	Percent of Base FFS	25.89			21.23		
2	Level of Service	F			F		
2	Auto Traveler Perception Score	2.88			2.97		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	4.62	E		4.43	E	
2	Bicycle Segment LOS Score / LOS	2.29	B		2.61	B	
2	Transit Segment LOS Score / LOS	5.56	F		5.58	F	

Facility Output Data	Southbound	Northbound
Facility Travel Time, s	150.07	138.60
Facility Travel Speed, mph	23.08	24.99
Facility Base Free Flow Speed, mph	45.45	45.24
Facility Percent of Base FFS	50.78	55.25
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.37	2.30

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS			4.53	E
Bicycle Facility LOS Score / LOS	2.01	B	2.80	C
Transit Facility LOS Score / LOS	6.44	F	4.94	E

