



HEXAGON TRANSPORTATION CONSULTANTS, INC.



123 Edgemont Drive JUHSD Office and Adult Education Buildings



Draft Transportation Analysis



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Executive Summary

This report presents the results of the transportation analysis conducted for the proposed relocation of the Jefferson Union High School District (JUHSD) office and adult education buildings from the existing facility located at 699 Serramonte Boulevard to the project site, approximately one mile north of the existing location, at 123 Edgemont Drive in Daly City, California. The project site is vacant. The project site would include a two-story district office building of 30,000 square feet (s.f.) that would provide office space, large event/conference space, and the district board room and a two-story adult education building of 39,000 s.f. that would provide administrative office space, adult education classrooms, adult transition classrooms, and multi-purpose rooms. Access to the new buildings would be provided via driveways on Edgemont Drive and Mariposa Avenue. Both driveways would provide access to a shared surface parking lot between the district office building and the adult education building. The project would not result in an increase of the number of employees working in the buildings or the number of students enrolled in the adult education program.

Per California Senate Bill 743 (SB 743) and CEQA Guidelines, the study evaluates the project's vehicle miles traveled (VMT) impact. The study also includes a transportation analysis that evaluates potential transportation effects of the project in accordance with the standards and methodologies set forth by Daly City and the City/County Association of Governments (C/CAG). The transportation analysis includes an analysis of the traffic operational effects of the project on the key intersections in the vicinity of the site, a vehicle queuing analysis, an evaluation of the transit, bicycle, and pedestrian access and circulation, and a review of site access and on-site circulation.

VMT Analysis

The project is relocating the district office and adult education program building and would not result in an increase in the number of employees and students, and therefore, no new trips would be generated by the project. Additionally, because the proposed building is near the existing building, it is expected that the project would not increase the VMT of the existing trips. Therefore, the project would have a less-than-significant impact on VMT.

Project Trip Estimates

Because the project would not result in an increase in the number of employees and students, trip generation at the new site should be based on the existing operation at the current site. However, due to Covid-19, students and employees study/work remotely and trip generation counts cannot be conducted at the existing site to reflect the typical conditions. Therefore, based on trip generation rates recommended by the Institute of Transportation Engineers *Trip Generation Manual* and data provided by the district for faculty and students, it is estimated that the project would generate 355 trips during

the AM peak hour (340 inbound and 15 outbound) and 281 trips during the PM peak hour (230 inbound and 51 outbound).

Intersection Level of Service Analysis

Signalized Intersections

The Skyline Boulevard/Westmoor Avenue intersection would operate at an unacceptable LOS E, based on estimated volumes, under existing and existing plus project conditions during both peak hours. Under cumulative and cumulative plus project conditions, the intersection would be at an unacceptable LOS F during the AM peak hour and LOS E during the PM peak hour. Because the project would add trips to the intersection; the project would cause an adverse effect at the intersection, based on the City's criteria. There are no feasible improvements to widen or increase the capacity of the intersection. The project applicant should coordinate with the City to identify appropriate improvements, which could include improvements to multimodal transportation to address the project's adverse effect.

All other signalized study intersections would operate at an acceptable level of service during the AM and PM peak hours under the existing and cumulative conditions, with and without the project.

Unsignalized Intersections

The St. Francis Boulevard/Eastmoor Avenue intersection would degrade from LOS D under no project conditions to LOS E and F under existing plus project and cumulative plus project conditions, respectively, during the AM peak hour. The Southgate Avenue/Westmoor Avenue intersection would degrade from LOS D under existing conditions to LOS E under existing plus project conditions and from LOS E under cumulative no project conditions to LOS F under cumulative plus project conditions during the AM peak hour. The City does not have a level of service standard for unsignalized intersections.

The peak-hour volume signal warrant analysis indicates that the Southgate Avenue/Westmoor Avenue intersection may warrant signalization under existing and cumulative conditions, both with and without the project, based on estimated volumes. It is recommended that the City evaluate the need for signalization or improvement at these intersections prior to the issuance of the occupancy permit for the project. If the City determines an improvement or signalization is warranted, it would be appropriate for the project applicant to pay a fair share contribution towards the improvement.

The intersection level of service results are shown on Table ES-1.

**Table ES-1
Intersection Level of Service Summary**

#	Intersection	Control	LOS Standard	Peak Hour	Existing					Cumulative (2035) ²				
					No Project		Plus Project			No Project		Plus Project		
					Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. in Delay (sec)	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. in Delay (sec)
1	Sullivan Avenue & Eastmoor Avenue	Signal	D	AM PM	31.6 23.8	C C	32.3 24.4	C C	0.7 0.6	32.9 25.0	C C	33.1 25.7	C C	0.2 0.7
2	St. Francis Boulevard & Eastmoor Avenue	AWSC	None	AM PM	27.0 15.8	D C	48.8 22.5	E C	21.8 6.7	34.0 17.5	D C	61.0 25.5	F D	27.0 8.0
3	Edgemont Drive & Westmoor Avenue ¹	AWSC	None	AM PM	9.2 9.1	A A	9.8 9.5	A A	0.6 0.4	9.4 9.0	A A	10.0 9.4	A A	0.6 0.4
4	St. Francis Boulevard & Mariposa Avenue ¹	OWSC	None	AM PM	13.0 10.7	B B	22.0 13.8	C B	9.0 3.1	13.3 10.9	B B	23.5 14.4	C B	10.2 3.5
5	St. Francis Boulevard & Southgate Avenue ¹	Signal	D	AM PM	15.0 14.4	B B	15.1 14.5	B B	0.1 0.1	14.8 14.4	B B	15.7 14.8	B B	0.9 0.4
6	Southgate Avenue & Westmoor Avenue ¹	AWSC	None	AM PM	28.4 17.6	D C	39.3 21.1	E C	10.9 3.5	41.5 19.3	E C	54.2 24.0	F C	12.7 4.7
7	Skyline Boulevard & Westmoor Avenue ¹	Signal	D	AM PM	74.3 57.8	E E	78.0 61.3	E E	3.7 3.5	93.1 68.1	F E	96.2 74.3	F E	3.1 6.2

Notes:
 AWSC = all-way stop control, OWSC = one-way stop control
 1. Counts from 2021 were factored by counting the nearby intersections with available counts.
 2. Cumulative traffic volumes were estimated by the City's Travel Demand Model
Bold indicates LOS E or F operations
Bold indicates an adverse effect due to the project.

Other Transportation Issues

The site plan shows adequate site access and on-site circulation, and no significant on-site circulation issues are expected to occur as a result of the project. The project would not have an adverse effect on the existing transit, pedestrian, or bicycle facilities in the study area.

Hexagon has the following recommendation resulting from the site access and circulation evaluation and the parking evaluation.

Recommendations

- The project should provide a pedestrian walkway along the north edge of the site to connect Edgemont Drive and the adult education building and extend the pedestrian walkway north of the district office to connect to Mariposa Avenue.
- To prevent traffic cutting through the parking lot between Mariposa Avenue and Edgemont Drive, the project should monitor the cut through traffic and install speed bumps in the drive aisles, as necessary.
- The project should coordinate with the City to determine the parking requirement for the adult education building and the total parking requirement for the site.
- The project should provide bicycle racks next to building entrances.

1. Introduction

This report presents the results of the transportation analysis conducted for the proposed relocation of the Jefferson Union High School District (JUHSD) office and adult education buildings from the existing facility located at 699 Serramonte Boulevard to the project site at 123 Edgemont Drive, approximately one mile north of the existing location (see Figure 1). The project site is vacant. The project would include a two-story, 30,000 square foot (s.f.) district office building that would provide office space, large event/conference space, and the district board room, and a two-story, 39,000 s.f. adult education building that would provide administrative office space, adult education classrooms, adult transition classrooms, and multi-purpose rooms. Access to the new buildings would be provided via driveways on Edgemont Drive and Mariposa Avenue (see Figure 2). Both driveways would provide access to a shared surface parking lot between the district office building and the adult education building. The project would not result in an increase of the number of employees working in the buildings or the number of students enrolled in the existing adult education program.

Scope of Study

The purpose of the study is to identify potential transportation impacts related to the proposed development. Per California Senate Bill 743 (SB 743) and CEQA Guidelines, the study evaluates the project's vehicle miles traveled (VMT) impact. The study also evaluates potential transportation effects of the project in accordance with the standards and methodologies set forth by Daly City and the City/County Association of Governments (C/CAG). The C/CAG administers the County Congestion Management Program (CMP).

Vehicle Miles Traveled (VMT)

Per SB 743, the California Natural Resources Agency, with assistance from the Governor's Office of Planning and Research (OPR), adopted new CEQA guidelines in December 2018. The new guidelines replace Level of Service (LOS) as the evaluation measure for transportation impacts under CEQA with another measure such as Vehicle Miles Traveled (VMT). VMT measures the amount of vehicle trip making and trip length and is a direct measurement of greenhouse gas emissions. A reduction in VMT would promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses that reduces the reliance on individual vehicles.

The project is relocating the district office and adult education program building and would not result in an increase in the number of employees and students, and therefore, no new trips would be generated by the project. Additionally, because the proposed building is near the existing building, it is expected that the project would not increase the VMT of the existing trips. Therefore, the project would have a less-than-significant impact on VMT based on OPR guidelines.

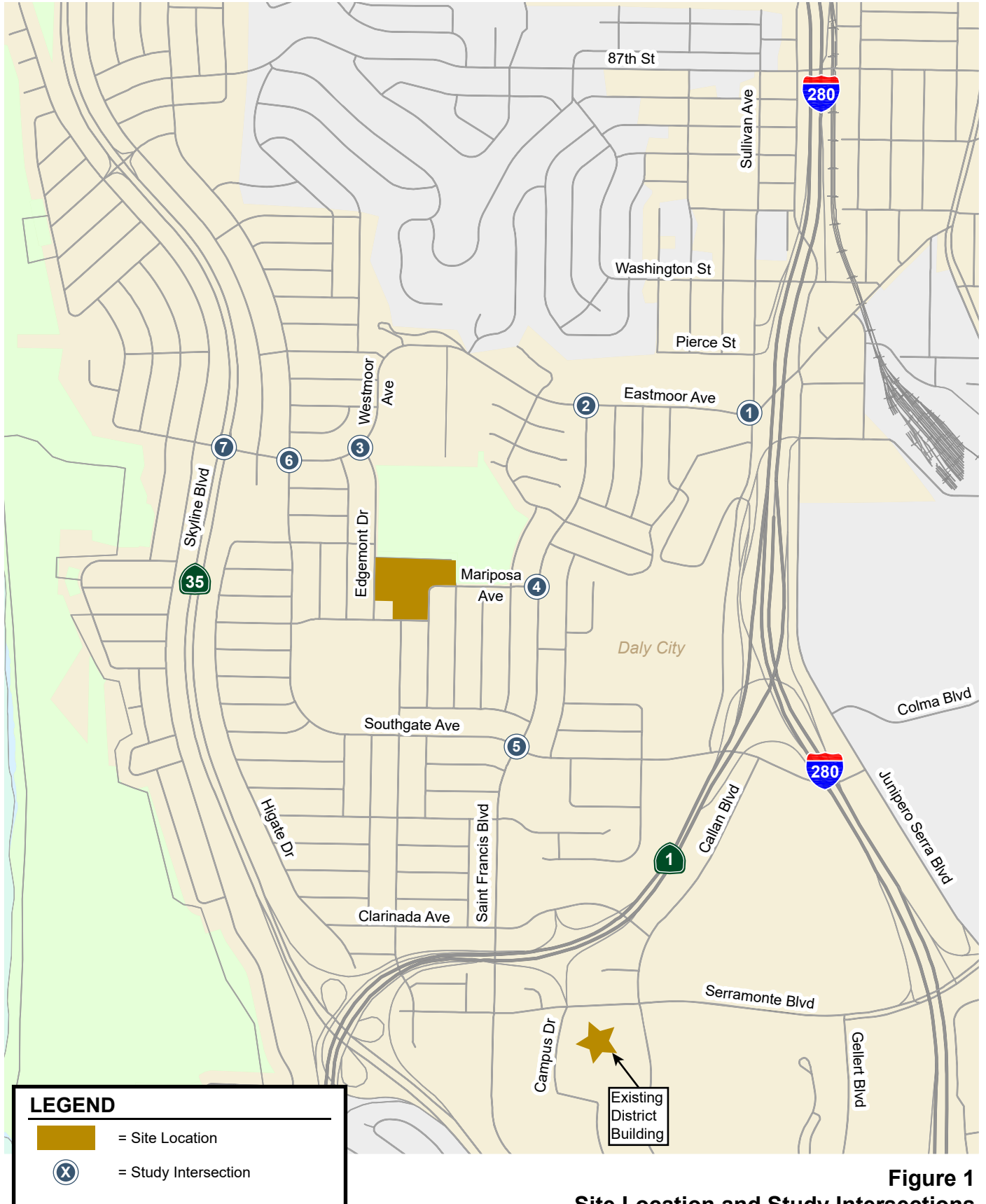


Figure 1
Site Location and Study Intersections

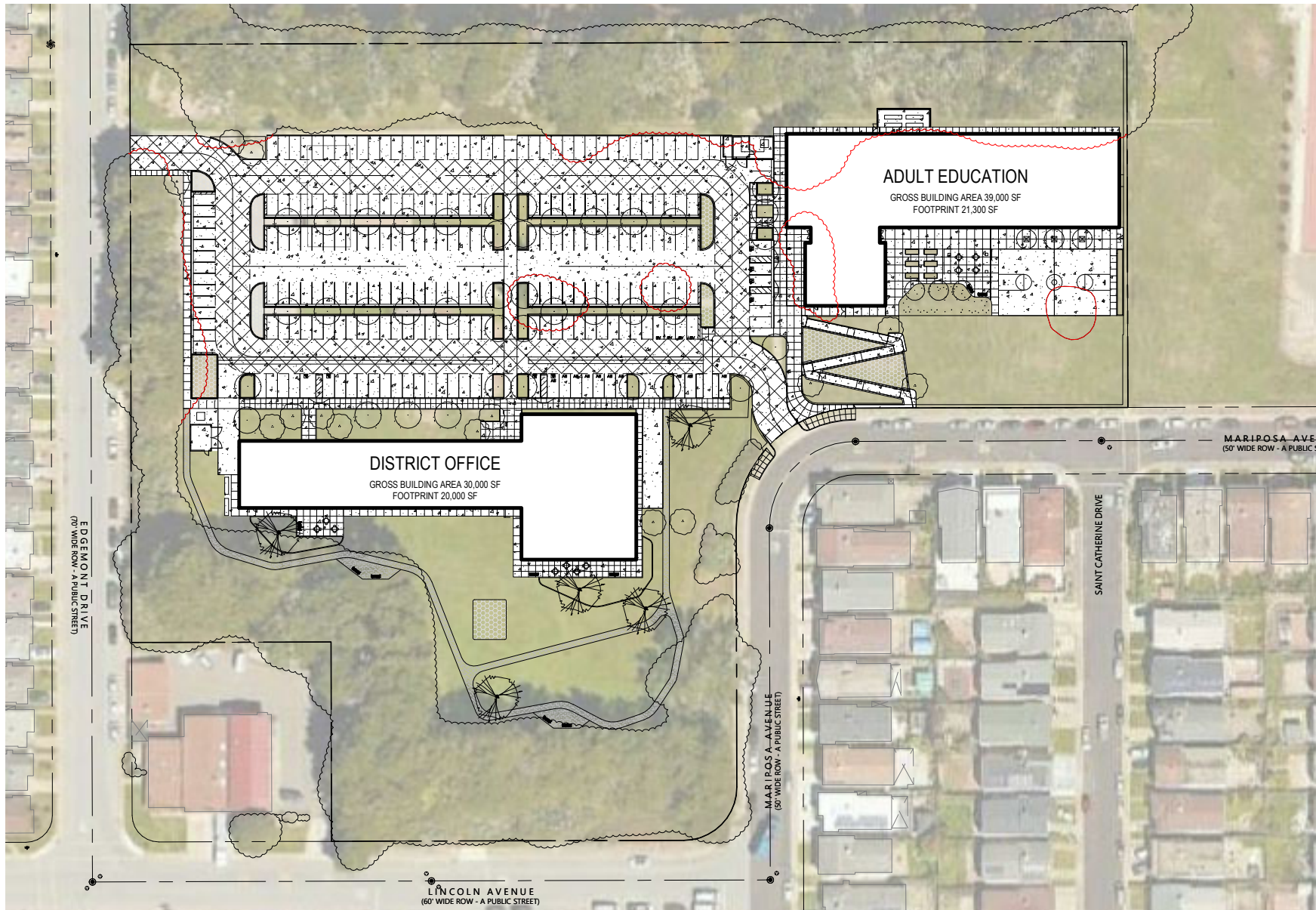


Figure 2
Project Site Plan

Transportation Analysis

Although the project does not require a VMT analysis, the City still requires all projects to measure intersection efficiency (LOS) as part of an operational analysis and to recommend improvements or address project related operational deficiencies. Thus, this report contains a transportation analysis to evaluate the project's consistency with the level of service standards set forth in the City's General Plan and to identify feasible improvements to remedy any deficiencies.

The transportation analysis includes an analysis of the traffic operational effects of the project on the key intersections in the vicinity of the site, a vehicle queuing analysis, an evaluation of the transit, bicycle, and pedestrian access and circulation, and a review of site access and on-site circulation.

Study Intersections

Because the project is to relocate the existing facility one mile away and would not generate new trips, it is expected that project traffic on regional and arterial streets would not change. Therefore, the study evaluated traffic operational conditions at the following three signalized and four unsignalized intersections near the project site.

1. Sullivan Avenue and Eastmoor Avenue/San Pedro Road
2. St. Francis Boulevard and Eastmoor Avenue (unsignalized)
3. Edgemont Drive and Westmoor Avenue (unsignalized)
4. St. Francis Boulevard and Mariposa Avenue (unsignalized)
5. St. Francis Boulevard and Southgate Avenue
6. Southgate Avenue and Westmoor Avenue (unsignalized)
7. Skyline Boulevard and Westmoor Avenue

Traffic conditions at the study locations were analyzed for the weekday AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) commute peak hours. These periods represent the most congested traffic conditions on the surrounding street network during a typical weekday.

Traffic conditions were evaluated for the following scenarios:

- **Existing Conditions.** Existing traffic volumes were obtained from turning-movement counts conducted in 2020 pre-Covid-19 for two of the study intersections. New turning movement counts were conducted in 2021 for the study intersections where no traffic counts were available. These traffic counts were adjusted by counting nearby intersections with available counts and comparing the new counts to the available counts to estimate the existing volumes that would occur under typical conditions (pre-Covid-19).
- **Existing Plus Project Conditions.** Existing plus project traffic volumes were estimated by adding to existing traffic volumes the trips associated with the proposed development. Existing plus project conditions were evaluated relative to existing conditions in order to identify operational deficiencies associated with the proposed project.
- **Cumulative No Project Conditions.** Cumulative no project traffic volumes for the study intersections were provided by the City, which were estimated using the Daly City Travel Demand Forecast (TDF) model. The cumulative no project traffic volumes reflect all approved and pending development in the City.
- **Cumulative Plus Project Conditions.** Cumulative plus project traffic volumes were estimated by adding project traffic from the proposed project to the cumulative no project traffic volumes. Cumulative plus project conditions were evaluated relative to cumulative no project conditions in order to determine potential operational deficiencies associated with the proposed project.

Methodology

This section describes the methods used to determine traffic conditions at the study intersections. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

Data Requirements

The data required for the analysis were obtained from traffic counts, previous traffic studies, and the City's TDF model. The following data were collected from these sources:

- existing traffic volumes,
- lane configurations,
- signal phasing, and
- cumulative traffic volumes.

Intersection Level of Service Analysis Methodologies and Standards

Traffic conditions at the study locations were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or congested conditions with excessive delays. The analysis methods are described in detail below.

Signalized Intersections Level of Service

Daly City evaluates level of service at signalized intersections based on the *Highway Capacity Manual (HCM)* level of service methodology using Synchro software. The HCM method evaluates signalized intersection operations based on average control delay time for all vehicles at the intersection. *Control delay* is the amount of delay that is attributed to the type of traffic control device at the intersection, and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The correlation between average delay and level of service is shown in Table 1. Daly City has a level of service standard for signalized intersections of LOS D or better.

The Skyline Boulevard/Westmoor Avenue intersection is operated and maintained by Caltrans. As stated in the Caltrans' Guide for the preparation of Traffic Impact Studies: "Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and "D" on State highway facilities; however, Caltrans acknowledges that may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than the appropriate target LOS, the existing measure of effectiveness (MOE) should be maintained." Because Daly City is the lead agency for this project, the level of service standards and adverse effect criteria used in this report were based on Daly City standards. This approach is consistent with all previous transportation analyses conducted in Daly City.

Table 1
Signalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0
C	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though some vehicles may still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	greater than 80.0

Source: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000), p.10-16.

Unsignalized Intersections Level of Service

Unlike signalized intersections, which typically represent constraint points for the roadway network, unsignalized intersections rarely limit the potential capacity of a roadway. The determination of appropriate improvements to unsignalized intersections typically includes a qualitative and quantitative analysis of movement delay, traffic signal warrants, movement traffic volumes, availability of alternate routes, and intersection safety. For this reason, improvements to unsignalized intersections are frequently determined on the basis of professional engineering judgment. Daly City does not have a level of service standard for unsignalized intersections.

One unsignalized study intersection is one-way stop controlled, and the other three unsignalized study intersections are all-way stop controlled. For the one-way stop-controlled intersection, the reported level of service is based on the worst approach delay at the intersection. The level of service for the all-way stop-controlled intersections are based on the average delay for all the intersection approaches. The correlation between average delay and level of service is shown in Table 2.

Table 2
Unsignalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Delay Per Vehicle (Sec.)
A	Little or no traffic delay	10.0 or less
B	Short traffic delays	10.1 to 15.0
C	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays	greater than 50.0

Source: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000) p17-2.

Traffic Signal Warrant

The level of service analysis at unsignalized intersections is supplemented with an assessment of the need for signalization of the intersections. For this study, the need for signalization is assessed based on the Peak Hour Volume Warrant (Warrant 3 – Part B) described in the *California Manual on Uniform Traffic Control Devices for Streets and Highways (CA MUTCD)*, Part 4, Highway Traffic Signals, 2014. This method provides an indication of whether traffic conditions and peak-hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal. Note that this is just one tool used to evaluate whether installation of a traffic signal would be justified. Additional analysis is recommended and may include unsignalized level of service analysis and/or operational analysis such as evaluating vehicle queuing and delay. Other types of traffic control devices, signage, or geometric changes may be preferable based on existing field conditions.

Intersection Vehicle Queuing Analysis

The analysis of intersection operations was supplemented with a vehicle queuing analysis at intersections where the project would add a substantial number of trips to the left-turn movements. The vehicle queuing analysis is used to determine the appropriate storage lengths for the high demand turn lanes where the project would add a substantial number of trips. Vehicle queues were estimated using Synchro software, which accounts for the effects of upstream intersections and intersection signal timing.

The basis of the queuing analysis is as follows: (1) the Synchro software is used to estimate the 95th percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future storage requirements at intersections.

The 95th percentile queue length value indicates that during the peak hour, a queue of this length or less would occur on 95 percent of the signal cycles. Or, a queue length larger than the 95th percentile queue would only occur on 5 percent of the signal cycles (about 3 cycles during the peak hour for a signal with a 60-second cycle length). Therefore, left-turn pocket storage designs based on the 95th

percentile queue length would ensure that storage space would be exceeded only 5 percent of the time for a movement.

Definition of Adverse Effects for Signalized Intersections

Adverse operations effects on signalized intersections are based on the Daly City level of service standard of LOS D or better. For the unsignalized intersections, the Daly City does not have a formally adopted level of service policy.

According to the Daly City level of service standard, a development is said to create an adverse effect on traffic conditions at a signalized intersection if for either peak hour, either of the following conditions occurs:

- the addition of project traffic would increase peak hour traffic volumes such that signalized intersection levels of service degrade to below LOS D, or
- the project adds traffic at a signalized intersection that is already operating at LOS E or F.

Report Organization

The remainder of this report is divided into five chapters. Chapter 2 describes the existing roadway network, transit service, existing bicycle and pedestrian facilities, and existing traffic conditions. Chapter 3 explains the method used to estimate project traffic. Chapter 4 describes existing plus project traffic conditions. Chapter 5 presents Cumulative traffic conditions with and without project traffic. Chapter 6 describes the evaluation of other transportation related issues, including site access and circulation.

2. Existing Conditions

This chapter describes existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, bicycle and pedestrian facilities, and transit service.

Existing Roadway Network

Regional access to the project study area is provided by Interstate 280 (I-280) and Skyline Boulevard (SR 35). These facilities are described below.

Interstate 280 (I-280) is a ten to twelve-lane north-south freeway in the vicinity of the site. I-280 extends northward through San Francisco and southward through San Jose. Access to and from the project study area is provided via interchanges at Eastmoor Avenue and Clarinada Avenue via Highway 1.

Skyline Boulevard (SR 35) is a four-lane north-south arterial in the vicinity of the site. SR 35 extends northward through San Francisco and southward through San Bruno where it merges with I-280. Access to and from the project study area is provided via a signal at Westmoor Avenue.

Local access to the project site is provided via Sullivan Avenue, St. Francis Boulevard, Eastmoor Avenue, Westmoor Avenue, Southgate Avenue, Edgemont Drive, and Mariposa Avenue. These roadways are described below.

Sullivan Avenue is a mostly two-lane, north-south local street that extends from Garden Lane to the north, to Southgate Avenue to the south. Sullivan Avenue is a four-lane street between Washington Street and the I-280 southbound on-ramp near Seton Medical Center. In the vicinity of the site, on-street parking is prohibited along both sides of the street. Sidewalks exist on the west side of Sullivan Avenue. The posted speed limit 30 miles per hour (mph).

St. Francis Boulevard is a two-lane, north-south collector street that extends from Eastmoor Avenue in the north, to Crestview Circle to the south. St. Francis Boulevard has continuous sidewalks with on-street parking on both sides of the street. The posted speed limit is 30 mph. St. Francis Boulevard provides access to the site via Mariposa Avenue

Eastmoor Avenue is a two-lane, east-west collector street that extends from Ocean Grove Avenue to the west (where it transitions to Westmoor Avenue), to Sullivan Avenue in the east (where it transitions to San Pedro Road). Eastmoor Avenue has continuous sidewalks with on-street parking on both sides of the street. The posted speed limit is 25 mph.

Westmoor Avenue is a two-lane, east-west collector street that transitions from Eastmoor Avenue in the east to Palisades Drive in the west. Bike lanes exists on Westmoor Avenue between

Southgate Avenue and Baldwin Avenue. Westmoor Avenue has continuous sidewalks with on-street parking on both sides of the street. The posted speed limit is 25 mph. Westmoor Avenue provides access to the site via Edgemont Drive.

Southgate Avenue is a mostly two-lane, north south collector street that extends between Park Plaza Drive in the north and Junipero Serra Boulevard in the south. Southgate Avenue is oriented in the east-west direction between Woodland Avenue and Junipero Serra Boulevard in the south and between Fairlawn Avenue and Park Plaza Drive in the north. Bike routes exist between Park Plaza Drive and Crestwood Drive, between Westmoor Avenue and Glenbrook Avenue, and between St. Francis Boulevard and Junipero Serra Boulevard. The remainder of the street provides bike lanes. In the vicinity of the site, on-street parking is permitted along both sides of the street. Sidewalks exist along both sides of the street. The posted speed limit is 25 mph.

Edgemont Drive is a two-lane, north south local street between Eastmoor Avenue and Lincoln Avenue. Edgemont Drive has continuous sidewalks with on-street parking on both sides of the street. The speed limit is 25 mph. Edgemont Drive provides direct access to the project site.

Mariposa Avenue is a two lane, local street that travels in the north-south direction between Midvale Drive and St. Catherine Drive, where it turns into the east-west direction until St. Francis Boulevard. Mariposa Avenue has continuous sidewalks with on-street parking on both sides of the street. The speed limit is 25 mph. Mariposa Avenue provides direct access to the project site.

Existing Bicycle Facilities

The bicycle facilities that exist within the vicinity of the project site (see Figure 3) include striped bike lanes (Class II bikeway) and shared bike routes (Class III bikeway). Bike lanes are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes are existing streets that accommodate bicycles but are not separate from the existing travel lanes. Bike routes are typically designated only with signage or with painted shared lane markings (Sharrows) on a road that indicate to motorists that bicyclists may use the full travel lane.

Bike lanes are located along the following street segments:

- Westmoor Avenue between Southgate Avenue and Baldwin Avenue
- Southgate Avenue between St. Francis Boulevard and Glenbrook Avenue
- Southgate Avenue between Westmoor Avenue and Crestwood Drive
- St. Francis Boulevard between Campana Avenue and Serramonte Boulevard

The following street segments are designated as bike routes:

- Skyline Drive south of Westridge Avenue
- Westmoor Avenue between Southgate Avenue and Skyline Drive
- Southgate Avenue between St. Francis Boulevard and Junipero Serra Boulevard
- Southgate Avenue between Glenbrook Avenue and Westmoor Avenue
- St. Francis Boulevard between Southgate Avenue and Campana Avenue

The *Walk Bike Daly City Plan (2020)* proposes bike lanes on Eastmoor Avenue for the entire street. Bike routes are proposed on Skyline Boulevard, San Pedro Road, and Junipero Serra Boulevard north of Colma Boulevard. The proposed bicycle facilities are shown on Figure 3.

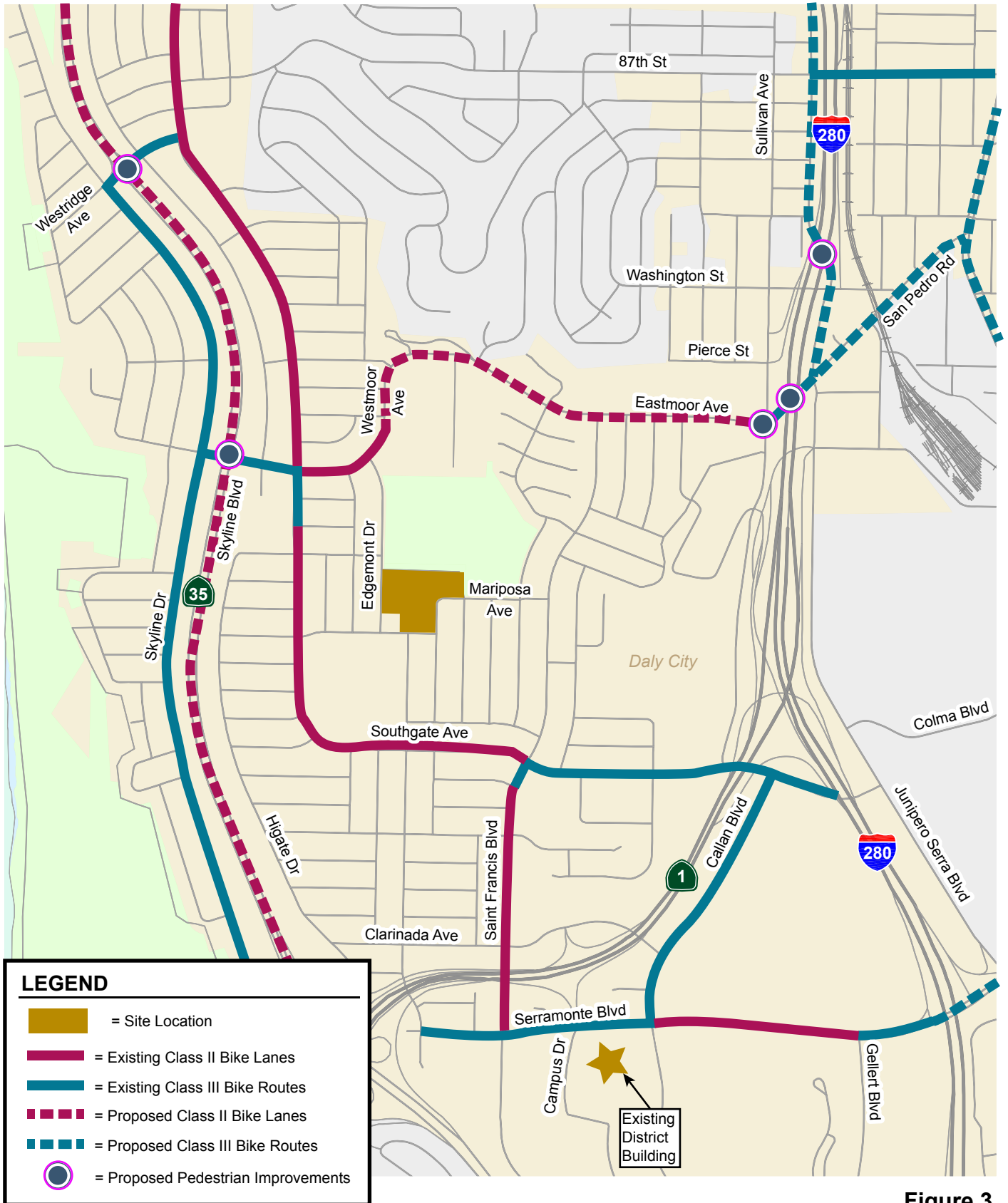


Figure 3
Bicycle and Pedestrian Facilities

Existing Pedestrian Facilities

Pedestrian access to the site is provided by sidewalks along the site frontage on Edgemont Drive and Mariposa Avenue and on all other streets in the vicinity of the site, including Westmoor Avenue, Eastmoor Avenue, San Pedro Road, St. Francis Boulevard, and Southgate Avenue. All of the study intersections have pedestrian crosswalks and curb ramps on at least one leg of the intersection.

Proposed pedestrian improvements in the vicinity of the project site per the *Walk Bike Daly City Plan* include intersection improvements at Skyline Boulevard/Westridge Avenue, Skyline Boulevard/Westmoor Avenue, Sullivan Avenue/Eastmoor Avenue, Junipero Serra Boulevard/Washington Street/I-280 On Ramps, and Junipero Serra Boulevard/San Pedro Road. The improvements include I-280 overcrossing improvements at Junipero Serra Boulevard/Washington Street/I-280 On Ramps and high visibility crosswalks on all four legs of the Junipero Serra Boulevard/San Pedro Road intersection. Other improvements at the remaining intersections could consist of wider sidewalks, median refuges, bulb-outs, curb ramps, and more. The proposed pedestrian facility locations are shown on Figure 3.

Existing Transit Service

Existing transit service to the study area is provided by the San Mateo County Transit District (SamTrans). Figure 4 shows the existing transit service routes in the study area.

SamTrans provides bus service near the project site via Routes 24, 120, and 121. These are described below.

Route 24 operates only on school days between Summit Shasta High School and Old County Road/San Francisco Avenue in Brisbane, with one daily westbound AM bus and one daily eastbound PM bus. The closest bus stop for Route 24 is located on Westmoor Avenue at Baldwin Avenue, approximately 1,555 feet from the project site. Route 24 has been suspended due to Covid-19 as of March 2021.

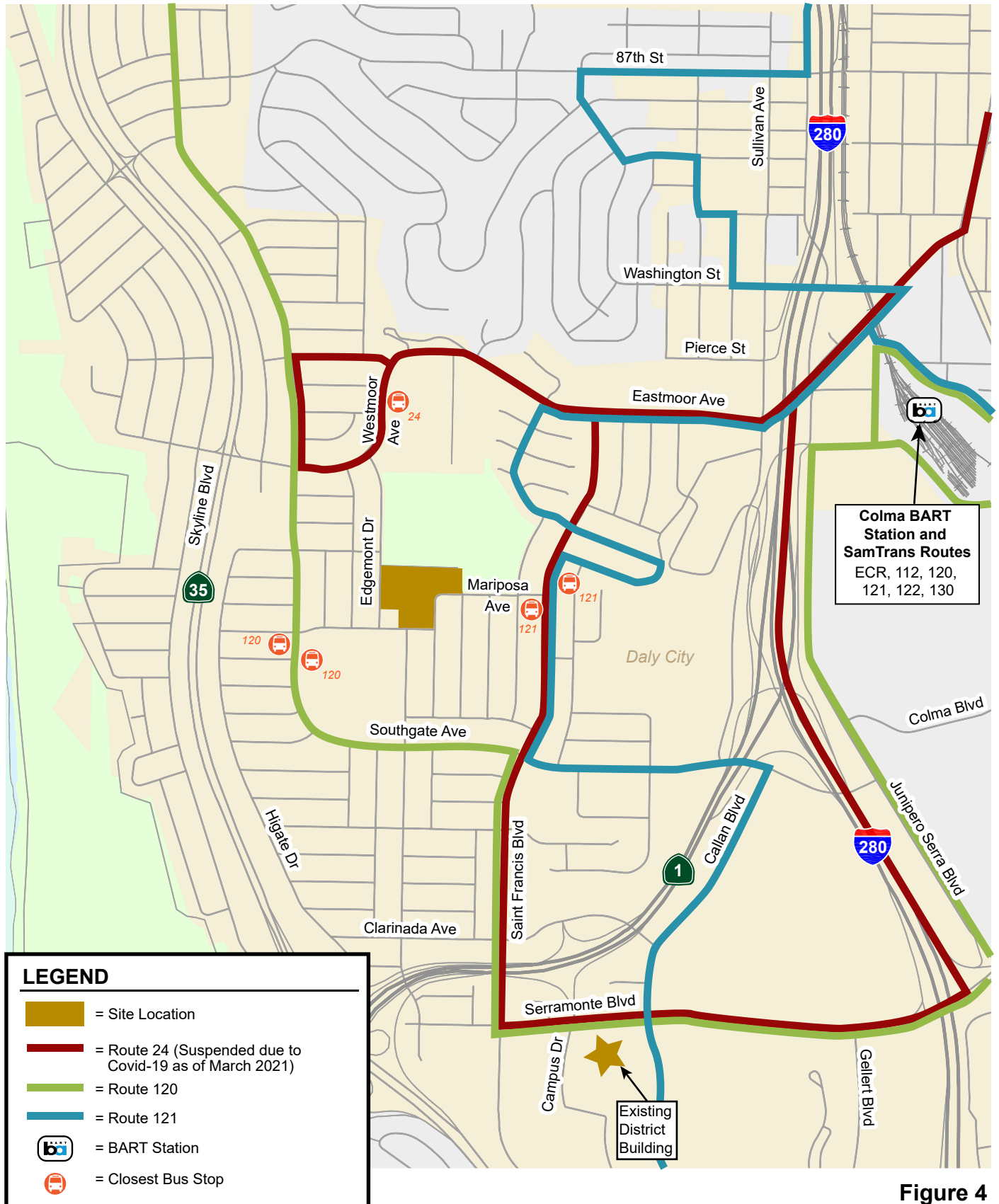
Route 120 operates between the Colma BART station and Brunswick/Templeton from 5:00 AM to 11:40 PM, with 10-minute headways during weekday commute periods. The closest bus stop is located on Southgate Avenue at Lincoln Avenue, approximately 1,400 feet from the project site.

Route 121 operates between Skyline College in San Bruno and Pope Street/Bellevue Avenue from 6:30 AM to 10:40 PM, with 60-minute headways during weekday commute periods. The closest bus stop for Route 121 is located on St. Francis Boulevard at Mariposa Avenue, approximately 1,050 feet from the project site.

Both Routes 120 and 121 provide service to the Colma BART station, located approximately 1.3 miles east and of the project site. BART trains provide access to a variety of locations in the Bay Area including San Francisco, Oakland, Dublin, Fremont, Pittsburg, and Richmond. Trains run on approximately 15-minute headways during commute hours. There are also a number of bus routes operated by SamTrans that stop at the Colma BART station.

Existing Intersection Lane Configurations and Traffic Volumes

The existing lane configurations at the study intersections were obtained from Google Earth (see Figure 5).



Colma BART Station and SamTrans Routes
 ECR, 112, 120, 121, 122, 130

LEGEND

- = Site Location
- = Route 24 (Suspended due to Covid-19 as of March 2021)
- = Route 120
- = Route 121
- = BART Station
- = Closest Bus Stop

Figure 4
Existing Transit Services

123 Edgemont Drive

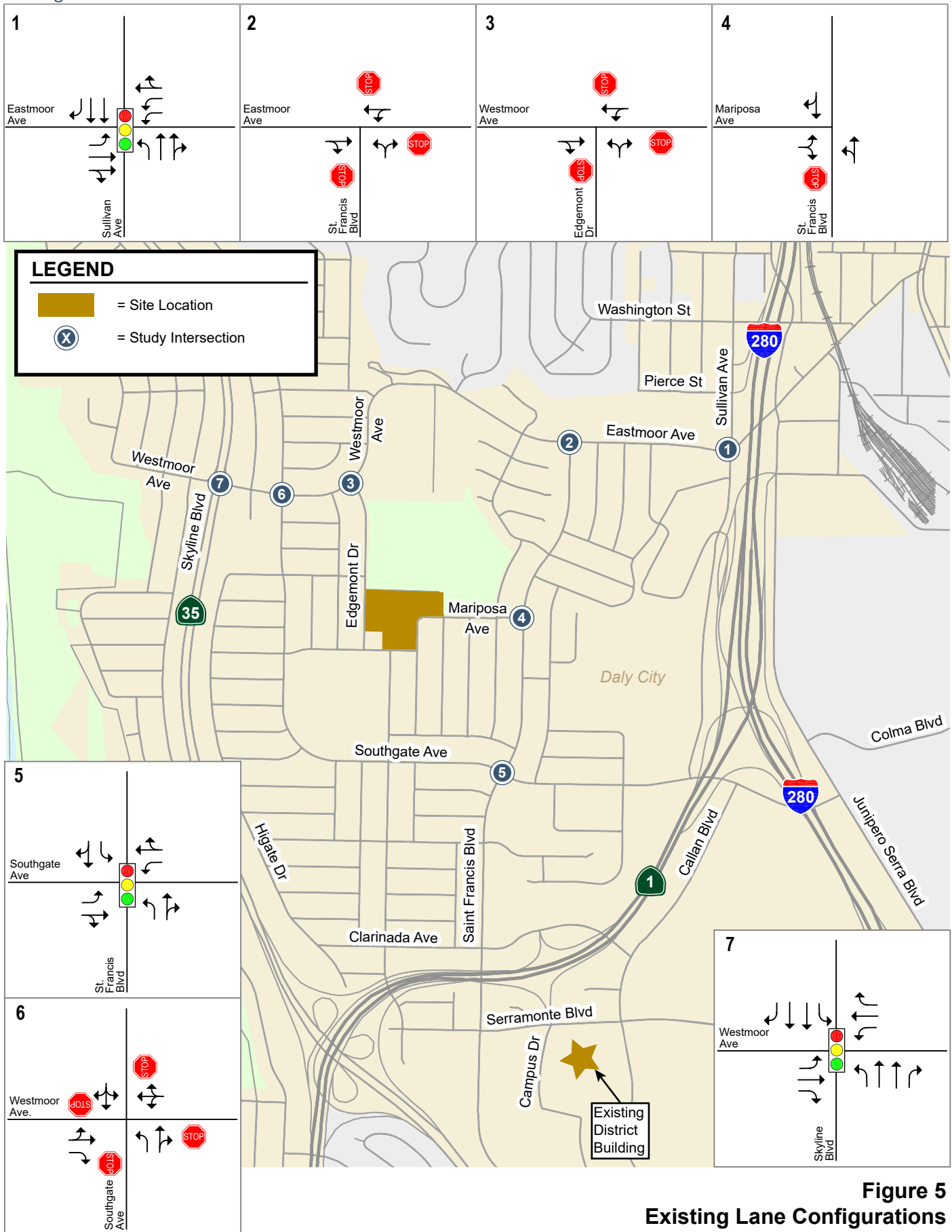


Figure 5
Existing Lane Configurations

Existing peak-hour traffic volumes at study intersections are based on available traffic counts conducted for nearby studies and new traffic counts at the study intersections where no traffic counts were available. The Sullivan Avenue/Eastmoor Avenue and St. Francis Boulevard/Eastmoor Avenue intersections have turning movement counts conducted in February 2020 prior to Covid-19 and shelter-in-place orders. These traffic counts were used directly for the study. The following five intersections did not have recent counts, and new traffic counts were conducted on February 23, 2021 when traffic volumes were lower than typical conditions due to Covid-19:

- Edgemont Drive and Westmoor Avenue (unsignalized)
- St. Francis Boulevard and Mariposa Avenue (unsignalized)
- St. Francis Boulevard and Southgate Avenue
- Southgate Avenue and Westmoor Avenue (unsignalized)
- Skyline Boulevard and Westmoor Avenue

New traffic counts were adjusted by counting nearby intersections with available recent counts (the St. Francis Boulevard/Eastmoor Avenue and Skyline Boulevard/John Daly Boulevard intersections) and comparing the new counts to the available counts to estimate the existing volumes at these study intersections that would occur under typical conditions (pre-Covid-19).

These five study intersections were increased accordingly based on the percent change in counts between the old and new counts at the St. Francis Boulevard/Eastmoor Avenue and Skyline Boulevard/John Daly Boulevard intersections. The counts at the Skyline Boulevard/John Daly Boulevard intersection were used to adjust the counted volume on Skyline Boulevard at Westmoor Avenue. The factors of 2.83 and 3.14 were applied to the AM peak-hour volume on northbound and southbound Skyline Boulevard, respectively, and Boulevard intersection were used to adjust the counted volume on Skyline Boulevard at Westmoor Avenue. The factors of 1.62 and 1.82 were applied to the PM peak-hour volume on northbound and southbound Skyline Boulevard, respectively. The counts at the St. Francis Boulevard/Eastmoor Avenue intersection were used to adjust the counted volumes at all other intersections and turning movements. The factors of 3.02 and 1.46 were applied to the AM and PM peak-hour volumes of these intersections and movements.

The estimated existing volumes are shown in Figure 6. The intersection turning-movement counts conducted for this analysis are presented in Appendix A. The estimates of existing traffic volumes are tabulated in Appendix B.

Existing Intersection Levels of Service

The results of the intersection level of service analysis under existing conditions are summarized in Table 3. The results indicate that all of the signalized intersections, except the Skyline Boulevard/Westmoor Avenue intersection, operate at an acceptable level of service during both peak hours. The Skyline Boulevard/Westmoor Avenue intersection operates at LOS E during both peak hours. All of the unsignalized intersections operate at LOS D or better during all peak hours. The intersection levels of service calculation sheets are included in Appendix C.

123 Edgemont Drive

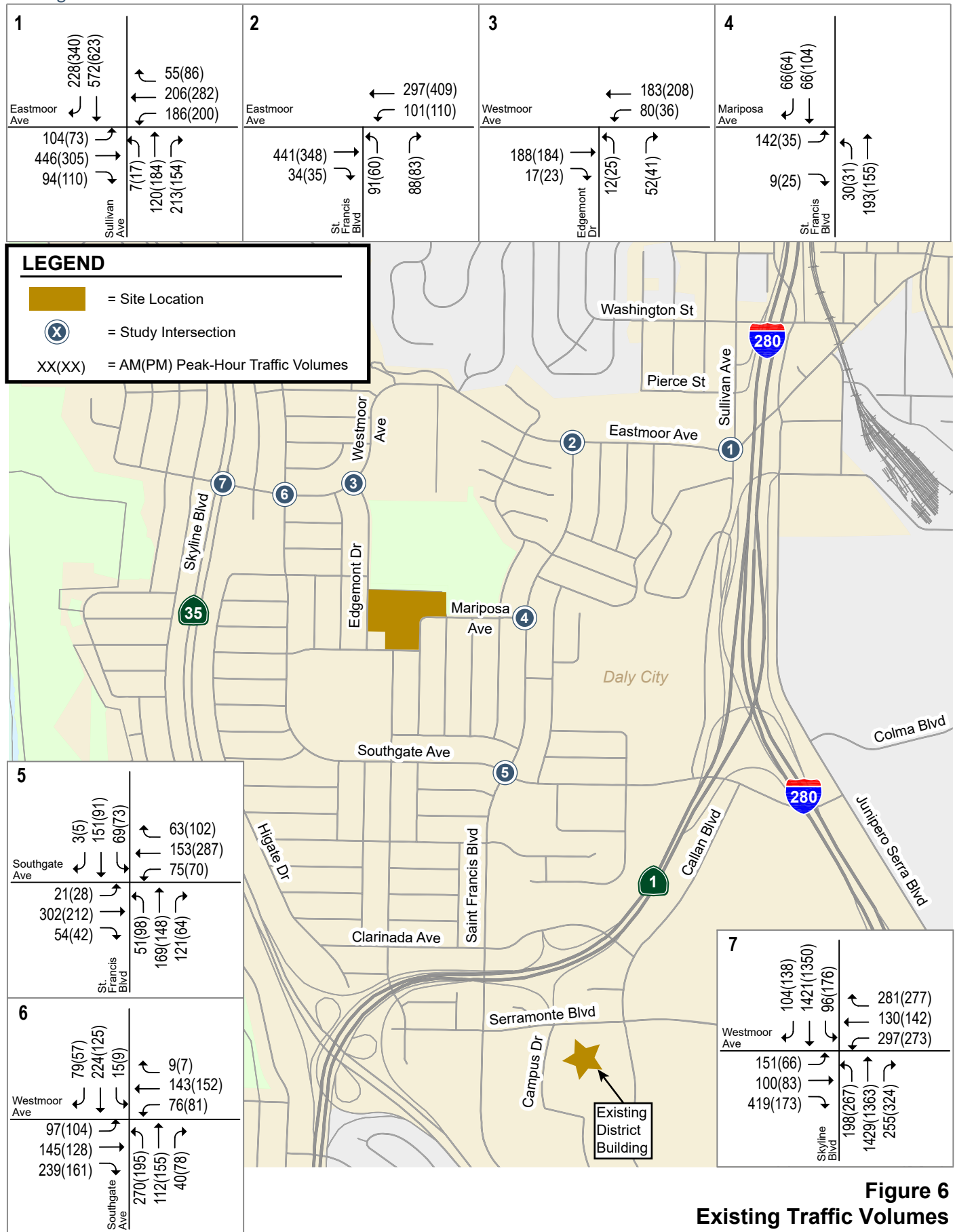


Figure 6
Existing Traffic Volumes

Table 3
Existing Intersection Levels of Service

#	Intersection	Contro	LOS Standard	Peak Hour	Count Date	Avg. Delay (sec)	LOS
1	Sullivan Avenue & Eastmoor Avenue	Signal	D	AM	02/13/20	31.6	C
				PM	02/13/20	23.8	C
2	St. Francis Boulevard & Eastmoor Avenue	AWSC	None	AM	02/13/20	27.0	D
				PM	02/13/20	15.8	C
3	Edgemont Drive & Westmoor Avenue ¹	AWSC	None	AM	02/23/21	9.2	A
				PM	02/23/21	9.1	A
4	St. Francis Boulevard & Mariposa Avenue ¹	OWSC	None	AM	02/23/21	13.0	B
				PM	02/23/21	10.7	B
5	St. Francis Boulevard & Southgate Avenue ¹	Signal	D	AM	02/23/21	15.0	B
				PM	02/23/21	14.4	B
6	Southgate Avenue & Westmoor Avenue ¹	AWSC	None	AM	02/23/21	28.4	D
				PM	02/23/21	17.6	C
7	Skyline Boulevard & Westmoor Avenue ¹	Signal	D	AM	02/23/21	74.3	E
				PM	02/23/21	57.8	E

Notes:
 AWSC = all-way stop control, OWSC = one-way stop control
 1. Counts from 2021 were factored by counting the nearby intersections with available counts.
Bold indicates LOS E or F operations.

3.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear were estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic traveling to and from the proposed project was estimated for the AM and PM peak hours. As part of the project trip distribution, the directions to and from which the project trips would travel were estimated. In the project trip assignment, the project trips were assigned to specific streets and intersections. These procedures are described below.

Trip Generation

The project would generate trips by the district employees and faculty and students of the adult education program. Because the project would not result in an increase in the number of employees and students, trip generation at the new site would be based on the existing operation at the current site. However, due to Covid-19, students and employees are studying/working remotely, and trip generation counts could not be conducted to reflect typical conditions. Therefore, peak-hour vehicle trips generated by the district employees were estimated using the trip rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition, for School District Office (Land Use 538). Because the *Trip Generation Manual* does not provide trip rates for an adult education program, the peak-hour vehicle trips generated by the faculty and students of the program were estimated utilizing project information as provided by the district.

District Employee Trips

The district currently has 54 employees working for the district office and 23 employees working for the adult education program, for a total of 77 employees that are expected to work during regular office hours. Based on the ITE trip rates for School District Office, these employees generate 64 AM peak-hour trips and 55 PM peak-hour trips (see Table 4).

The adult education program also has 14 faculty members teaching the classes. The peak-hour trips generated by the faculty members were estimated based on the class schedule for the 2020 fall semester. During the AM peak hour, there are 8 classes starting at 8:45 or 9:00 AM on a typical weekday. It was assumed there would be 8 AM inbound trips generated by the instructors of these classes. During the PM peak hour, there are no daytime classes ending after 3:30 PM, but there are 10 classes starting at 5:30 or 6:00 PM on a typical weekday. Based on the schedule, the instructors of these classes also have daytime classes. Therefore, it was assumed that a half of the instructors would leave and return to the site for the evening classes during the PM peak hour.

Table 4
Project Trip Generation Estimates

Land Use	Size	AM Peak Hour				PM Peak Hour			
		Trip Rate	Trips		Trip Rate	Trips			
			In	Out		Total	In	Out	Total
District Employees ¹	77 employees	0.83	49	15	64	0.72	9	46	55
Adult Education Program Faculty ²	8 AM classes	1	8	0	8	1	5	5	10
	10 PM classes								
Adult Education Program Students ³	368 AM students	0.77	283	0	283	0.77	216	0	216
	281 PM students								
Total Project Trips			340	15	355		230	51	281

Notes:

1. Trip rates (trips per employee) based on the ITE Trip Generation Manual, 10th Edition, for School District Office (Land Use 538).
2. It was assumed each class would generate one AM peak-hour inbound trip by instructors, and a half of the instructors would leave and return to the site for the evening classes during the PM peak hour.
3. The trip rate is calculated based on 90 percent of students attending the classes and about 15 percent of students carpooling or using transportation modes other than driving to access the site.

The district also offers off-campus classes, which would not be affected by the project. Therefore, instructor and student trips associated with these classes were not estimated.

Student Trips

Based on the enrollment information provided by the district for the 2020 spring semester, there were 368 students enrolled in the classes that start at 8:45 or 9:00 AM on a typical weekday. In the evening, there were 281 students enrolled in the classes that start at 5:30 or 6:00 PM on a typical weekday. Most of these classes are English as a second language (ESL). It was assumed that 90 percent of students enrolled in class would attend on any given day (others may be ill or otherwise absent) and about 15 percent of students would carpool or use transportation modes other than driving. Therefore, it is estimated the students would generate 283 inbound trips in the AM peak hour and 216 inbound trips in the PM peak hour.

Total Project Trips

As summarized in Table 4, the project is estimated to generate 355 trips during the AM peak hour (340 inbound and 15 outbound) and 281 trips during the PM peak hour (230 inbound and 51 outbound).

Trip Distribution and Trip Assignment

The trip distribution patterns for the project trips were developed for staff and students (see Figure 7). The trip distribution for staff was estimated based on the residence zip code data of existing staff and the surrounding roadway system. The trip distribution for students was estimated based on the surrounding roadway network and the locations of complementary land uses. The peak-hour vehicle trips generated by the project were assigned to the roadway network in accordance with the trip distribution patterns (see Figure 8).

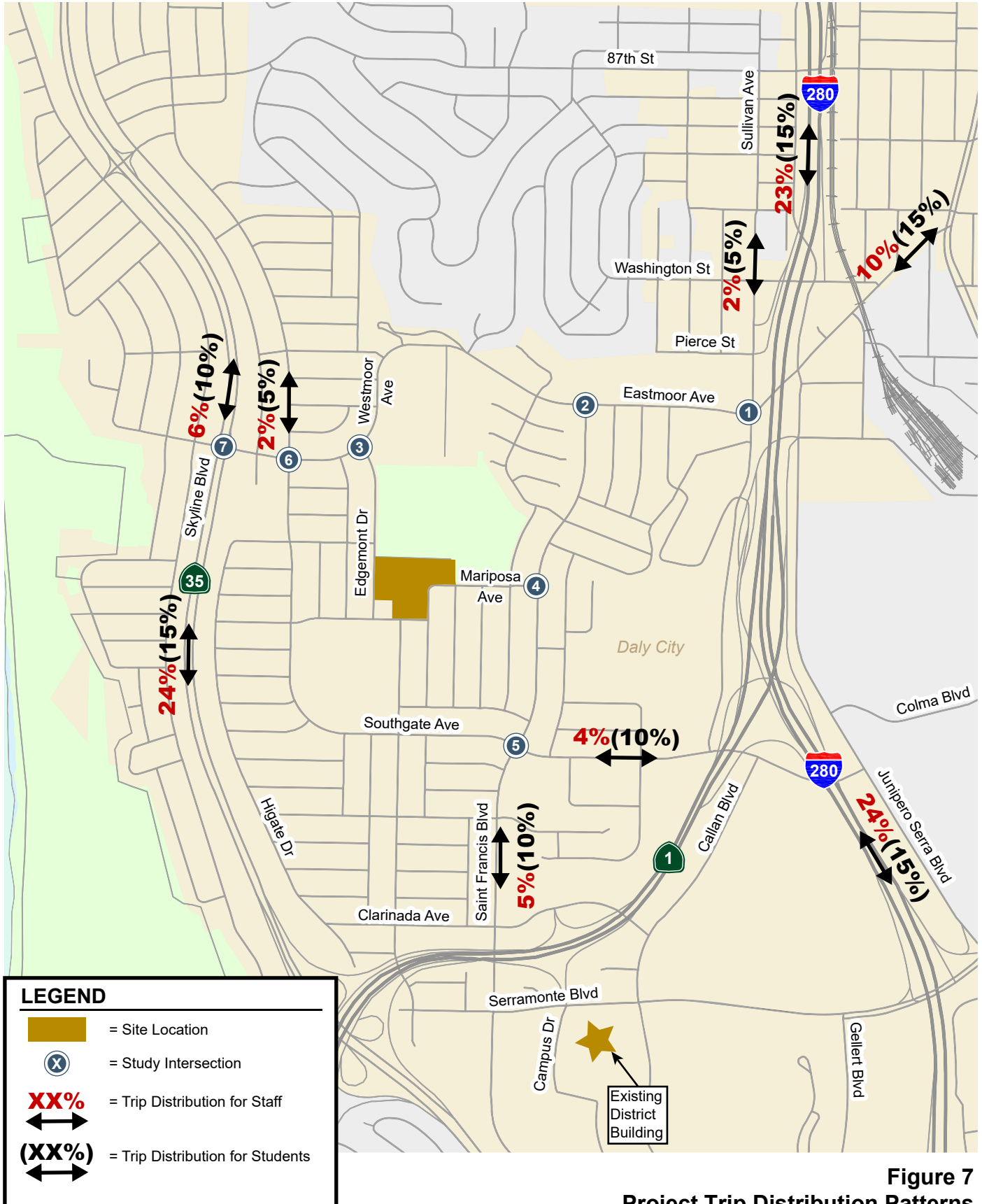


Figure 7
Project Trip Distribution Patterns

123 Edgemont Drive

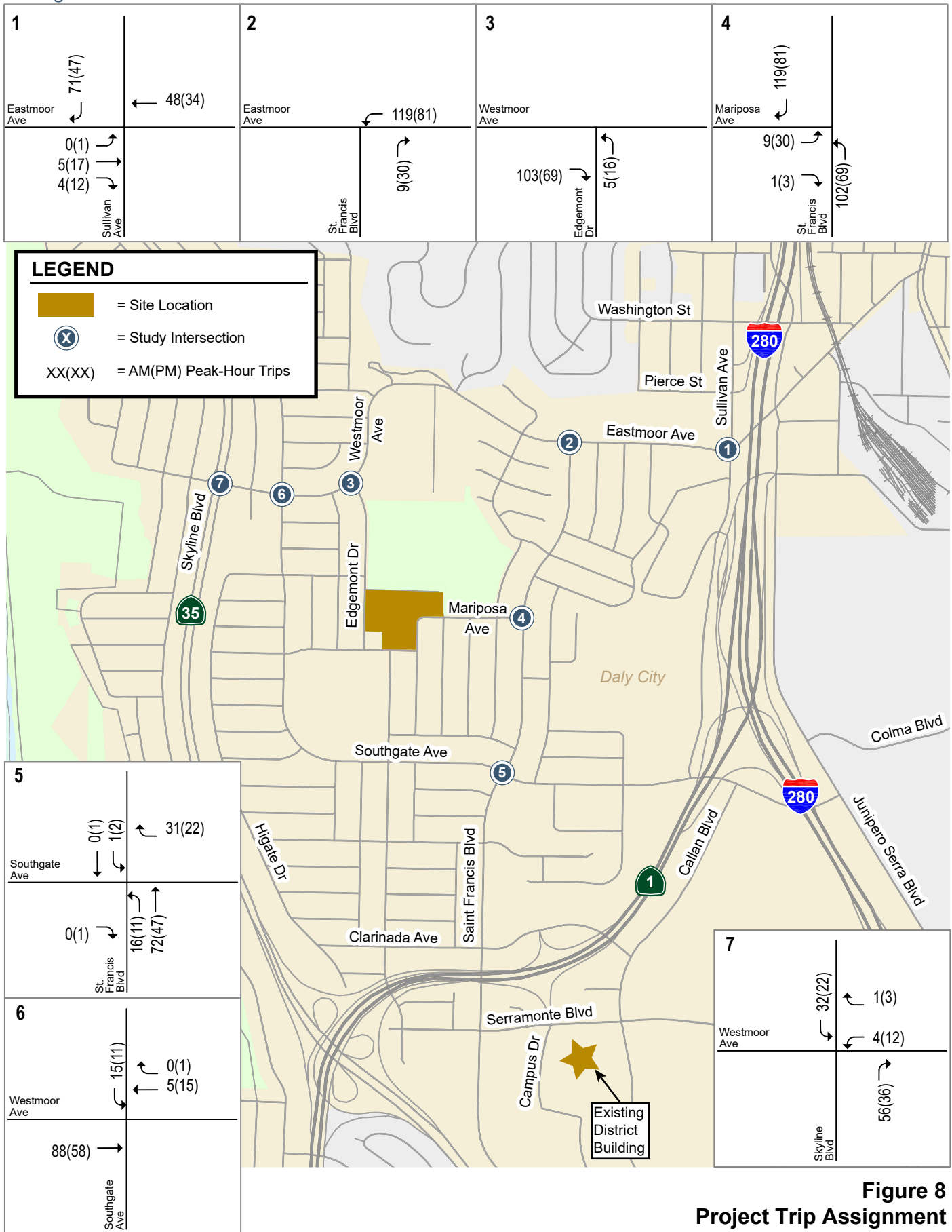


Figure 8
Project Trip Assignment

4. Existing Plus Project Conditions

This chapter describes existing plus project traffic conditions. Existing plus project traffic conditions represent the traffic conditions that would occur if the project were constructed and occupied today.

Existing Plus Project Transportation Network and Traffic Volumes

The roadway network under existing plus project conditions would be the same as the existing roadway network because the project would not alter the existing intersection lane configurations.

The project trips, as described in Chapter 3, were added to the existing traffic volumes to derive the existing plus project traffic volumes (see Figure 9).

Existing Plus Project Intersection Levels of Service

The results of the intersection level of service analysis (see Table 5) indicate that all signalized intersections, except the Skyline Boulevard/Westmoor Avenue intersection, would continue to operate at an acceptable level of service during all peak hours. The Skyline Boulevard/Westmoor Avenue intersection would continue to operate at LOS E during both peak hours. Because the project would add trips to the intersection that already operates at an unacceptable LOS E under existing conditions, this constitutes an adverse effect by Daly City's criteria.

The intersection levels of service calculation sheets are included in Appendix C.

Skyline Boulevard and Westmoor Avenue

Although the project would result in an adverse effect at the intersection, there is no feasible improvement to widen or increase the capacity of the intersection. The project applicant should coordinate with the City to identify appropriate improvements, which could include improvements to multimodal transportation to address the project's adverse effect.

123 Edgemont Drive

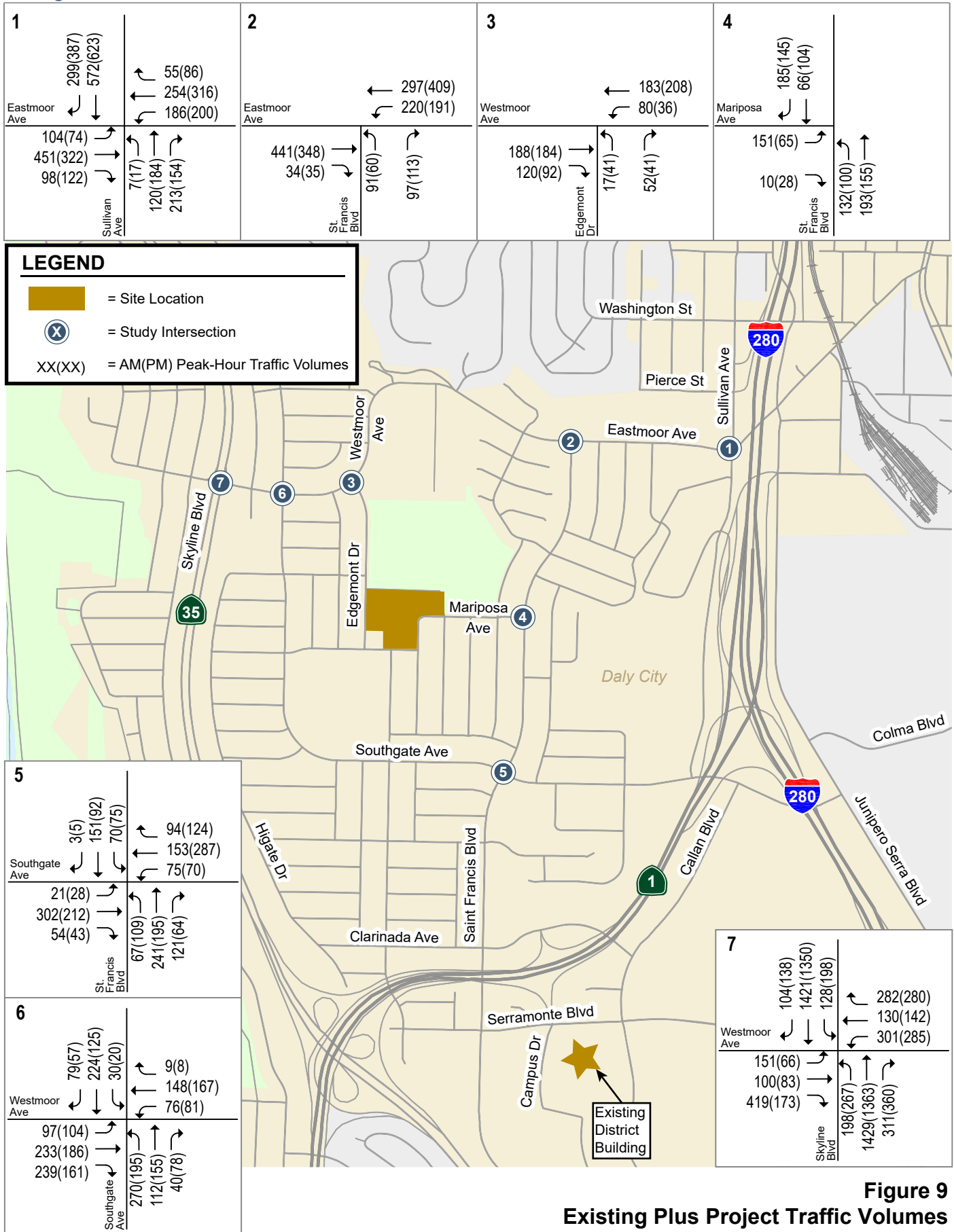


Figure 9
Existing Plus Project Traffic Volumes

**Table 5
Existing Plus Project Intersection Levels of Service**

#	Intersection	Control	LOS Standard	Peak Hour	Existing Conditions				
					No Project		Plus Project		
					Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Increase in Delay (sec)
1	Sullivan Avenue & Eastmoor Avenue	Signal	D	AM	31.6	C	32.3	C	0.7
				PM	23.8	C	24.4	C	0.6
2	St. Francis Boulevard & Eastmoor Avenue	AWSC	None	AM	27.0	D	48.8	E	21.8
				PM	15.8	C	22.5	C	6.7
3	Edgemont Drive & Westmoor Avenue ¹	AWSC	None	AM	9.2	A	9.8	A	0.6
				PM	9.1	A	9.5	A	0.4
4	St. Francis Boulevard & Mariposa Avenue ¹	OWSC	None	AM	13.0	B	22.0	C	9.0
				PM	10.7	B	13.8	B	3.1
5	St. Francis Boulevard & Southgate Avenue ¹	Signal	D	AM	15.0	B	15.1	B	0.1
				PM	14.4	B	14.5	B	0.1
6	Southgate Avenue & Westmoor Avenue ¹	AWSC	None	AM	28.4	D	39.3	E	10.9
				PM	17.6	C	21.1	C	3.5
7	Skyline Boulevard & Westmoor Avenue ^{1,2}	Signal	D	AM	74.3	E	78.0	E	3.7
				PM	57.8	E	61.3	E	3.5

Notes:
 AWSC = all-way stop control, OWSC = one-way stop control
 1. Counts from 2021 were factored by counting the nearby intersections with available counts.
 2. San Mateo County CMP establishes LOS E as the standard for roadways along Skyline Boulevard (SR 35).
Bold indicates LOS E or F operations.
Boxed indicates an adverse effect due to the project.

Unsignalized Intersection Operations

Of the four unsignalized intersections, two intersections would continue to operate at LOS C or better during both peak hours. The intersections of St. Francis Boulevard/Eastmoor Avenue and Southgate Avenue/Westmoor Avenue would degrade from LOS D under existing conditions to LOS E under existing plus project conditions during the AM peak hour. The City does not have a level of service standard for unsignalized intersections.

The results of the peak-hour signal warrant checks indicate that the Southgate Avenue/Westmoor Avenue intersection may warrant signalization during the AM peak hour under existing conditions, both with and without the project traffic. The peak-hour signal warrant sheets are contained in Appendix D.

It should be noted that due to Covid-19, field observations were not conducted to identify whether there are traffic operational issues at these intersections under normal traffic conditions. Therefore, although the Southgate Avenue/Westmoor Avenue intersection may meet the peak-hour signal warrant under existing conditions (with and without project), this is based on estimated volumes. The need for intersection improvement or modification of traffic control at the intersection should be evaluated further with field observations in the future when volumes return to pre-Covid levels. It is recommended that the City evaluate the need for signalization or improvement at the intersection prior to issuance of the occupancy permit for the project. If the City determines an improvement or signalization is warranted, it would be appropriate for the project applicant to pay a fair share contribution towards the improvement.

5. Cumulative Conditions

This chapter describes traffic operations that would occur under cumulative conditions. For this analysis, cumulative conditions represent buildout of the Daly City General Plan to year 2035. Included in this chapter is a summary of project related operational characteristics under cumulative conditions.

Cumulative Transportation Network and Traffic Volumes

While there are various regional transportation improvements planned by the year 2035, the transportation network in the project vicinity under cumulative conditions is assumed to be the same as described under existing conditions.

Traffic volumes for cumulative conditions were obtained from the Daly City Travel Demand Forecast (TDF) model based on the Year 2035 General Plan Buildout land uses. The 2035 forecasts represent volumes under cumulative no project conditions. Cumulative plus project volumes were determined by adding the estimated project trips to the cumulative no project volumes. The cumulative traffic volumes with and without the proposed project are shown on Figures 10 and 11, respectively.

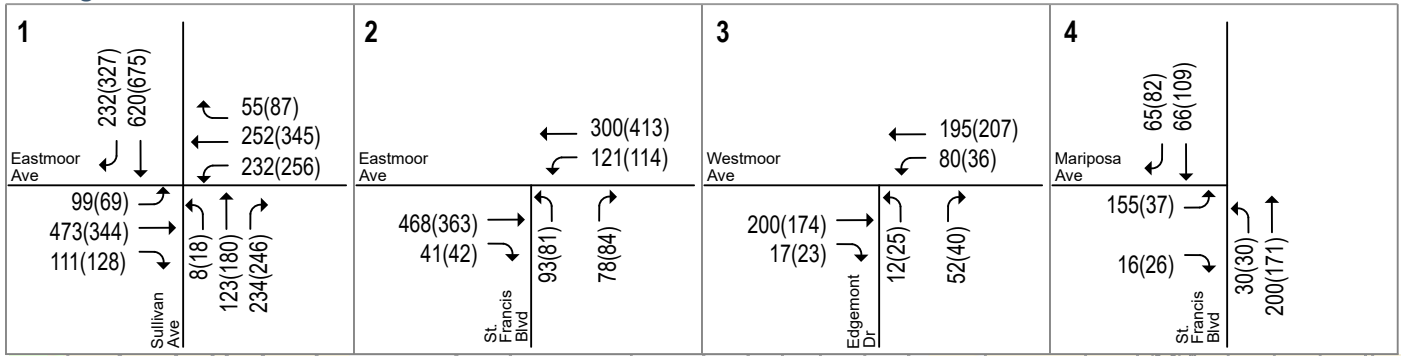
Cumulative Intersection Levels of Service

The results of intersection level of service analysis (see Table 6) show that the signalized study intersections except the Skyline Boulevard/Westmoor Avenue intersection would operate at an acceptable level of service under both cumulative with and without project conditions. The intersection of Skyline Boulevard and Westmoor Avenue would operate at LOS F and E during the AM and PM peak hours, respectively, under cumulative with and without project conditions. Because the project would add trips to the intersection that would operate at unacceptable LOS E and F under cumulative no project conditions, this constitutes an adverse effect by the Daly City's criteria. The intersection levels of service calculation sheets are included in Appendix C.



Skyline Boulevard and Westmoor Avenue

As described in Chapter 4, there is no feasible improvement to widen or increase the capacity of the intersection. The project applicant should coordinate with the City to identify appropriate improvements, which could include improvements to multimodal transportation to address the project's adverse effect.

123 Edgemont Drive



LEGEND

-  = Site Location
-  = Study Intersection
- XX(XX) = AM(PM) Peak-Hour Traffic Volumes

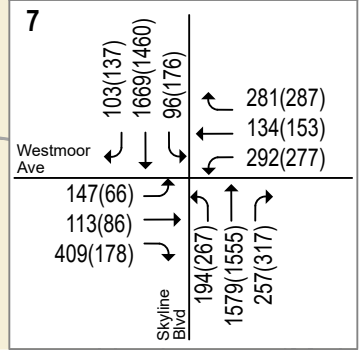
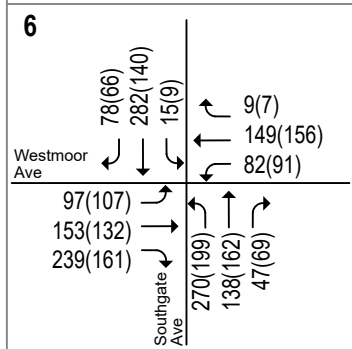
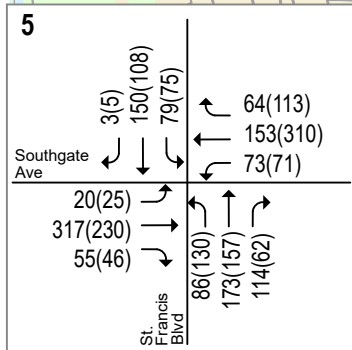
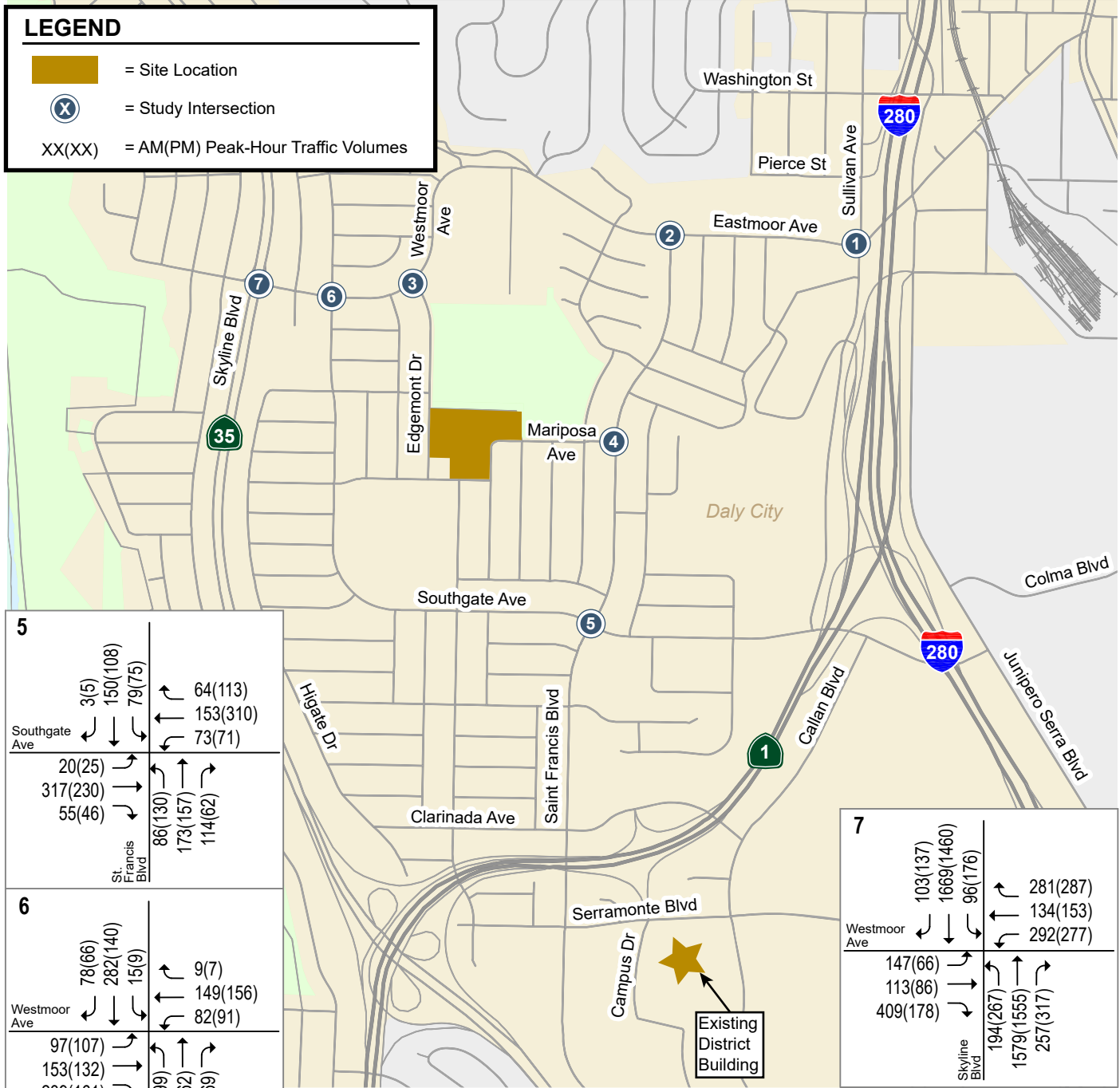
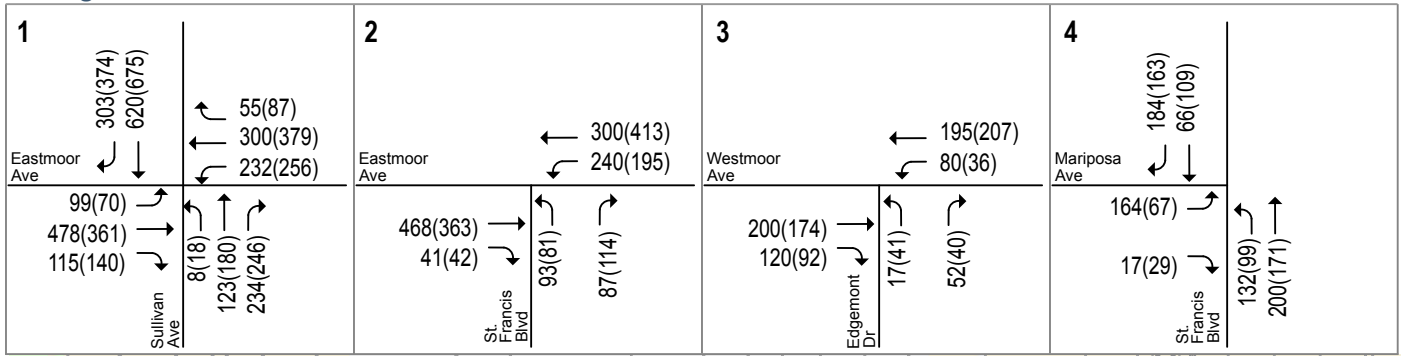




Figure 10
Cumulative No Project Traffic Volumes

123 Edgemont Drive



LEGEND

-  = Site Location
-  = Study Intersection
- XX(XX) = AM(PM) Peak-Hour Traffic Volumes

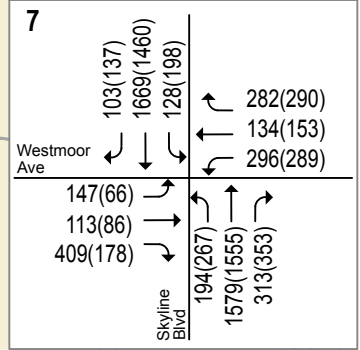
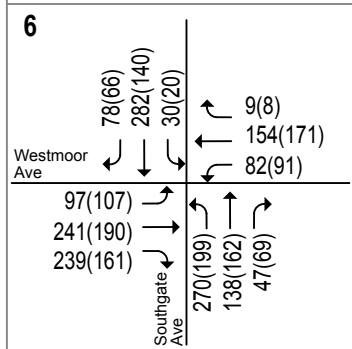
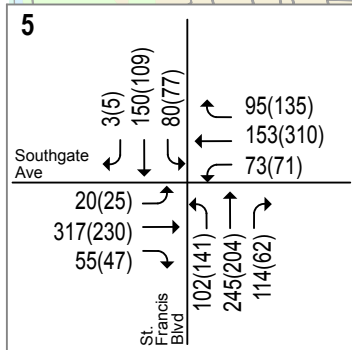
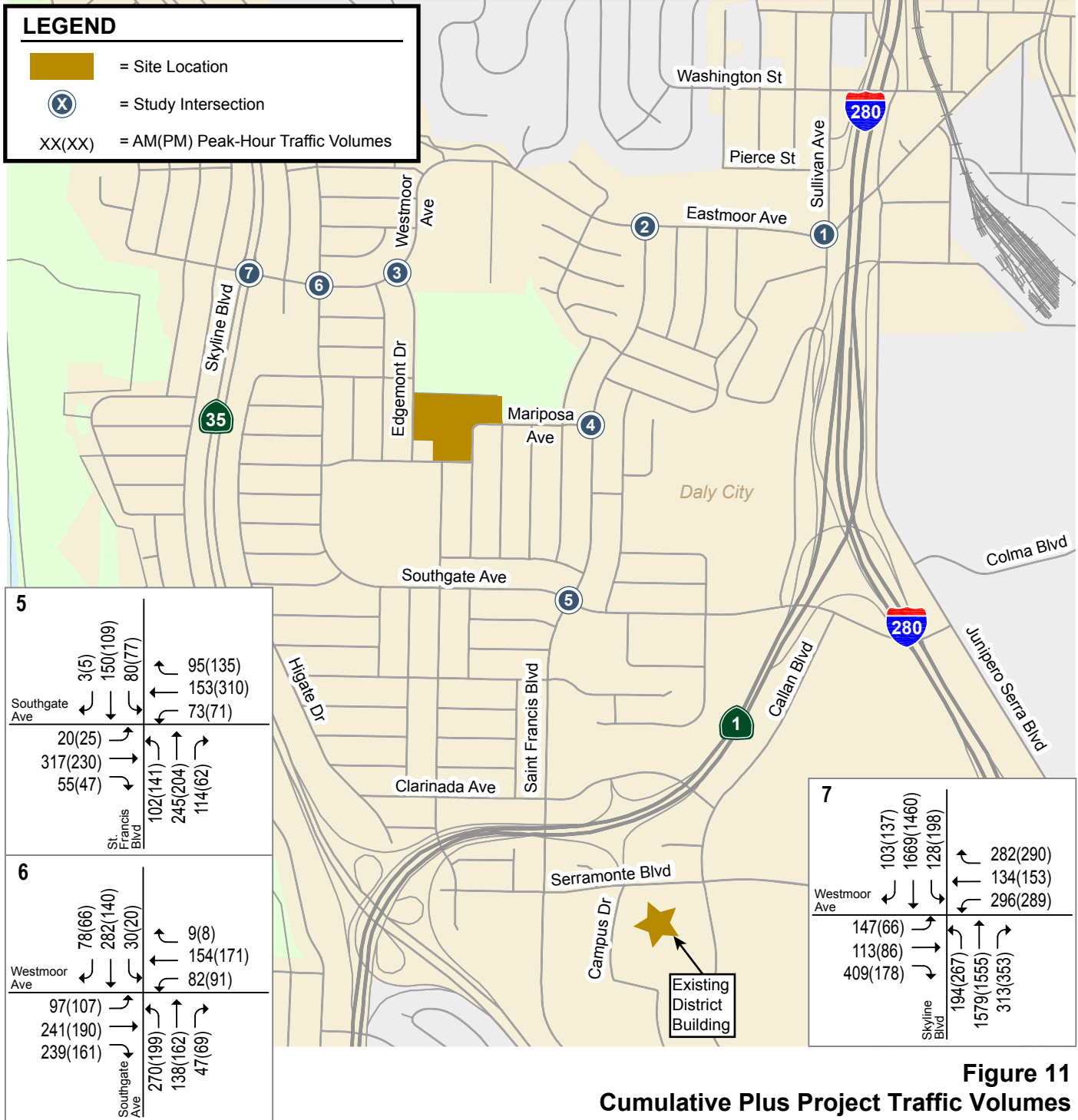


Figure 11
Cumulative Plus Project Traffic Volumes

**Table 6
Cumulative Intersection Levels of Service**

#	Intersection	Control	LOS Standard	Peak Hour	Cumulative Conditions ²				
					No Project		Plus Project		
					Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Increase in Delay (sec)
1	Sullivan Avenue & Eastmoor Avenue	Signal	D	AM PM	32.9 25.0	C C	33.1 25.7	C C	0.2 0.7
2	St. Francis Boulevard & Eastmoor Avenue	AWSC	None	AM PM	34.0 17.5	D C	61.0 25.5	F D	27.0 8.0
3	Edgemont Drive & Westmoor Avenue ¹	AWSC	None	AM PM	9.4 9.0	A A	10.0 9.4	A A	0.6 0.4
4	St. Francis Boulevard & Mariposa Avenue ¹	OWSC	None	AM PM	13.3 10.9	B B	23.5 14.4	C B	10.2 3.5
5	St. Francis Boulevard & Southgate Avenue ¹	Signal	D	AM PM	14.8 14.4	B B	15.7 14.8	B B	0.9 0.4
6	Southgate Avenue & Westmoor Avenue ¹	AWSC	None	AM PM	41.5 19.3	E C	54.2 24.0	F C	12.7 4.7
7	Skyline Boulevard & Westmoor Avenue ¹	Signal	D	AM PM	93.1 68.1	F E	96.2 74.3	F E	3.1 6.2

Notes:
 AWSC = all-way stop control, OWSC = one-way stop control
 1. Counts from 2021 were factored by counting the nearby intersections with available counts.
 2. Cumulative traffic volumes were estimated by the City's Travel Demand Model Forecast Model.
Bold indicates LOS E or F operations.
Boxed indicates an adverse effect due to the project.

Unsignalized Intersection Operations

The results of the intersection level of service analysis (see Table 6) indicate that two unsignalized intersections: St. Francis Boulevard/Eastmoor Avenue and Southgate Avenue/Westmoor Avenue would operate at LOS F during the AM peak hour with the project. The St. Francis Boulevard/Eastmoor Avenue intersection would degrade from LOS D under cumulative no project conditions to LOS F under cumulative plus project conditions. The Southgate Avenue/Westmoor Avenue intersection would degrade from LOS E under cumulative no project conditions to LOS F under cumulative plus project conditions. The City does not have a level of service standard for unsignalized intersections.

The results of the peak-hour signal warrant checks indicate that the Southgate Avenue/Westmoor Avenue intersection would warrant signalization during the AM peak hour under the existing and cumulative conditions, both with and without the project traffic. The peak-hour signal warrant sheets are contained in Appendix D.

As described in Chapter 4, although the intersection may meet the peak-hour signal warrant, the need for intersection improvement or modification of traffic control at the intersection should be evaluated further with field observations in the future when volumes return to pre-Covid levels. It is recommended that the City evaluate the need for signalization or improvement at the intersection prior to issuance of the occupancy permit for the project. If the City determines an improvement or signalization is warranted, it would be appropriate for the project applicant to pay a fair share contribution towards the improvement.

6. Other Transportation Issues

This chapter presents an analysis of other transportation issues associated with the project site, including:

- Intersection Vehicle Queuing Analysis
- Pedestrian, Bicycles and Transit Analysis
- Site Access and Circulation
- Parking Analysis

Unlike the level of service analysis methodology, which is adopted by the City Council, the analyses in this chapter are based on professional judgment in accordance with the standards and methods employed by the traffic engineering community.

Intersection Vehicle Queuing Analysis

There are no established thresholds under CEQA or policies adopted by Daly City for determining impacts for vehicle queuing. A vehicle queuing analysis can be useful in determining the adequacy of existing vehicle storage capacity at intersections in the vicinity of the site. Accordingly, a vehicle queuing analysis was conducted for the high demand turn movements where the project would add traffic. This analysis provides a basis for estimating future storage requirements at the intersections under existing and project conditions. Vehicle queues were estimated using Synchro software, as described in Chapter 1. The following movements were evaluated, and the results of the queuing analysis are summarized in Table 7:

- St. Francis Boulevard and Eastmoor Avenue: northbound movement and westbound movement
- St. Francis Boulevard and Southgate Avenue: northbound left turn
- Skyline Boulevard and Westmoor Avenue: southbound left turn and westbound left turn

The queuing analysis indicates that that under existing plus project conditions, the maximum left-turn vehicle queue at the following movements and peak hours would exceed the storage capacity. The vehicle queuing calculations are included in Appendix E.

- Westbound movement at St. Francis Boulevard and Eastmoor Avenue (AM and PM peak hour)
- Westbound left turn from Westmoor Avenue to Skyline Boulevard (AM and PM peak hour)

The queuing analyses for these movements are discussed below. The project trips would not cause the estimated maximum vehicle queue to exceed the storage capacity at other movements or peak hours.

Table 7
Intersection Vehicle Queuing Analysis

Analysis Scenario	St. Francis Blvd & Eastmoor Ave				St. Francis Blvd & Southgate Ave		Skyline Blvd & Westmoor Ave			
	NBL/NBR ²		WBL/WBT ²		NBL		SBL		WBL	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Existing										
95th % Queue ¹ (veh/ln)	2	1	7	6	1	2	9	14	22	20
95th % Queue ¹ (ft/ln)	50	25	175	150	25	50	225	350	550	500
Storage (ft/ln)	825	825	200	200	75	75	725	725	225	225
Adequate (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Existing Plus Project										
95th % Queue ¹ (veh/ln)	3	2	17	10	2	3	12	15	22	20
95th % Queue ¹ (ft/ln)	75	50	425	250	50	75	300	375	550	500
Storage (ft/ln)	825	825	200	200	75	75	725	725	225	225
Adequate (Y/N)	Y	Y	N	N	Y	Y	Y	Y	N	N
Notes:										
NBL = northbound left-turn movement; NBR = northbound right-turn movement; SBL = southbound left-turn movement; WBL = westbound left-turn movement; WBT = westbound through movement.										
¹ Assumes 25 feet per vehicle queued.										
² Storage length measured from intersection to upstream intersection.										

St. Francis Boulevard and Eastmoor Avenue

On westbound Eastmoor Avenue at St. Francis Boulevard there is about 200 feet of vehicle storage, which can accommodate about 8 vehicles, before the upstream intersection at Camelia Drive. Under existing conditions, the 95th percentile queue is contained within the storage length. The 95th percentile vehicle queue would exceed the storage capacity by 9 vehicles during the AM peak hour and by 2 vehicles during the PM peak hour under project conditions. During the AM peak hour, the queue would reach the intersection of Mirada Drive and Eastmoor Avenue. Due to Covid-19, field observations cannot be conducted to identify whether there are vehicle queuing issues at the intersection under normal traffic conditions. However, because the intersection is stop controlled, the queue is expected to move quickly.

Skyline Boulevard and Westmoor Avenue

The westbound left-turn storage lane has approximately 225 feet of storage, which is room for approximately 9 vehicles. The storage lane spans from the Skyline Boulevard/Westmoor Avenue intersection to the upstream intersection at Mayfair Avenue. Under existing conditions, the 95th percentile queue is approximately 525 feet, or about 21 vehicles, during the AM peak hour. During the PM peak hour, the 95th percentile queue is approximately 500 feet, or about 20 vehicles. The queue would exceed the storage lane by 12 vehicles during the AM peak hour and 11 vehicles during the PM peak hour. The project is not expected to result in a noticeable increase in the vehicle queue length during the AM or PM peak hour. Due to Covid-19, field observations cannot be conducted to identify whether there are vehicle queuing issues at the intersection under normal traffic conditions. However, there are "Keep Clear" markings at the Mayfair Avenue/Westmoor Avenue intersection that westbound vehicles are not to block access to Mayfair Avenue and Skyline Plaza.

Site Access and On-Site Circulation

A review of the project site plan was performed to determine if adequate site access and on-site circulation are provided and to identify any access or circulation issues that should be improved. This review is based on the site plan prepared by HKIT Architects, dated March 4, 2021, presented on Figure 2 and in accordance with generally accepted traffic engineering standards.

Vehicle Site Access

Vehicle site access would be provided by an existing full access driveway on Edgemont Drive and a new full access driveway on Mariposa Avenue. The driveways would provide access to and from the surface parking lot at the site.

Project Driveway Design

Per the site plan, the driveways are planned to be 26 feet wide, which meets the Daly City Municipal Code requirements of a minimum of 24 feet for a two-way driveway.

Project Driveway Operations

Mariposa Avenue Driveway

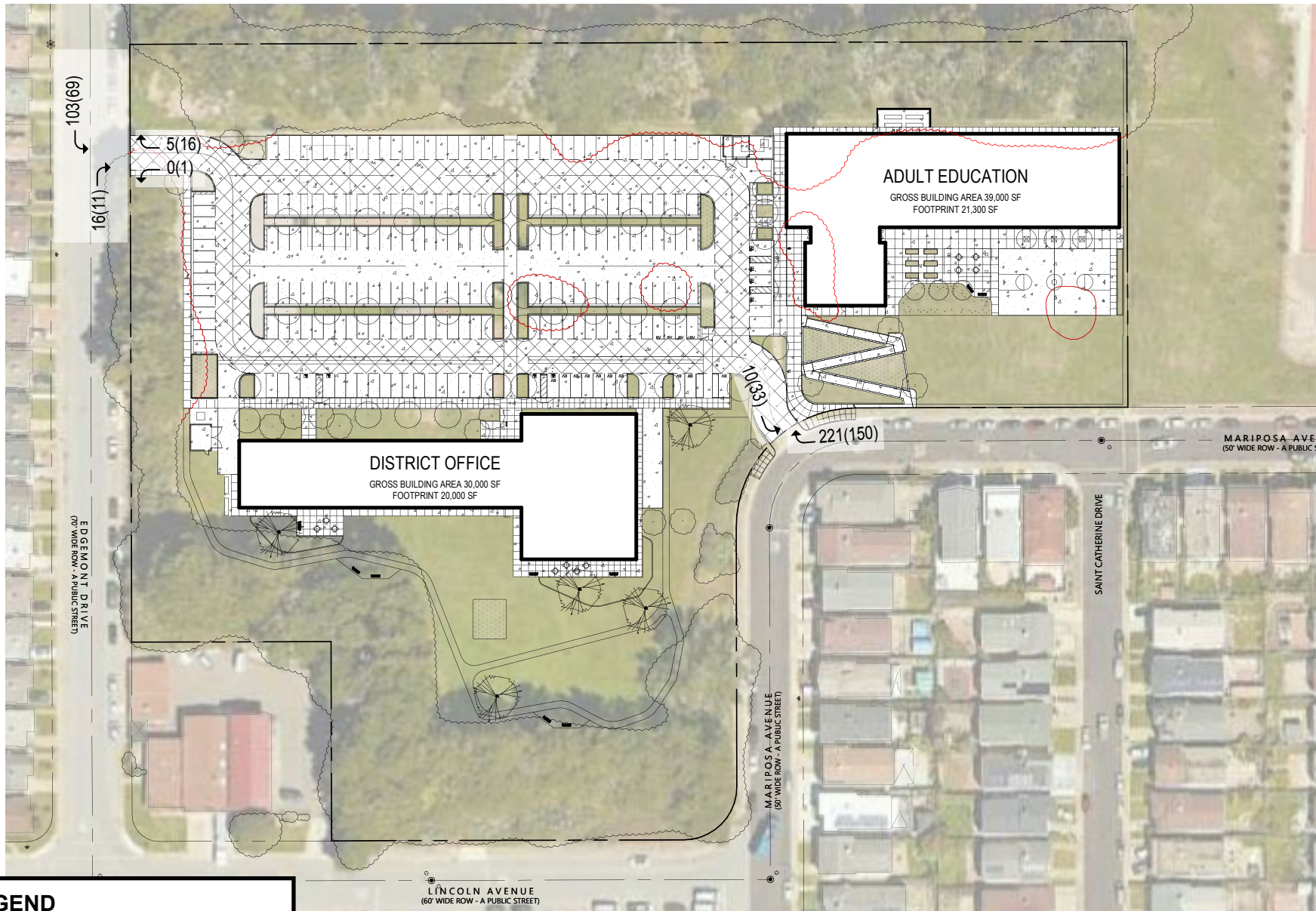
The driveway would be located at the curve of the street. Because of the sharp curve, northbound traffic approaching the curve is stop controlled, just south of the driveway. The driveway would be perpendicular to the street.

The trips that are estimated to occur at the Mariposa Avenue driveway are 221 inbound and 10 outbound trips during the AM peak hour, and 150 inbound and 33 outbound trips during the PM peak hour (see Figure 12). Some minor on-site vehicle queuing could occur due to a combination of the inherent unpredictability of vehicle arrivals at the driveway and the random occurrence of gaps in traffic along Mariposa Avenue. However, given the estimated 33 outbound trips in the PM peak hour at the driveway, that calculates to about one outbound trip every 109 seconds, the probability of two or more outbound vehicles exiting the site at the same time would be low. The maximum queue is not expected to affect the on-site circulation. Vehicles turning right into the project site from Mariposa Avenue may block the travel lane momentarily due to vehicles slowing down to turn into the driveway, but this would not have a significant effect on traffic operations.

Edgemont Drive Driveway

The estimated trips occurring at the Edgemont Drive driveway would be 119 inbound trips and 5 outbound trips during the AM peak hour and 80 inbound trips and 17 outbound trips during the PM peak hour (see Figure 12). The southbound left-turn trips (103 AM and 69 PM peak-hour trips) are expected to have a vehicle delay of 7.6 seconds and 7.5 seconds per vehicle during the AM and PM peak hours, respectively. The short delay is not expected to affect traffic flow on southbound Edgemont Drive.

Some minor on-site vehicle queuing could occur due to a combination of the inherent unpredictability of vehicle arrivals at the driveway and the random occurrence of gaps in traffic along Edgemont Drive. However, given the estimated 17 outbound trips in the PM peak hour at the driveway, that calculates to about one outbound trip every 3.5 minutes, the probability of two or more outbound vehicles exiting the site at the same time would be low. The maximum queue is not expected to affect the on-site circulation. Vehicles turning right into the project site from northbound Edgemont Drive may block the travel lane momentarily due to vehicles slowing down to turn into the driveway, but this would not have a significant effect on traffic operations.



LEGEND
 XX(XX) = AM(PM) Peak-Hour Trips

Figure 12
Project Trips at Driveways

Sight Distance at Project Driveways

The project driveways should be free and clear of any obstructions to provide adequate sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and vehicles and bicycles traveling on Edgemont Drive and Mariposa Avenue. Any landscaping and signage should be located in such a way to ensure an unobstructed view for drivers exiting the site. Providing the appropriate sight distance reduces the likelihood of a collision at a driveway and provides drivers with the ability to locate sufficient gaps in traffic and exit a driveway.

The minimum acceptable sight distance at the driveway is calculated according to the Caltrans recommended stopping sight distance. Sight distance requirements vary depending on roadway speeds. The speed limits on Edgemont Drive and Mariposa Avenue are 25 mph, and the recommended Caltrans stopping sight distance for 25 mph roadways is 150 feet. There are no roadway curves on Edgemont Drive to obstruct the view for exiting vehicles. The driveway on Mariposa Avenue would be located at the curve of the street. However, northbound traffic approaching the curve is stop controlled, and exiting vehicles would have a clear line of sight for westbound vehicles.

According to the site plan, the landscape plan shows there would be no landscaping changes along Edgemont Drive and Mariposa Avenue. Note that existing street trees have a high canopy and would not obstruct the view of drivers exiting the project driveways. Therefore, sight distance would be adequate for the driveways.

Vehicle On-Site Circulation

The project would provide 90-degree uniform parking stalls throughout the surface parking lot. The project proposes internal drive aisles of 26 feet wide, which meets the Daly City Municipal Code guidelines of a minimum of driveway aisle width.

The project would provide adequate circulation around the surface lot with acceptable drive aisle widths and no dead-end aisles.

Potential Cut-Through Traffic

The site is accessed via driveways on Mariposa Avenue and Edgemont Drive. It is possible that some vehicles may use the site as a cut-through point between Mariposa Avenue and Edgemont Drive. Vehicles traveling southbound on Mariposa Avenue to Edgemont Drive encounter one stop-control on Lincoln Avenue at Lakeshire Drive, and vehicles traveling southbound on Edgemont Drive to Mariposa Avenue encounter two stop signs on Edgemont Drive at Lincoln Avenue and on Lincoln Avenue at Lakeshire Drive. Thus, it is possible that vehicles would consider going through the site as a shorter/faster alternative between Mariposa Avenue and Edgemont Drive. However, estimated traffic counts show that vehicle traffic along Mariposa Avenue and Edgemont Drive is relatively low. Therefore, traffic cutting through the parking lot is also expected to be low. Regardless, the project should monitor the cut through traffic and install speed bumps in the drive aisles, as necessary.

Pedestrian, Bicycle, and Transit Analysis

Pedestrian Facilities

The continuous network of sidewalks and crosswalks in the study area exhibits good connectivity and would provide pedestrians with safe routes to transit stops and other points of interest in the project area. Marked crosswalks are provided with pedestrian signal heads at most of the signalized intersections in the surrounding area. The nearby intersections have ADA curb ramps. Closest to the project site, three corners of the Edgemont Drive/Lincoln Avenue and the Edgemont Drive/Higate Drive intersections have ADA curb ramps with truncated domes. Truncated domes are also provided on the

southwest and southeast corners of the Edgemont Drive/Westmoor Avenue intersection. Truncated domes are the standard design requirement for detectable warnings which enable people with visual disabilities to determine the boundary between the sidewalk and the street.

Pedestrian circulation between the site and the public streets appears adequate. According to the *Walk Bike Daly City Plan*, approximately 2.0 percent of the proposed project's users could be expected to commute via walking to and from the project site. For the proposed project, this would equate to approximately 7 and 6 new walking trips during the AM and PM peak hours, respectively. There are walkways connecting the district office building to the parking lot and Edgemont Drive and walkways connecting the adult education building to the parking lot and Mariposa Avenue. However, there are no convenient pedestrian connections between Edgemont Drive and the adult education building and no convenient pedestrian connections between Mariposa Avenue and the district office building. The project should provide a pedestrian walkway along the north edge of the site to connect Edgemont Drive and the adult education building. The project should also provide an extension to the pedestrian walkway north of the district office to connect to Mariposa Avenue.

The *Walk Bike Daly City Plan* proposes pedestrian improvements at the intersections of Skyline Boulevard/Westridge Avenue, Skyline Boulevard/Westmoor Avenue, Sullivan Avenue/Eastmoor Avenue, and Junipero Serra Boulevard/San Pedro Road in the project vicinity. These improvements could consist of high visibility crosswalks, wider sidewalks, bulb-outs, and more.

Bicycle Facilities

According to the *Walk Bike Daly City Plan*, approximately 0.2 percent of the proposed project's users could be expected to commute via bike to and from the project site. For the proposed project, this would equate to approximately 1 new bike trip during both the AM and PM peak hours. The low volume of bicycle trips generated by the project would not exceed the bicycle-carrying capacity of the streets surrounding the site. The *Walk Bike Daly City Plan* proposes bike lanes on Eastmoor Avenue for the entire street and a bike route along Skyline Boulevard in the vicinity of the project site.

Transit Service

Transit service in the project vicinity is provided by SamTrans. The nearest bus service is provided by Route 121, with bus stops approximately 1,050 feet from the project site. The next closest bus stop is approximately 1,400 feet from the project site and is served by Route 120. According to the *Walk Bike Daly City Plan*, public transportation comprises approximately 20 percent of the total commute mode share in Daly City. For the proposed project, this would equate to 71 transit riders during the AM peak hour and 56 transit riders during the PM peak hour. However, the project is a relocation from the site on Serramonte Boulevard, which is also served by Routes 120 and 121. Therefore, the project is not expected to generate any new ridership.

Parking Analysis

The parking analysis for the proposed project is based on Daly City's Municipal Code requirements.

Vehicle Parking

According to the Section 17.34.020 of the City Code, professional offices are required to provide one space for each 300 s.f. of gross floor area up to 21,000 s.f., and thereafter, one space for each 200 s.f. of gross floor area. Therefore, the 30,000 s.f. district office building would require 115 parking spaces.

Daly City does not have a requirement for the number of parking spaces for educational buildings. The City requires that the requirement should be based off similar uses. However, there are no similar uses

listed in the Section 17.34.020 that can be applied to the adult education building. Therefore, the project should coordinate with the City to determine the parking requirement for the adult education building.

The project proposes to provide 250 parking spaces on the project site. The project would provide 8 ADA accessible parking spaces on site, which exceeds the California Building Code (CBC) Section 11-B-208 requirement of 7 ADA parking spaces, including one van accessible parking space for a parking lot of 250 spaces.

Bicycle Parking

Daly City does not have bicycle parking requirements. However, to encourage alternate modes of transportation, the project should provide some bicycle racks.

The bicycle racks should be located in highly visible locations and should be easily accessible between the project building and streets. Recommended locations for the bicycle parking spaces would be next to building entrances.

DRAFT

**123 Edgemont
JUHSD Office and Adult Education Buildings
Technical Appendices**

May 13, 2021

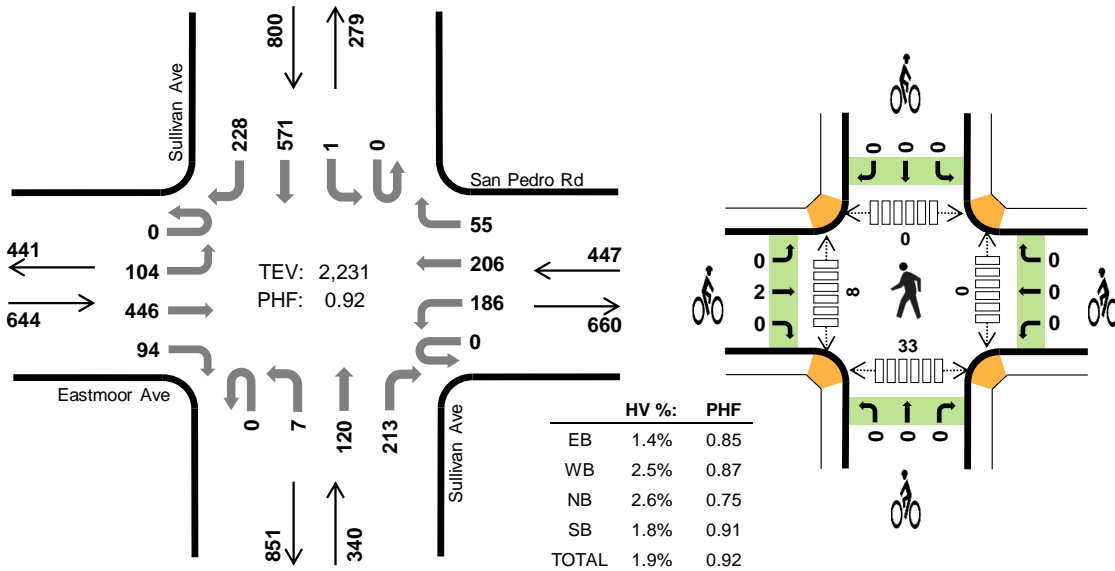
Appendix A

Traffic Counts

Sullivan Ave Eastmoor Ave



Date: 02-13-2020
 Count Period: 7:00 AM to 9:00 AM
 Peak Hour: 7:45 AM to 8:45 AM



Two-Hour Count Summaries

Interval Start	Eastmoor Ave				San Pedro Rd				Sullivan Ave				Sullivan Ave				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	11	95	26	0	26	19	11	0	0	22	42	0	0	112	24	388	0	
7:15 AM	0	23	98	32	0	29	31	15	0	1	18	30	0	0	97	41	415	0	
7:30 AM	0	25	106	28	0	28	38	12	0	0	14	40	0	1	123	54	469	0	
7:45 AM	0	32	102	33	0	40	53	9	0	0	22	39	0	0	140	79	549	1,821	
8:00 AM	0	31	131	28	0	55	66	8	0	0	37	48	0	0	146	55	605	2,038	
8:15 AM	0	20	104	15	0	38	56	13	0	6	36	71	0	0	154	56	569	2,192	
8:30 AM	0	21	109	18	0	53	31	25	0	1	25	55	0	1	131	38	508	2,231	
8:45 AM	0	17	63	26	0	42	25	17	0	0	41	52	0	0	115	44	442	2,124	
Count Total	0	180	808	206	0	311	319	110	0	8	215	377	0	2	1,018	391	3,945	0	
Peak Hour	All	0	104	446	94	0	186	206	55	0	7	120	213	0	1	571	228	2,231	0
	HV	0	2	6	1	0	5	6	0	0	0	2	7	0	0	11	3	43	0
	HV%	-	2%	1%	1%	-	3%	3%	0%	-	0%	2%	3%	-	0%	2%	1%	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	0	3	3	7	0	0	0	0	0	0	1	0	2	3
7:15 AM	0	4	3	2	9	0	0	0	0	0	0	1	0	4	5
7:30 AM	0	3	2	3	8	0	1	0	0	1	0	1	0	4	5
7:45 AM	1	2	1	2	6	0	0	0	0	0	0	0	0	9	9
8:00 AM	1	3	4	7	15	2	0	0	0	2	0	3	0	6	9
8:15 AM	4	5	4	3	16	0	0	0	0	0	0	3	0	10	13
8:30 AM	3	1	0	2	6	0	0	0	0	0	0	2	0	8	10
8:45 AM	5	3	2	3	13	0	0	0	0	0	0	2	0	10	12
Count Total	15	21	19	25	80	2	1	0	0	3	0	13	0	53	66
Peak Hour	9	11	9	14	43	2	0	0	0	2	0	8	0	33	41

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Eastmoor Ave				San Pedro Rd				Sullivan Ave				Sullivan Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	0	0	0	0	1	2	0	0	2	1	7	0
7:15 AM	0	0	0	0	0	2	2	0	0	0	0	3	0	0	2	0	9	0
7:30 AM	0	0	0	0	0	2	1	0	0	0	0	2	0	0	2	1	8	0
7:45 AM	0	0	1	0	0	1	1	0	0	0	0	1	0	0	2	0	6	30
8:00 AM	0	0	1	0	0	3	0	0	0	0	1	3	0	0	5	2	15	38
8:15 AM	0	1	3	0	0	1	4	0	0	0	1	3	0	0	2	1	16	45
8:30 AM	0	1	1	1	0	0	1	0	0	0	0	0	0	0	2	0	6	43
8:45 AM	0	2	3	0	0	1	2	0	0	0	1	1	0	0	3	0	13	50
Count Total	0	4	10	1	0	10	11	0	0	0	4	15	0	0	20	5	80	0
Peak Hour	0	2	6	1	0	5	6	0	0	0	2	7	0	0	11	3	43	0

Two-Hour Count Summaries - Bikes																	
Interval Start	Eastmoor Ave			San Pedro Rd			Sullivan Ave			Sullivan Ave			15-min Total	Rolling One Hour			
	Eastbound			Westbound			Northbound			Southbound							
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT					
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	1	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0
Peak Hour	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0

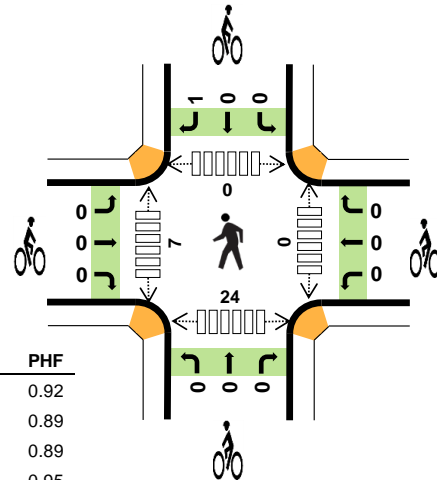
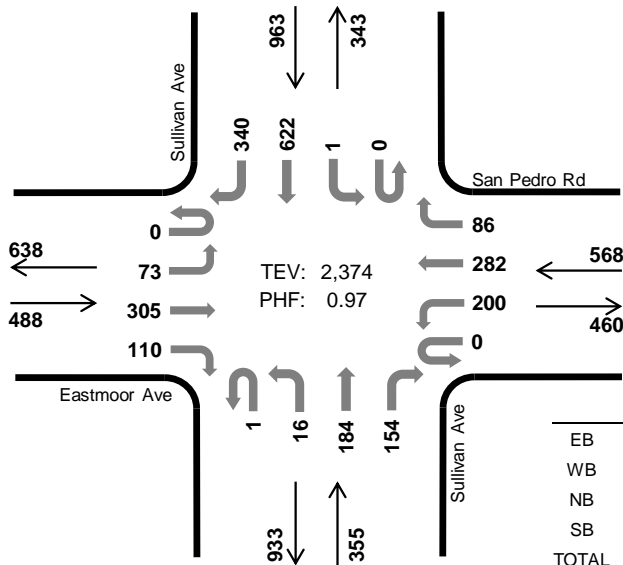
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Sullivan Ave Eastmoor Ave



Peak Hour

Date: 02-13-2020
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	1.2%	0.92
WB	1.6%	0.89
NB	2.3%	0.89
SB	0.7%	0.95
TOTAL	1.3%	0.97

Two-Hour Count Summaries

Interval Start	Eastmoor Ave				San Pedro Rd				Sullivan Ave				Sullivan Ave				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	18	55	27	0	26	53	21	0	5	43	46	0	0	170	75	539	0	
4:15 PM	0	14	66	24	0	38	49	21	0	5	42	47	0	0	123	66	495	0	
4:30 PM	0	22	61	17	0	50	62	25	0	2	65	33	0	0	150	75	562	0	
4:45 PM	0	16	82	26	0	38	70	26	0	3	56	41	0	0	152	69	579	2,175	
5:00 PM	0	17	79	37	0	50	63	24	0	5	50	36	0	0	170	83	614	2,250	
5:15 PM	0	20	69	25	0	57	82	20	1	6	39	33	0	1	150	84	587	2,342	
5:30 PM	0	20	75	22	0	55	67	16	0	2	39	44	0	0	150	104	594	2,374	
5:45 PM	0	34	83	28	0	48	57	27	0	4	32	31	0	0	125	74	543	2,338	
Count Total	0	161	570	206	0	362	503	180	1	32	366	311	0	1	1,190	630	4,513	0	
Peak Hour	All	0	73	305	110	0	200	282	86	1	16	184	154	0	1	622	340	2,374	0
	HV	0	0	5	1	0	4	2	3	0	1	2	5	0	0	6	1	30	0
	HV%	-	0%	2%	1%	-	2%	1%	3%	0%	6%	1%	3%	-	0%	1%	0%	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	3	1	3	7	0	0	0	0	0	0	3	1	4	8
4:15 PM	3	5	3	2	13	0	0	1	0	1	0	0	0	7	7
4:30 PM	0	4	1	4	9	0	0	0	0	0	0	2	0	3	5
4:45 PM	1	0	3	2	6	0	0	0	0	0	0	3	0	2	5
5:00 PM	3	2	2	2	9	0	0	0	0	0	0	0	0	5	5
5:15 PM	1	1	1	1	4	0	0	0	1	1	0	2	0	10	12
5:30 PM	1	6	2	2	11	0	0	0	0	0	0	2	0	7	9
5:45 PM	0	0	2	1	3	1	0	0	0	1	0	1	0	3	4
Count Total	9	21	15	17	62	1	0	1	1	3	0	13	1	41	55
Peak Hour	6	9	8	7	30	0	0	0	1	1	0	7	0	24	31

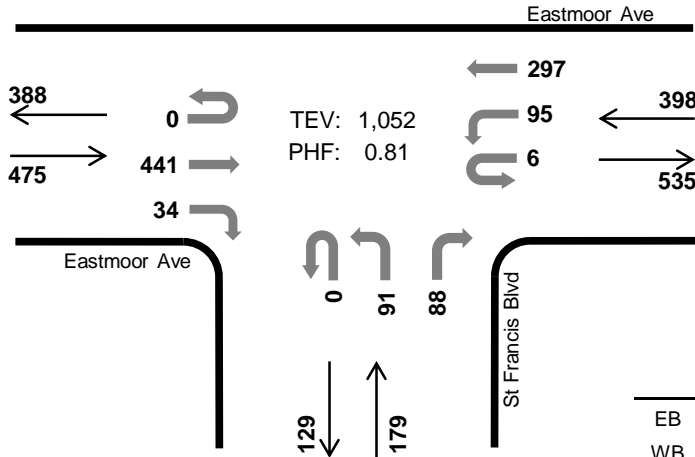
Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Eastmoor Ave				San Pedro Rd				Sullivan Ave				Sullivan Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	1	1	1	0	0	0	1	0	0	2	1	7	0
4:15 PM	0	0	3	0	0	2	1	2	0	0	2	1	0	0	2	0	13	0
4:30 PM	0	0	0	0	0	2	2	0	0	0	1	0	0	0	3	1	9	0
4:45 PM	0	0	1	0	0	0	0	0	0	1	0	2	0	0	2	0	6	35
5:00 PM	0	0	2	1	0	1	1	0	0	0	1	1	0	0	2	0	9	37
5:15 PM	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	4	28
5:30 PM	0	0	1	0	0	2	1	3	0	0	1	1	0	0	1	1	11	30
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	3	27
Count Total	0	0	8	1	0	9	6	6	0	1	6	8	0	0	14	3	62	0
Peak Hour	0	0	5	1	0	4	2	3	0	1	2	5	0	0	6	1	30	0
Two-Hour Count Summaries - Bikes																		
Interval Start	Eastmoor Ave			San Pedro Rd			Sullivan Ave			Sullivan Ave			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	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	1	0	0	0	0	1	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2
Count Total	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	3	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
<i>Note: U-Turn volumes for bikes are included in Left-Turn, if any.</i>																		

St Francis Blvd Eastmoor Ave



Peak Hour

Date: 02-13-2020
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



TEV: 1,052
PHF: 0.81

	HV %:	PHF
EB	0.8%	0.87
WB	2.5%	0.77
NB	1.1%	0.76
SB	-	-
TOTAL	1.5%	0.81

Two-Hour Count Summaries

Interval Start	Eastmoor Ave				Eastmoor Ave				St Francis Blvd				n/a				15-min Total	Rolling One Hour	
	Eastbound		Westbound		Northbound		Southbound		UT		LT		TH		RT				
7:00 AM	0	0	90	4	0	2	32	0	0	7	0	24	0	0	0	0	159	0	
7:15 AM	1	0	104	6	0	9	50	0	0	7	0	28	0	0	0	0	205	0	
7:30 AM	0	0	116	3	0	14	70	0	0	24	0	24	0	0	0	0	251	0	
7:45 AM	0	0	132	5	0	16	114	0	0	37	0	22	0	0	0	0	326	941	
8:00 AM	0	0	115	8	0	32	57	0	0	14	0	20	0	0	0	0	246	1,028	
8:15 AM	0	0	78	18	6	33	56	0	0	16	0	22	0	0	0	0	229	1,052	
8:30 AM	0	0	83	13	1	17	46	0	0	12	0	22	0	0	0	0	194	995	
8:45 AM	0	0	56	6	0	15	54	0	0	9	0	23	0	0	0	0	163	832	
Count Total	1	0	774	63	7	138	479	0	0	126	0	185	0	0	0	0	1,773	0	
Peak Hour	All	0	0	441	34	6	95	297	0	0	91	0	88	0	0	0	0	1,052	0
	HV	0	0	3	1	0	0	10	0	0	1	0	1	0	0	0	0	16	0
	HV%	-	-	1%	3%	0%	0%	3%	-	-	1%	-	1%	-	-	-	-	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	1	0	0	2	0	0	0	0	0	0	2	0	3	5
7:15 AM	0	2	0	0	2	0	0	0	0	0	3	0	1	4	8
7:30 AM	1	2	1	0	4	0	0	0	0	0	3	4	5	5	17
7:45 AM	1	1	0	0	2	0	0	0	0	0	2	2	6	6	16
8:00 AM	0	3	1	0	4	1	0	0	0	1	2	5	16	4	27
8:15 AM	2	4	0	0	6	0	0	0	0	0	6	24	31	3	64
8:30 AM	4	2	0	0	6	0	0	0	0	0	3	2	7	2	14
8:45 AM	1	1	0	0	2	0	0	0	0	0	0	1	2	2	5
Count Total	10	16	2	0	28	1	0	0	0	1	19	40	68	29	156
Peak Hr	4	10	2	0	16	1	0	0	0	1	13	35	58	18	124

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Eastmoor Ave				Eastmoor Ave				St Francis Blvd				n/a				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	
7:15 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	
7:30 AM	0	0	1	0	0	0	2	0	0	1	0	0	0	0	0	4	0	
7:45 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	10	
8:00 AM	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	4	12	
8:15 AM	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	6	16	
8:30 AM	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	6	18	
8:45 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	18	
Count Total	0	0	9	1	0	0	16	0	0	1	0	1	0	0	0	28	0	
Peak Hour	0	0	3	1	0	0	10	0	0	1	0	1	0	0	0	16	0	

Two-Hour Count Summaries - Bikes

Interval Start	Eastmoor Ave			Eastmoor Ave			St Francis Blvd			n/a			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	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
7:30 AM	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
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	0	1	0	0	0	0	0	0	0	0	0	0	1	0

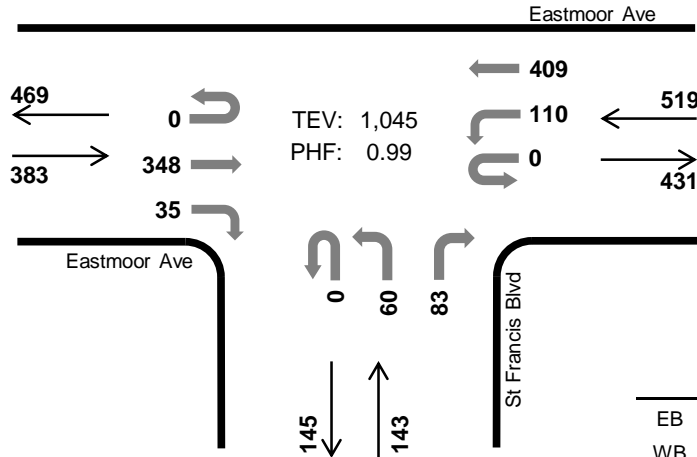
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

St Francis Blvd Eastmoor Ave

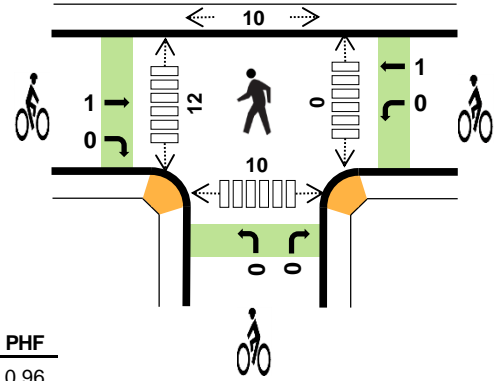


Peak Hour

Date: 02-13-2020
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



TEV: 1,045
PHF: 0.99



	HV %:	PHF
EB	1.8%	0.96
WB	0.4%	0.94
NB	0.0%	0.85
SB	-	-
TOTAL	0.9%	0.99

Two-Hour Count Summaries

Interval Start	Eastmoor Ave				Eastmoor Ave				St Francis Blvd				n/a				15-min Total	Rolling One Hour	
	Eastbound		Westbound		Northbound		Southbound		UT		LT		TH		RT				
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	0	59	5	0	27	85	0	0	7	0	19	0	0	0	0	202	0	
4:15 PM	0	0	72	5	0	14	84	0	0	10	0	14	0	0	0	0	199	0	
4:30 PM	0	0	64	8	0	29	98	0	0	5	0	17	0	0	0	0	221	0	
4:45 PM	0	0	94	6	1	16	95	0	0	10	0	16	0	0	0	0	238	860	
5:00 PM	0	0	92	8	0	23	100	0	0	9	0	22	0	0	0	0	254	912	
5:15 PM	0	0	84	8	0	37	101	0	0	12	0	22	0	0	0	0	264	977	
5:30 PM	0	0	81	13	0	29	105	0	0	16	0	20	0	0	0	0	264	1,020	
5:45 PM	0	0	91	6	0	21	103	0	0	23	0	19	0	0	0	0	263	1,045	
Count Total	0	0	637	59	1	196	771	0	0	92	0	149	0	0	0	0	1,905	0	
Peak Hour	All	0	0	348	35	0	110	409	0	0	60	0	83	0	0	0	0	1,045	0
	HV	0	0	7	0	0	0	2	0	0	0	0	0	0	0	0	0	9	0
	HV%	-	-	2%	0%	-	0%	0%	-	-	0%	-	0%	-	-	-	-	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	2	0	0	2	0	0	0	0	0	2	0	1	2	5
4:15 PM	3	1	0	0	4	0	0	0	0	0	0	1	4	1	6
4:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	2	3	5
4:45 PM	2	0	0	0	2	0	0	0	0	0	0	0	1	4	5
5:00 PM	3	1	0	0	4	0	0	0	0	0	0	1	3	1	5
5:15 PM	1	0	0	0	1	0	0	0	0	0	0	2	1	1	4
5:30 PM	1	1	0	0	2	0	1	0	0	1	0	1	1	6	8
5:45 PM	2	0	0	0	2	1	0	0	0	1	0	8	5	2	15
Count Total	12	7	0	0	19	1	1	0	0	2	2	13	18	20	53
Peak Hr	7	2	0	0	9	1	1	0	0	2	0	12	10	10	32

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Eastmoor Ave				Eastmoor Ave				St Francis Blvd				n/a				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	
4:15 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4	0	
4:30 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	0	
4:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	10	
5:00 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4	12	
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	9	
5:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	9	
5:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	9	
Count Total	0	0	12	0	0	1	6	0	0	0	0	0	0	0	0	19	0	
Peak Hour	0	0	7	0	0	0	2	0	0	0	0	0	0	0	0	9	0	

Two-Hour Count Summaries - Bikes

Interval Start	Eastmoor Ave			Eastmoor Ave			St Francis Blvd			n/a			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	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
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	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	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	1
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	1	0	0	1	0	0	0	0	0	0	0	0	2
Peak Hour	0	1	0	0	1	0	0	0	0	0	0	0	0	2

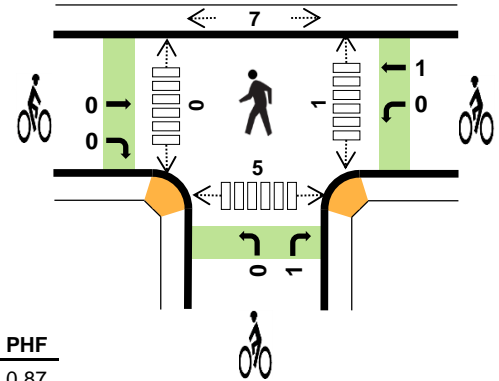
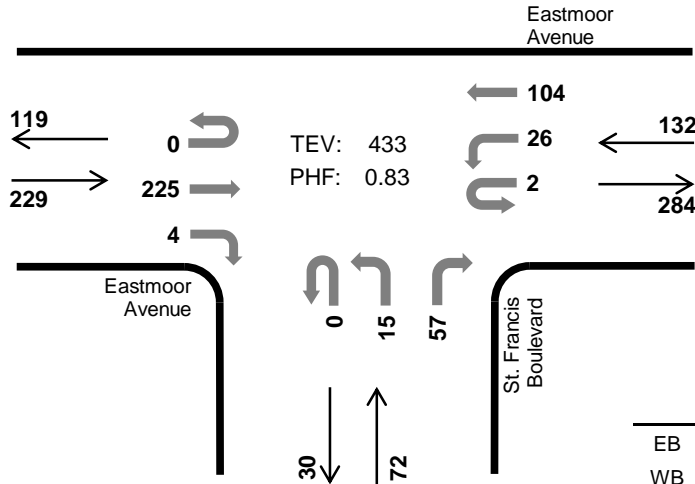
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

St. Francis Boulevard Eastmoor Avenue



Peak Hour

Date: 02-23-2021
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	2.6%	0.87
WB	3.8%	0.87
NB	1.4%	0.62
SB	-	-
TOTAL	2.8%	0.83

Two-Hour Count Summaries

Interval Start	Eastmoor Avenue				Eastmoor Avenue				St. Francis Boulevard				N/A				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	0	34	0	0	2	9	0	0	0	0	9	0	0	0	0	54	0	
7:15 AM	0	0	40	0	0	2	10	0	0	0	0	12	0	0	0	0	64	0	
7:30 AM	0	0	36	2	0	4	19	0	0	1	0	9	0	0	0	0	71	0	
7:45 AM	0	0	50	3	1	9	27	0	0	0	0	20	0	0	0	0	110	299	
8:00 AM	0	0	42	0	2	8	21	0	0	2	0	11	0	0	0	0	86	331	
8:15 AM	0	0	55	2	0	6	21	0	0	1	0	13	0	0	0	0	98	365	
8:30 AM	0	0	66	0	0	5	31	0	0	2	0	14	0	0	0	0	118	412	
8:45 AM	0	0	62	2	0	7	31	0	0	10	0	19	0	0	0	0	131	433	
Count Total	0	0	385	9	3	43	169	0	0	16	0	107	0	0	0	0	732	0	
Peak Hour	All	0	0	225	4	2	26	104	0	0	15	0	57	0	0	0	0	433	0
	HV	0	0	6	0	0	0	5	0	0	1	0	0	0	0	0	0	12	0
	HV%	-	-	3%	0%	0%	0%	5%	-	-	7%	-	0%	-	-	-	-	3%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3
7:15 AM	0	0	0	0	0	1	0	0	0	1	1	0	1	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	2	3	6
7:45 AM	1	2	0	0	3	1	0	0	0	1	0	0	2	0	2
8:00 AM	2	2	0	0	4	0	0	0	0	0	0	0	2	0	2
8:15 AM	0	0	1	0	1	0	0	1	0	1	0	0	2	1	3
8:30 AM	2	1	0	0	3	0	0	0	0	0	0	0	1	1	2
8:45 AM	2	2	0	0	4	0	1	0	0	1	1	0	2	3	6
Count Total	7	7	1	0	15	2	1	1	0	4	3	1	13	9	26
Peak Hr	6	5	1	0	12	0	1	1	0	2	1	0	7	5	13

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Eastmoor Avenue				Eastmoor Avenue				St. Francis Boulevard				N/A				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
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	1	0	0	0	2	0	0	0	0	0	0	0	0	3	3	
8:00 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	4	7	
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	8	
8:30 AM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3	11	
8:45 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	4	12	
Count Total	0	0	7	0	0	0	7	0	0	1	0	0	0	0	0	15	0	
Peak Hour	0	0	6	0	0	0	5	0	0	1	0	0	0	0	0	12	0	

Two-Hour Count Summaries - Bikes

Interval Start	Eastmoor Avenue			Eastmoor Avenue			St. Francis Boulevard			N/A			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	2
Count Total	0	2	0	0	1	0	0	0	1	0	0	0	4	0
Peak Hour	0	0	0	0	1	0	0	0	1	0	0	0	2	0

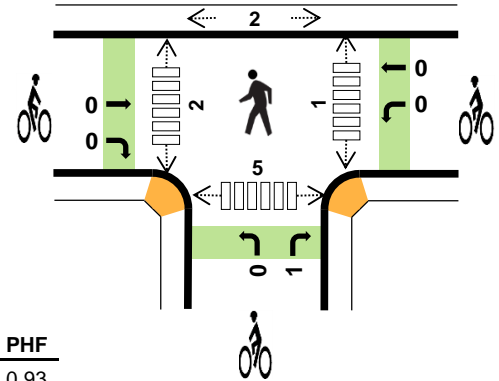
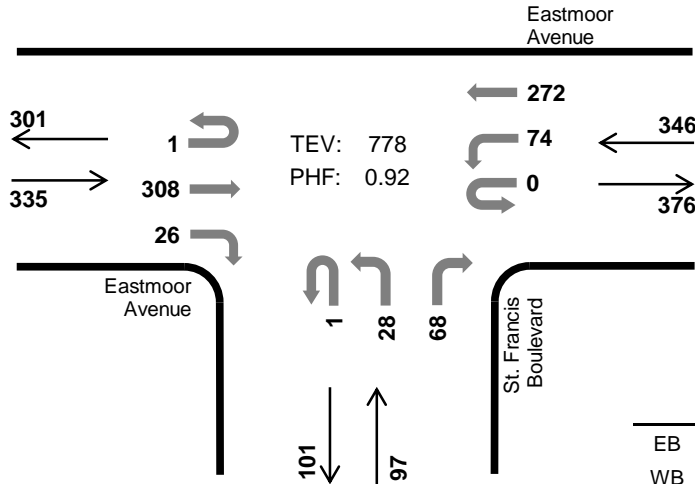
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

St. Francis Boulevard Eastmoor Avenue



Peak Hour

Date: 02-23-2021
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.6%	0.93
WB	0.3%	0.92
NB	0.0%	0.90
SB	-	-
TOTAL	0.4%	0.92

Two-Hour Count Summaries

Interval Start	Eastmoor Avenue				Eastmoor Avenue				St. Francis Boulevard				N/A				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	0	80	6	0	26	66	0	0	5	0	17	0	0	0	0	200	0	
4:15 PM	0	0	63	5	0	19	55	0	0	9	0	16	0	0	0	0	167	0	
4:30 PM	0	0	78	5	0	18	55	0	0	3	0	10	0	0	0	0	169	0	
4:45 PM	0	0	64	4	0	17	70	0	0	2	0	11	0	0	0	0	168	704	
5:00 PM	0	0	81	7	0	11	65	0	0	7	0	18	0	0	0	0	189	693	
5:15 PM	0	0	85	5	0	20	74	0	0	8	0	19	0	0	0	0	211	737	
5:30 PM	1	0	71	6	0	23	63	0	0	10	0	16	0	0	0	0	190	758	
5:45 PM	0	0	71	8	0	20	70	0	1	3	0	15	0	0	0	0	188	778	
Count Total	1	0	593	46	0	154	518	0	1	47	0	122	0	0	0	0	1,482	0	
Peak Hour	All	1	0	308	26	0	74	272	0	1	28	0	68	0	0	0	0	778	0
	HV	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
	HV%	0%	-	1%	0%	-	0%	0%	-	0%	0%	-	0%	-	-	-	-	0%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	0	0	1	1	1	0	0	2	0	0	2	2	4
4:15 PM	1	1	1	0	3	1	0	0	0	1	1	4	1	4	10
4:30 PM	0	0	0	0	0	1	0	1	0	2	0	0	2	1	3
4:45 PM	0	1	0	0	1	0	0	0	0	0	0	4	6	0	10
5:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	2	2
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	1	2	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
5:45 PM	1	0	0	0	1	0	0	1	0	1	0	2	1	0	3
Count Total	4	3	1	0	8	3	1	2	0	6	2	10	13	12	37
Peak Hr	2	1	0	0	3	0	0	1	0	1	1	2	2	5	10

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Eastmoor Avenue				Eastmoor Avenue				St. Francis Boulevard				N/A				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	5
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5
5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
Count Total	0	0	4	0	0	0	3	0	0	1	0	0	0	0	0	0	8	0
Peak Hour	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0

Two-Hour Count Summaries - Bikes

Interval Start	Eastmoor Avenue			Eastmoor Avenue			St. Francis Boulevard			N/A			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	1	0	0	0	0	1	0	0	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	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	1	0	0	0	1	1
Count Total	0	3	0	0	1	0	1	0	1	0	0	0	6	0
Peak Hour	0	0	0	0	0	0	0	0	1	0	0	0	1	0

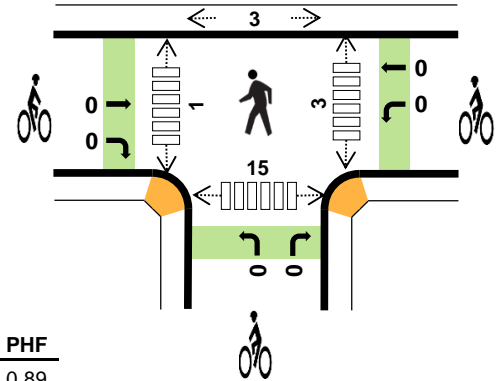
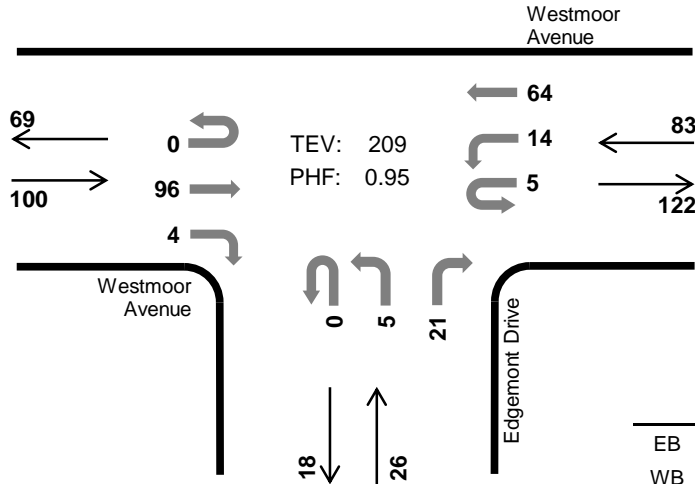
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Edgemont Drive Westmoor Avenue



Peak Hour

Date: 02-23-2021
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	1.0%	0.89
WB	2.4%	0.90
NB	0.0%	0.72
SB	-	-
TOTAL	1.4%	0.95

Two-Hour Count Summaries

Interval Start	Westmoor Avenue				Westmoor Avenue				Edgemont Drive				N/A				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	0	19	3	0	4	15	0	0	1	0	2	0	0	0	0	44	0	
7:15 AM	1	0	15	1	0	2	12	0	0	0	0	5	0	0	0	0	36	0	
7:30 AM	0	0	19	1	0	3	11	0	1	0	0	6	0	0	0	0	41	0	
7:45 AM	0	0	16	4	0	6	13	0	0	2	0	3	0	0	0	0	44	165	
8:00 AM	0	0	25	3	1	2	16	0	0	1	0	3	0	0	0	0	51	172	
8:15 AM	0	0	26	1	1	6	12	0	0	0	0	9	0	0	0	0	55	191	
8:30 AM	0	0	24	0	1	3	18	0	0	3	0	6	0	0	0	0	55	205	
8:45 AM	0	0	21	0	2	3	18	0	0	1	0	3	0	0	0	0	48	209	
Count Total	1	0	165	13	5	29	115	0	1	8	0	37	0	0	0	0	374	0	
Peak Hour	All	0	0	96	4	5	14	64	0	0	5	0	21	0	0	0	0	209	0
	HV	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	3	0
	HV%	-	-	1%	0%	0%	7%	2%	-	-	0%	-	0%	-	-	-	-	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	3	0	0	3	0	0	0	0	0	0	1	1	2	4
7:15 AM	1	0	0	0	1	0	0	0	0	0	0	2	1	1	4
7:30 AM	1	0	0	0	1	0	0	0	0	0	3	0	1	0	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	5	7
8:15 AM	0	2	0	0	2	0	0	0	0	0	1	0	1	5	7
8:30 AM	1	0	0	0	1	0	0	0	0	0	1	1	1	4	7
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Count Total	3	5	0	0	8	0	0	0	0	0	7	4	6	19	36
Peak Hr	1	2	0	0	3	0	0	0	0	0	3	1	3	15	22

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Westmoor Avenue				Westmoor Avenue				Edgemont Drive				N/A				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	3
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	0	3	0	0	1	4	0	0	0	0	0	0	0	0	0	8	0
Peak Hour	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	3	0

Two-Hour Count Summaries - Bikes

Interval Start	Westmoor Avenue			Westmoor Avenue			Edgemont Drive			N/A			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	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
7:30 AM	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
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	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	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

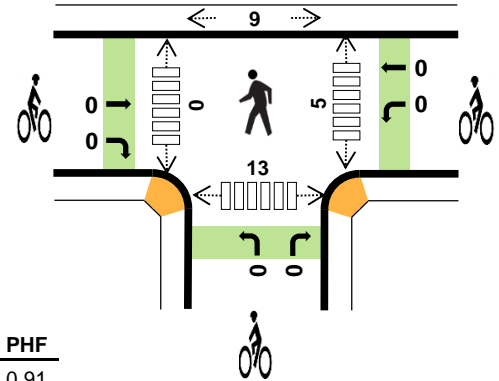
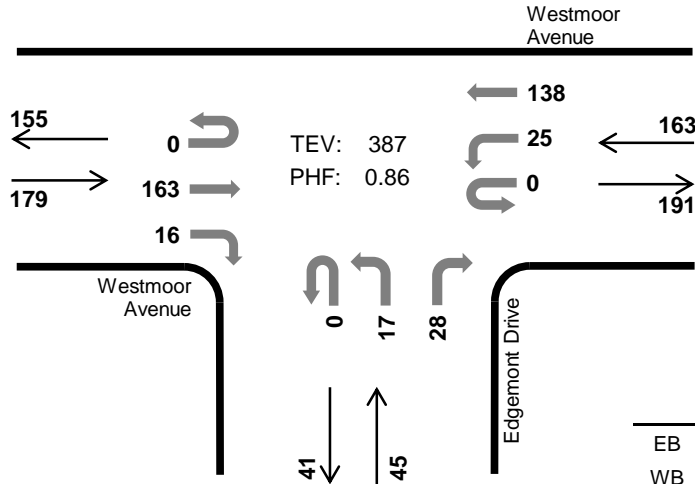
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Edgemont Drive Westmoor Avenue



Peak Hour

Date: 02-23-2021
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	0.6%	0.91
WB	0.6%	0.80
NB	0.0%	0.75
SB	-	-
TOTAL	0.5%	0.86

Two-Hour Count Summaries

Interval Start	Westmoor Avenue				Westmoor Avenue				Edgemont Drive				N/A				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	0	44	5	0	8	33	0	0	5	0	6	0	0	0	0	101	0	
4:15 PM	0	0	44	3	0	11	40	0	0	7	0	8	0	0	0	0	113	0	
4:30 PM	0	0	37	4	0	2	33	0	0	3	0	6	0	0	0	0	85	0	
4:45 PM	0	0	38	4	0	4	32	0	0	2	0	8	0	0	0	0	88	387	
5:00 PM	0	0	39	3	0	2	41	0	0	1	0	9	0	0	0	0	95	381	
5:15 PM	0	0	29	2	0	7	33	0	0	3	0	6	0	0	0	0	80	348	
5:30 PM	0	0	38	2	2	7	34	0	0	3	0	10	0	0	0	0	96	359	
5:45 PM	1	0	35	1	0	0	28	0	0	4	0	8	0	0	0	0	77	348	
Count Total	1	0	304	24	2	41	274	0	0	28	0	61	0	0	0	0	735	0	
Peak Hour	All	0	0	163	16	0	25	138	0	0	17	0	28	0	0	0	0	387	0
	HV	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
	HV%	-	-	1%	0%	-	0%	1%	-	-	0%	-	0%	-	-	-	-	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	1	2	6
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	1	3
4:30 PM	1	0	0	0	1	0	0	0	0	0	1	0	4	6	11
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	2	4	7
5:00 PM	0	0	0	0	0	1	0	0	0	1	2	0	3	6	11
5:15 PM	0	0	1	0	1	1	0	1	0	2	1	0	2	5	8
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	9	11
5:45 PM	0	1	0	0	1	0	0	0	0	0	3	1	0	3	7
Count Total	1	2	1	0	4	2	0	1	0	3	12	1	15	36	64
Peak Hr	1	1	0	0	2	0	0	0	0	0	5	0	9	13	27

Two-Hour Count Summaries - Heavy Vehicles

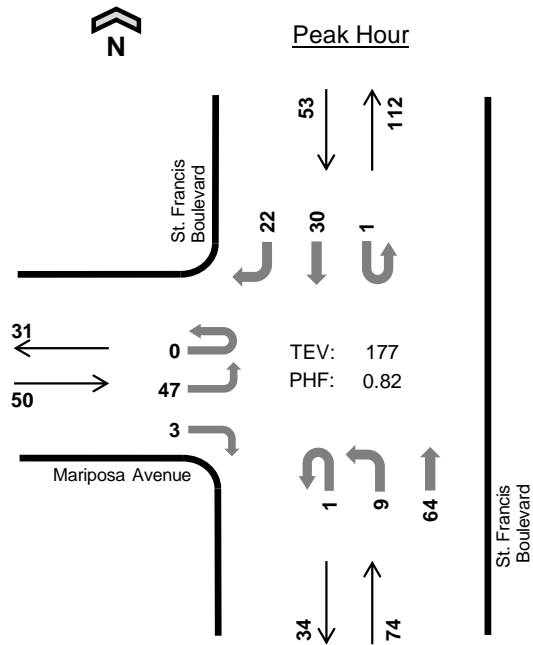
Interval Start	Westmoor Avenue				Westmoor Avenue				Edgemont Drive				N/A				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
5:30 PM	0	0	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	1	0	0	0	0	0	0	0	0	0	1	2
Count Total	0	0	1	0	0	0	2	0	0	1	0	0	0	0	0	0	4	0
Peak Hour	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0

Two-Hour Count Summaries - Bikes

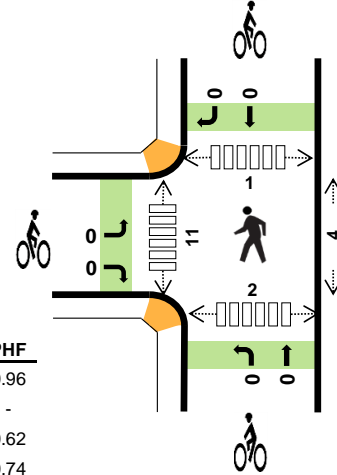
Interval Start	Westmoor Avenue			Westmoor Avenue			Edgemont Drive			N/A			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	1
5:15 PM	0	0	1	0	0	0	1	0	0	0	0	0	2	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	1	1	0	0	0	1	0	0	0	0	0	3	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

St. Francis Boulevard Mariposa Avenue



Date: 02-23-2021
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	0.0%	0.96
WB	-	-
NB	1.4%	0.62
SB	1.9%	0.74
TOTAL	1.1%	0.82

Two-Hour Count Summaries

Interval Start	Mariposa Avenue				N/A				St. Francis Boulevard				St. Francis Boulevard				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	7	0	4	0	0	0	0	0	1	8	0	0	0	6	3	29	0	
7:15 AM	0	6	0	1	0	0	0	0	0	0	9	0	0	0	2	4	22	0	
7:30 AM	0	6	0	5	0	0	0	0	0	0	12	0	0	0	7	3	33	0	
7:45 AM	0	8	0	2	0	0	0	0	0	5	15	0	0	0	6	3	39	123	
8:00 AM	0	12	0	1	0	0	0	0	0	0	14	0	1	0	11	6	45	139	
8:15 AM	0	10	0	1	0	0	0	0	0	0	14	0	0	0	6	7	38	155	
8:30 AM	0	12	0	1	0	0	0	0	1	6	9	0	0	0	8	3	40	162	
8:45 AM	0	13	0	0	0	0	0	0	0	3	27	0	0	0	5	6	54	177	
Count Total	0	74	0	15	0	0	0	0	1	15	108	0	1	0	51	35	300	0	
Peak Hour	All	0	47	0	3	0	0	0	0	1	9	64	0	1	0	30	22	177	0
	HV	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
	HV%	-	0%	-	0%	-	-	-	-	0%	0%	2%	-	0%	-	3%	0%	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

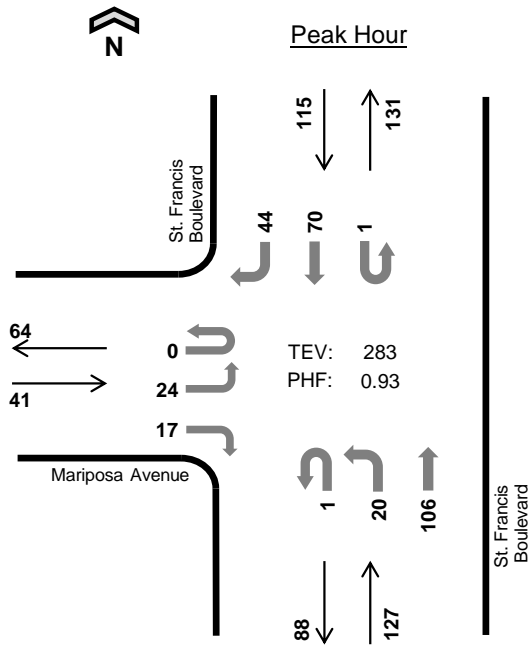
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	1	1	0	0	0	1	0	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3
7:45 AM	0	0	1	0	1	0	0	0	0	0	1	2	1	0	4
8:00 AM	0	0	0	1	1	0	0	0	0	0	2	1	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4
8:45 AM	0	0	1	0	1	0	0	0	0	0	2	6	0	2	10
Count Total	1	0	3	1	5	1	0	0	0	1	7	13	3	3	26
Peak Hr	0	0	1	1	2	0	0	0	0	0	4	11	1	2	18

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Mariposa Avenue				N/A				St. Francis Boulevard				St. Francis Boulevard				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
7:30 AM	0	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	1	0	0	0	0	0	1	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
Count Total	0	0	0	1	0	0	0	0	0	0	3	0	0	0	1	0	5	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0

Two-Hour Count Summaries - Bikes																	
Interval Start	Mariposa Avenue			N/A			St. Francis Boulevard			St. Francis Boulevard			15-min Total	Rolling One Hour			
	Eastbound			Westbound			Northbound			Southbound							
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT					
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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	1
8:00 AM	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

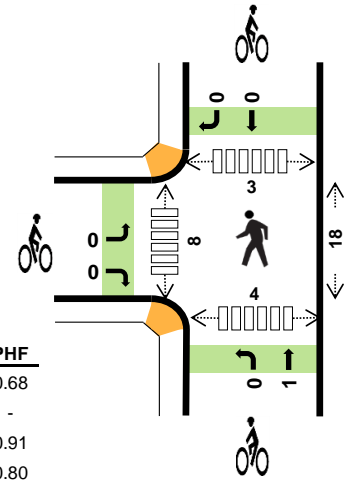
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

St. Francis Boulevard Mariposa Avenue



Date: 02-23-2021
 Count Period: 4:00 PM to 6:00 PM
 Peak Hour: 4:15 PM to 5:15 PM

	HV %:	PHF
EB	2.4%	0.68
WB	-	-
NB	2.4%	0.91
SB	0.9%	0.80
TOTAL	1.8%	0.93



Two-Hour Count Summaries

Interval Start	Mariposa Avenue				N/A				St. Francis Boulevard				St. Francis Boulevard				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	10	0	6	0	0	0	0	0	6	22	0	0	0	10	8	62	0	
4:15 PM	0	7	0	3	0	0	0	0	0	6	29	0	0	0	17	11	73	0	
4:30 PM	0	11	0	4	0	0	0	0	0	5	25	0	0	0	12	10	67	0	
4:45 PM	0	1	0	2	0	0	0	0	0	5	30	0	0	0	21	8	67	269	
5:00 PM	0	5	0	8	0	0	0	0	1	4	22	0	1	0	20	15	76	283	
5:15 PM	0	8	0	5	0	0	0	0	0	2	24	0	0	0	16	9	64	274	
5:30 PM	0	7	0	1	0	0	0	0	0	5	26	0	0	0	20	14	73	280	
5:45 PM	0	8	0	7	0	0	0	0	0	6	10	0	0	0	20	9	60	273	
Count Total	0	57	0	36	0	0	0	0	1	39	188	0	1	0	136	84	542	0	
Peak Hour	All	0	24	0	17	0	0	0	0	1	20	106	0	1	0	70	44	283	0
	HV	0	0	0	1	0	0	0	0	0	0	3	0	0	0	1	0	5	0
	HV%	-	0%	-	6%	-	-	-	-	0%	0%	3%	-	0%	-	1%	0%	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	1	0	1	0	0	0	0	0	1	5	0	1	7
4:15 PM	0	0	1	1	2	0	0	0	0	0	2	2	1	1	6
4:30 PM	0	0	0	0	0	0	0	0	0	0	7	3	1	1	12
4:45 PM	0	0	2	0	2	0	0	0	0	0	4	2	1	2	9
5:00 PM	1	0	0	0	1	0	0	1	0	1	5	1	0	0	6
5:15 PM	0	0	0	0	0	1	0	0	0	1	2	2	0	2	6
5:30 PM	0	0	0	1	1	0	0	0	0	0	6	5	2	3	16
5:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	1	1	2
Count Total	1	0	5	2	8	1	0	1	0	2	27	20	6	11	64
Peak Hr	1	0	3	1	5	0	0	1	0	1	18	8	3	4	33

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Mariposa Avenue				N/A				St. Francis Boulevard				St. Francis Boulevard				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	5
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
Count Total	0	0	0	1	0	0	0	0	0	0	5	0	0	0	2	0	8	0
Peak Hour	0	0	0	1	0	0	0	0	0	0	3	0	0	0	1	0	5	0

Two-Hour Count Summaries - Bikes																	
Interval Start	Mariposa Avenue			N/A			St. Francis Boulevard			St. Francis Boulevard			15-min Total	Rolling One Hour			
	Eastbound			Westbound			Northbound			Southbound							
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT					
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
5:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
5:30 PM	0	0	0	0	0	0	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	2
Count Total	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0
Peak Hour	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

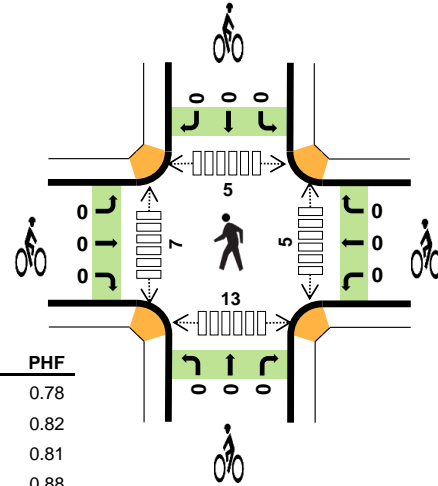
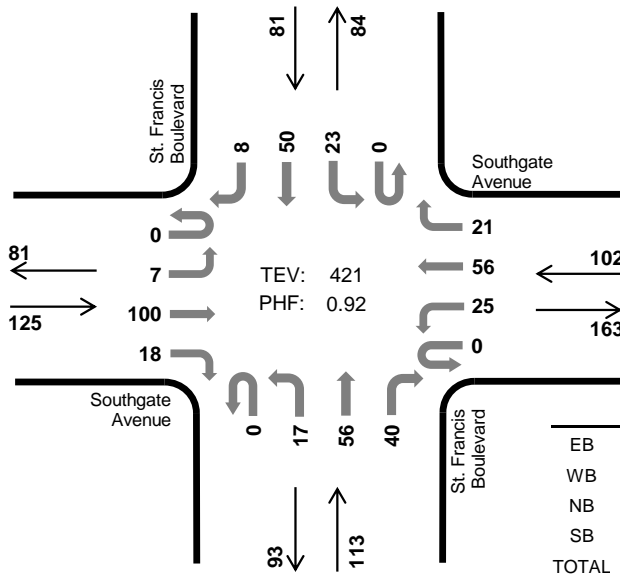
St. Francis Boulevard Southgate Avenue



Date: 02-23-2021

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	4.8%	0.78
WB	2.0%	0.82
NB	4.4%	0.81
SB	1.2%	0.88
TOTAL	3.3%	0.92

Two-Hour Count Summaries

Interval Start	Southgate Avenue				Southgate Avenue				St. Francis Boulevard				St. Francis Boulevard				15-min Total	Rolling One Hour	
	Eastbound		Westbound		Northbound		Southbound		Northbound		Southbound								
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	2	18	6	0	6	16	3	0	3	8	11	0	7	14	2	96	0	
7:15 AM	0	2	19	3	0	1	7	2	0	7	3	7	0	3	10	3	67	0	
7:30 AM	0	0	24	6	0	8	9	2	0	3	10	9	0	5	11	1	88	0	
7:45 AM	0	1	19	7	0	6	15	8	0	4	8	15	0	13	7	2	105	356	
8:00 AM	0	3	23	4	0	8	20	3	0	7	11	9	0	8	13	2	111	371	
8:15 AM	0	0	19	5	0	5	9	4	0	2	16	13	0	4	10	4	91	395	
8:30 AM	0	1	25	5	0	10	14	6	0	3	8	9	0	9	13	1	104	411	
8:45 AM	0	3	33	4	0	2	13	8	0	5	21	9	0	2	14	1	115	421	
Count Total	0	12	180	40	0	46	103	36	0	34	85	82	0	51	92	16	777	0	
Peak Hour	All	0	7	100	18	0	25	56	21	0	17	56	40	0	23	50	8	421	0
	HV	0	0	1	5	0	0	1	1	0	5	0	0	0	1	0	0	14	0
	HV%	-	0%	1%	28%	-	0%	2%	5%	-	29%	0%	0%	-	4%	0%	0%	3%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)					
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total	
7:00 AM	1	1	2	1	5	0	0	0	0	0	0	1	1	1	5	7
7:15 AM	1	0	1	0	2	0	0	0	0	0	2	0	0	0	3	3
7:30 AM	1	0	2	0	3	0	0	0	0	0	0	0	0	3	3	
7:45 AM	2	2	1	0	5	0	0	0	0	0	1	0	0	4	5	
8:00 AM	1	0	2	1	4	0	0	0	0	0	2	0	2	1	5	
8:15 AM	2	0	1	0	3	0	0	0	0	0	0	2	0	5	7	
8:30 AM	1	0	1	0	2	0	0	0	0	0	2	4	2	2	10	
8:45 AM	2	2	1	0	5	0	0	0	0	0	1	1	1	5	8	
Count Total	11	5	11	2	29	0	0	0	0	0	8	8	6	26	48	
Peak Hour	6	2	5	1	14	0	0	0	0	0	5	7	5	13	30	

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Southgate Avenue				Southgate Avenue				St. Francis Boulevard				St. Francis Boulevard				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	1	0	0	0	1	0	1	1	0	0	0	1	0	5	0
7:15 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2	0
7:30 AM	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	3	0
7:45 AM	0	0	1	1	0	0	1	1	0	1	0	0	0	0	0	0	5	15
8:00 AM	0	0	0	1	0	0	0	0	0	2	0	0	0	1	0	0	4	14
8:15 AM	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	3	15
8:30 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2	14
8:45 AM	0	0	1	1	0	0	1	1	0	1	0	0	0	0	0	0	5	14
Count Total	0	0	2	9	0	0	2	3	0	10	1	0	0	1	1	0	29	0
Peak Hour	0	0	1	5	0	0	1	1	0	5	0	0	0	1	0	0	14	0
Two-Hour Count Summaries - Bikes																		
Interval Start	Southgate Avenue			Southgate Avenue			St. Francis Boulevard			St. Francis Boulevard			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	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	0
7:30 AM	0	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	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Note: U-Turn volumes for bikes are included in Left-Turn, if any.</i>																		

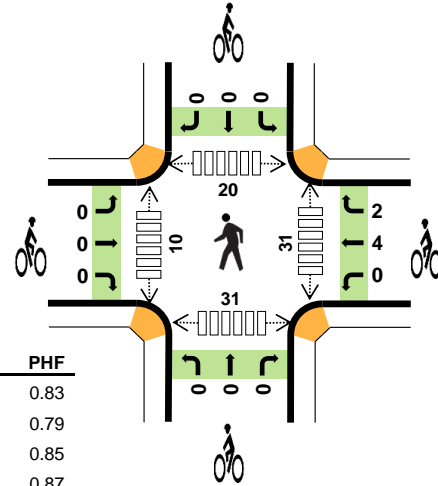
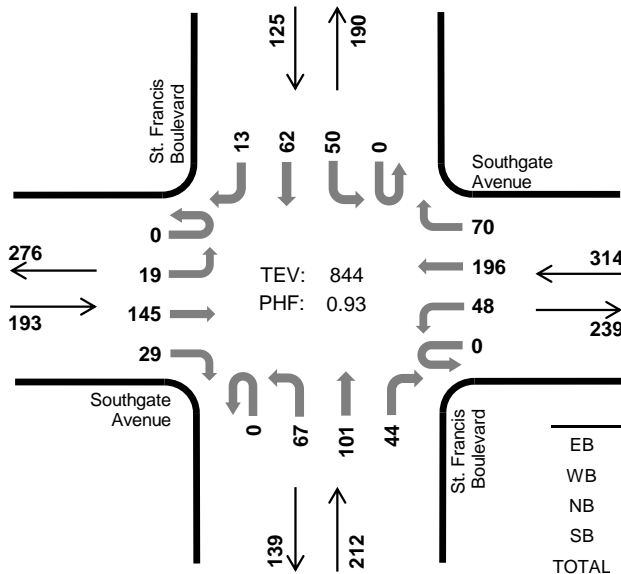
St. Francis Boulevard Southgate Avenue



Date: 02-23-2021

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	3.1%	0.83
WB	0.6%	0.79
NB	3.8%	0.85
SB	1.6%	0.87
TOTAL	2.1%	0.93

Two-Hour Count Summaries

Interval Start	Southgate Avenue Eastbound				Southgate Avenue Westbound				St. Francis Boulevard Northbound				St. Francis Boulevard Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	3	40	9	0	9	33	17	0	19	28	12	0	13	12	0	195	0	
4:15 PM	0	2	37	3	0	7	40	20	0	14	35	14	0	19	9	3	203	0	
4:30 PM	0	3	28	8	0	9	42	25	0	17	24	8	0	10	13	0	187	0	
4:45 PM	0	6	30	6	0	8	46	17	0	17	21	10	0	9	17	2	189	774	
5:00 PM	0	4	43	11	0	10	44	17	0	17	31	14	0	15	18	3	227	806	
5:15 PM	0	5	27	8	0	18	59	23	0	16	22	7	0	14	13	5	217	820	
5:30 PM	0	4	45	4	0	12	47	13	0	17	27	13	0	12	14	3	211	844	
5:45 PM	0	1	36	5	0	6	37	16	0	8	18	15	0	15	18	1	176	831	
Count Total	0	28	286	54	0	79	348	148	0	125	206	93	0	107	114	17	1,605	0	
Peak Hour	All	0	19	145	29	0	48	196	70	0	67	101	44	0	50	62	13	844	0
	HV	0	1	0	5	0	0	1	1	0	7	1	0	0	2	0	0	18	0
	HV%	-	5%	0%	17%	-	0%	1%	1%	-	10%	1%	0%	-	4%	0%	0%	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	3	1	2	0	6	0	0	0	0	0	5	2	3	2	12
4:15 PM	1	0	3	1	5	1	0	0	0	1	4	1	6	6	17
4:30 PM	2	1	1	0	4	0	0	0	0	0	1	1	2	5	9
4:45 PM	2	1	1	0	4	0	1	0	0	1	8	2	3	7	20
5:00 PM	1	0	3	1	5	0	4	0	0	4	8	2	5	4	19
5:15 PM	2	0	2	0	4	0	0	0	0	0	3	4	3	10	20
5:30 PM	1	1	2	1	5	0	1	0	0	1	12	2	9	10	33
5:45 PM	2	0	1	0	3	0	0	0	0	0	1	3	3	5	12
Count Total	14	4	15	3	36	1	6	0	0	7	42	17	34	49	142
Peak Hour	6	2	8	2	18	0	6	0	0	6	31	10	20	31	92

Two-Hour Count Summaries - Heavy Vehicles																			
Interval Start	Southgate Avenue				Southgate Avenue				St. Francis Boulevard				St. Francis Boulevard				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	0	1	2	0	0	0	1	0	2	0	0	0	0	0	0	0	6	0
4:15 PM	0	0	0	1	0	0	0	0	0	2	1	0	0	0	1	0	0	5	0
4:30 PM	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	0	4	0
4:45 PM	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	4	19
5:00 PM	0	0	0	1	0	0	0	0	0	2	1	0	0	0	1	0	0	5	18
5:15 PM	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	4	17
5:30 PM	0	0	0	1	0	0	1	0	0	2	0	0	0	0	1	0	0	5	18
5:45 PM	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	3	17
Count Total	0	1	1	12	0	0	2	2	0	13	2	0	0	0	3	0	0	36	0
Peak Hour	0	1	0	5	0	0	1	1	0	7	1	0	0	0	2	0	0	18	0
Two-Hour Count Summaries - Bikes																			
Interval Start	Southgate Avenue			Southgate Avenue			St. Francis Boulevard			St. Francis Boulevard			15-min Total	Rolling One Hour					
	Eastbound			Westbound			Northbound			Southbound									
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT							
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	2
5:00 PM	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	6
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Count Total	0	1	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	7	0
Peak Hour	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	6	0
<i>Note: U-Turn volumes for bikes are included in Left-Turn, if any.</i>																			

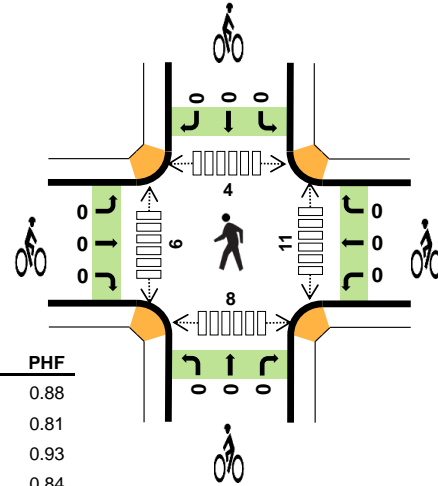
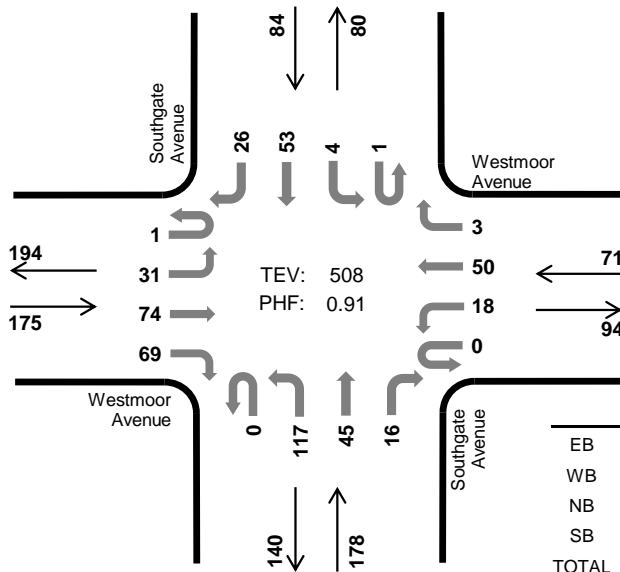
Southgate Avenue Westmoor Avenue



Date: 02-23-2021

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	1.7%	0.88
WB	2.8%	0.81
NB	4.5%	0.93
SB	9.5%	0.84
TOTAL	4.1%	0.91

Two-Hour Count Summaries

Interval Start	Westmoor Avenue				Westmoor Avenue				Southgate Avenue				Southgate Avenue				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	4	14	10	0	1	13	1	0	26	9	3	0	1	4	7	93	0	
7:15 AM	1	2	10	12	0	4	8	0	0	18	6	6	0	1	8	7	83	0	
7:30 AM	0	5	14	17	0	3	8	0	0	18	5	3	0	0	6	5	84	0	
7:45 AM	0	4	15	10	0	3	12	0	0	23	12	2	0	0	10	16	107	367	
8:00 AM	1	5	18	15	0	3	12	1	0	31	9	8	0	1	13	4	121	395	
8:15 AM	0	8	22	17	0	6	6	1	0	29	10	1	0	2	16	7	125	437	
8:30 AM	0	12	18	20	0	3	17	0	0	31	11	3	1	0	15	8	139	492	
8:45 AM	0	6	16	17	0	6	15	1	0	26	15	4	0	1	9	7	123	508	
Count Total	2	46	127	118	0	29	91	4	0	202	77	30	1	6	81	61	875	0	
Peak Hour	All	1	31	74	69	0	18	50	3	0	117	45	16	1	4	53	26	508	0
	HV	0	1	1	1	0	0	2	0	0	2	6	0	1	0	7	0	21	0
	HV%	0%	3%	1%	1%	-	0%	4%	0%	-	2%	13%	0%	100%	0%	13%	0%	4%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	2	2	1	5	0	0	0	0	0	0	0	1	1	2
7:15 AM	1	0	2	1	4	0	1	0	0	1	0	1	0	1	2
7:30 AM	1	0	1	1	3	0	0	0	0	0	1	2	2	0	5
7:45 AM	1	0	2	2	5	0	0	0	0	0	1	1	0	2	4
8:00 AM	0	1	2	2	5	0	0	0	0	0	2	1	1	3	7
8:15 AM	2	1	3	2	8	0	0	0	0	0	2	4	2	2	10
8:30 AM	1	0	1	3	5	0	0	0	0	0	3	1	1	1	6
8:45 AM	0	0	2	1	3	0	0	0	0	0	4	0	0	2	6
Count Total	6	4	15	13	38	0	1	0	0	1	13	10	7	12	42
Peak Hour	3	2	8	8	21	0	0	0	0	0	11	6	4	8	29

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Westmoor Avenue				Westmoor Avenue				Southgate Avenue				Southgate Avenue				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	1	1	0	0	0	2	0	0	0	1	0	5	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	1	1	0	0	1	0	4	0
7:30 AM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	3	0
7:45 AM	0	0	0	1	0	0	0	0	0	0	2	0	0	0	2	0	5	17
8:00 AM	0	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	5	17
8:15 AM	0	1	0	1	0	0	1	0	0	1	2	0	0	0	2	0	8	21
8:30 AM	0	0	1	0	0	0	0	0	0	0	1	0	1	0	2	0	5	23
8:45 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	3	21
Count Total	0	1	3	2	0	1	3	0	0	2	12	1	1	0	12	0	38	0
Peak Hour	0	1	1	1	0	0	2	0	0	2	6	0	1	0	7	0	21	0
Two-Hour Count Summaries - Bikes																		
Interval Start	Westmoor Avenue			Westmoor Avenue			Southgate Avenue			Southgate Avenue			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	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	1
8:00 AM	0	0	0	0	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	0
8:30 AM	0	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	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Note: U-Turn volumes for bikes are included in Left-Turn, if any.</i>																		

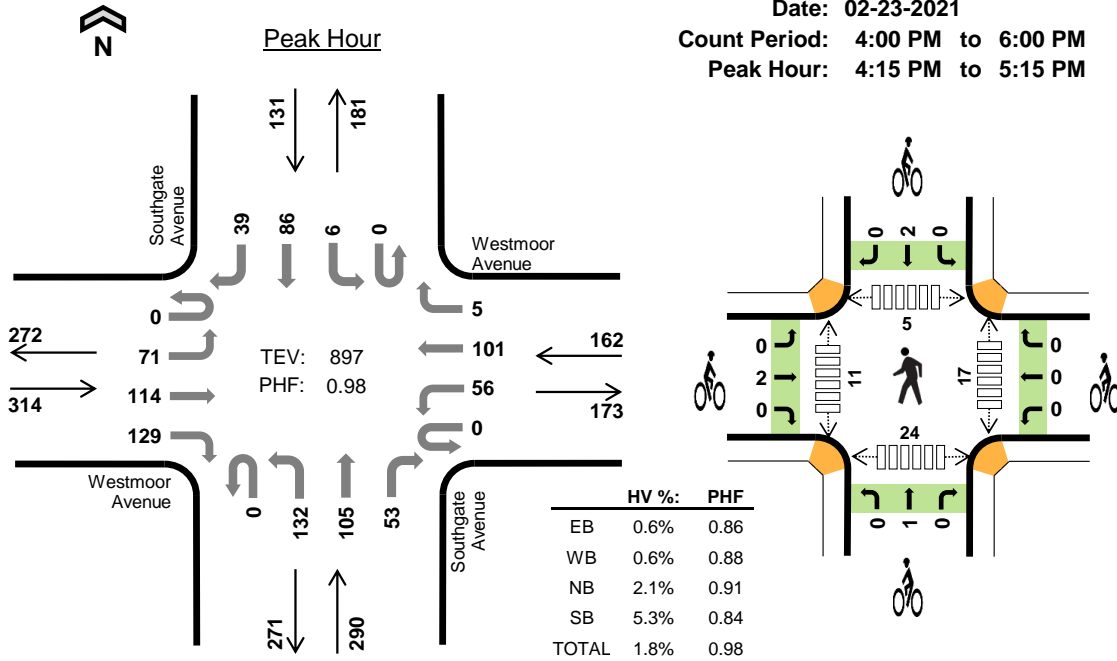
Southgate Avenue Westmoor Avenue



Date: 02-23-2021

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 4:15 PM to 5:15 PM



Two-Hour Count Summaries

Interval Start	Westmoor Avenue				Westmoor Avenue				Southgate Avenue				Southgate Avenue				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	17	32	39	0	21	17	0	0	34	24	14	0	1	20	7	226	0	
4:15 PM	0	12	26	31	0	21	23	2	0	33	29	18	0	1	21	12	229	0	
4:30 PM	0	23	28	26	0	12	28	1	0	41	19	13	0	1	21	7	220	0	
4:45 PM	0	11	27	39	0	10	22	2	0	31	25	12	0	2	22	15	218	893	
5:00 PM	0	25	33	33	0	13	28	0	0	27	32	10	0	2	22	5	230	897	
5:15 PM	0	11	29	36	0	15	15	0	0	56	17	6	0	0	19	6	210	878	
5:30 PM	0	22	27	48	0	15	17	3	0	30	26	11	0	2	17	10	228	886	
5:45 PM	0	28	24	33	0	12	19	0	0	31	25	14	0	1	29	5	221	889	
Count Total	0	149	226	285	0	119	169	8	0	283	197	98	0	10	171	67	1,782	0	
Peak Hour	All	0	71	114	129	0	56	101	5	0	132	105	53	0	6	86	39	897	0
	HV	0	1	0	1	0	0	0	1	0	0	6	0	0	1	6	0	16	0
	HV%	-	1%	0%	1%	-	0%	0%	20%	-	0%	6%	0%	-	17%	7%	0%	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	2	1	3	3	0	0	1	4	4	3	0	5	12
4:15 PM	0	1	1	2	4	0	0	1	2	3	2	4	0	3	9
4:30 PM	1	0	2	2	5	0	0	0	0	0	8	3	2	4	17
4:45 PM	0	0	1	2	3	0	0	0	0	0	2	3	2	8	15
5:00 PM	1	0	2	1	4	2	0	0	0	2	5	1	1	9	16
5:15 PM	0	0	2	2	4	0	1	0	0	1	2	3	3	2	10
5:30 PM	0	0	1	1	2	0	0	1	0	1	2	8	3	7	20
5:45 PM	0	1	3	2	6	0	0	0	0	0	4	4	1	7	16
Count Total	2	2	14	13	31	5	1	2	3	11	29	29	12	45	115
Peak Hour	2	1	6	7	16	2	0	1	2	5	17	11	5	24	57

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Westmoor Avenue				Westmoor Avenue				Southgate Avenue				Southgate Avenue				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	4	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	2	0	0	1	1	0	5	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	15
5:00 PM	0	0	0	1	0	0	0	0	0	0	2	0	0	0	1	0	4	16
5:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	4	16
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	13
5:45 PM	0	0	0	0	0	0	1	0	0	0	3	0	0	0	2	0	6	16
Count Total	0	1	0	1	0	0	1	1	0	1	13	0	0	1	12	0	31	0
Peak Hour	0	1	0	1	0	0	0	1	0	0	6	0	0	1	6	0	16	0
Two-Hour Count Summaries - Bikes																		
Interval Start	Westmoor Avenue			Westmoor Avenue			Southgate Avenue			Southgate Avenue			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	1	4	0		
4:15 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	2	0	3	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
5:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	3	
5:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	4	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Count Total	0	2	3	0	1	0	0	2	0	0	2	0	0	2	1	11	0	
Peak Hour	0	2	0	0	0	0	0	1	0	0	2	0	0	2	0	5	0	
<i>Note: U-Turn volumes for bikes are included in Left-Turn, if any.</i>																		

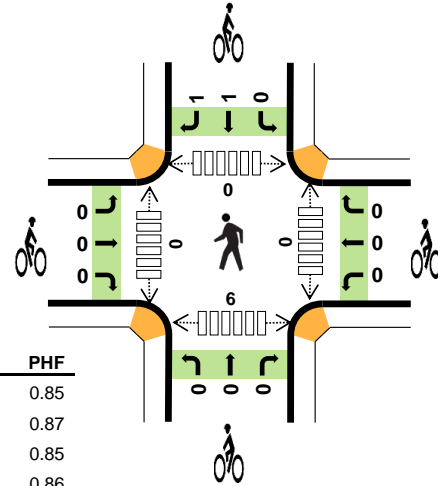
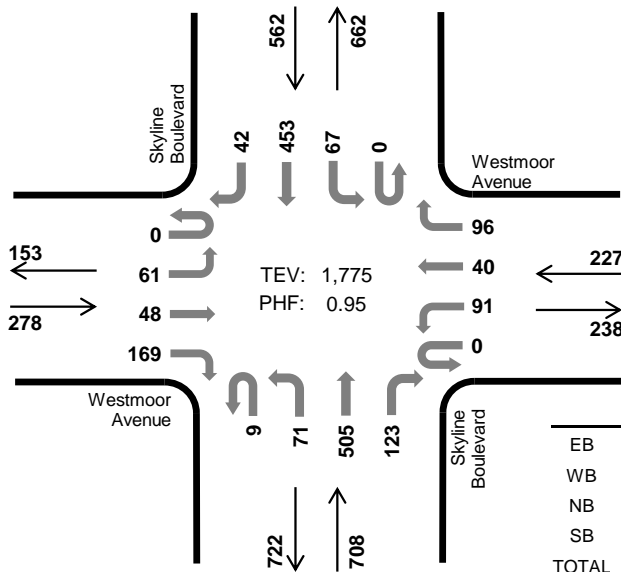
Skyline Boulevard Westmoor Avenue



Date: 02-23-2021

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	0.4%	0.85
WB	1.8%	0.87
NB	1.4%	0.85
SB	1.1%	0.86
TOTAL	1.2%	0.95

Two-Hour Count Summaries

Interval Start	Westmoor Avenue				Westmoor Avenue				Skyline Boulevard				Skyline Boulevard				15-min Total	Rolling One Hour	
	Eastbound		Westbound		Northbound		Southbound		UT		LT		TH						
7:00 AM	0	16	14	54	0	14	13	20	0	16	90	13	1	6	61	5	323	0	
7:15 AM	0	13	10	41	0	22	10	17	0	10	114	13	0	11	62	7	330	0	
7:30 AM	0	14	16	40	0	9	6	21	2	14	126	19	0	6	93	15	381	0	
7:45 AM	0	24	8	43	0	25	7	24	3	18	156	29	0	8	95	10	450	1,484	
8:00 AM	0	15	9	42	0	17	10	25	1	12	116	29	0	10	118	9	413	1,574	
8:15 AM	0	21	12	49	0	18	8	21	1	21	124	31	0	20	136	7	469	1,713	
8:30 AM	0	14	12	45	0	33	9	23	3	12	119	31	0	17	100	11	429	1,761	
8:45 AM	0	11	15	33	0	23	13	27	4	26	146	32	0	20	99	15	464	1,775	
Count Total	0	128	96	347	0	161	76	178	14	129	991	197	1	98	764	79	3,259	0	
Peak Hour	All	0	61	48	169	0	91	40	96	9	71	505	123	0	67	453	42	1,775	0
	HV	0	0	1	0	0	1	2	1	0	0	6	4	0	0	6	0	21	0
	HV%	-	0%	2%	0%	-	1%	5%	1%	0%	0%	1%	3%	-	0%	1%	0%	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	2	0	1	3	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	1	2	1	1	0	0	2	0	0	1	0	1
7:30 AM	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0
7:45 AM	0	0	5	1	6	0	0	0	0	0	0	0	0	2	2
8:00 AM	0	0	1	2	3	0	0	0	0	0	0	0	0	2	2
8:15 AM	1	3	4	3	11	0	0	0	1	1	0	0	0	1	1
8:30 AM	0	0	2	0	2	0	0	0	1	1	0	0	0	1	1
8:45 AM	0	1	3	1	5	0	0	0	0	0	0	0	0	2	2
Count Total	1	6	17	9	33	1	1	0	3	5	0	0	1	8	9
Peak Hour	1	4	10	6	21	0	0	0	2	2	0	0	0	6	6

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Westmoor Avenue				Westmoor Avenue				Skyline Boulevard				Skyline Boulevard				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	3	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	3	2	0	0	1	0	6	12
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	12
8:15 AM	0	0	1	0	0	1	1	1	0	0	3	1	0	0	3	0	11	21
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	22
8:45 AM	0	0	0	0	0	0	1	0	0	0	2	1	0	0	1	0	5	21
Count Total	0	0	1	0	0	2	3	1	0	0	9	8	0	0	9	0	33	0
Peak Hour	0	0	1	0	0	1	2	1	0	0	6	4	0	0	6	0	21	0
Two-Hour Count Summaries - Bikes																		
Interval Start	Westmoor Avenue			Westmoor Avenue			Skyline Boulevard			Skyline Boulevard			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Count Total	1	0	0	0	0	1	0	0	0	0	0	0	0	2	1	5	0	
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	
<i>Note: U-Turn volumes for bikes are included in Left-Turn, if any.</i>																		

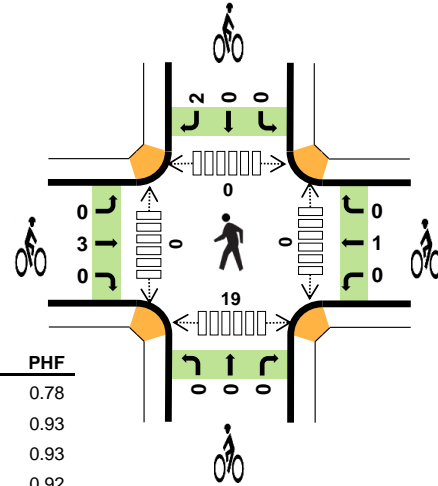
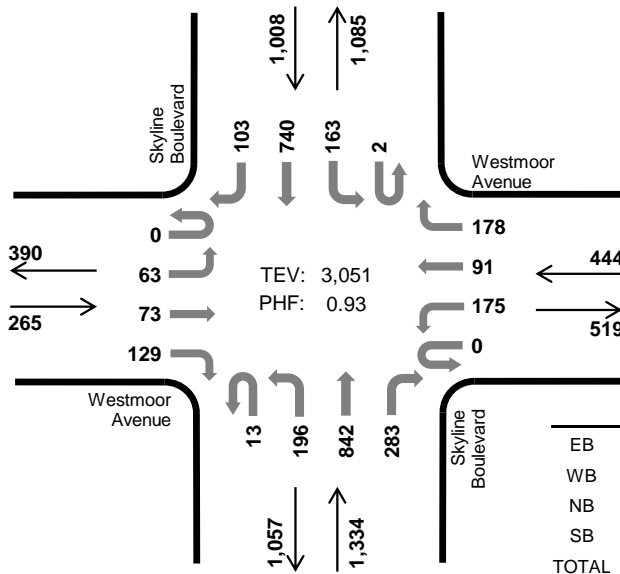
Skyline Boulevard Westmoor Avenue



Date: 02-23-2021

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	0.8%	0.78
WB	0.2%	0.93
NB	0.0%	0.93
SB	0.2%	0.92
TOTAL	0.2%	0.93

Two-Hour Count Summaries

Interval Start	Westmoor Avenue				Westmoor Avenue				Skyline Boulevard				Skyline Boulevard				15-min Total	Rolling One Hour	
	Eastbound		Westbound		Northbound		Southbound		UT		LT		TH		RT				
4:00 PM	0	17	15	29	0	37	26	34	1	39	206	64	0	27	189	12	696	0	
4:15 PM	0	13	20	33	0	46	25	36	2	43	170	75	1	27	185	29	705	0	
4:30 PM	0	15	18	31	0	50	22	44	3	43	210	74	1	38	174	23	746	0	
4:45 PM	0	9	15	38	0	35	25	42	6	48	193	59	0	45	165	30	710	2,857	
5:00 PM	0	16	14	24	0	47	20	39	1	43	216	79	0	36	208	29	772	2,933	
5:15 PM	0	23	26	36	0	43	24	53	3	62	223	71	1	44	193	21	823	3,051	
5:30 PM	0	17	17	28	0	36	20	34	1	39	176	75	0	36	163	27	669	2,974	
5:45 PM	0	14	16	34	0	25	25	34	4	67	195	77	1	32	162	25	711	2,975	
Count Total	0	124	141	253	0	319	187	316	21	384	1,589	574	4	285	1,439	196	5,832	0	
Peak Hour	All	0	63	73	129	0	175	91	178	13	196	842	283	2	163	740	103	3,051	0
	HV	0	0	2	0	0	0	0	1	0	0	0	0	0	0	2	0	5	0
	HV%	-	0%	3%	0%	-	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	2	2	0	1	0	0	1	0	0	0	11	11
4:15 PM	0	0	0	0	0	0	0	1	1	2	0	0	0	7	7
4:30 PM	1	0	0	1	2	0	0	0	0	0	0	0	0	2	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7
5:00 PM	1	0	0	1	2	2	0	0	1	3	0	0	0	3	3
5:15 PM	0	1	0	0	1	1	1	0	1	3	0	0	0	7	7
5:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	7	7
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9
Count Total	2	1	0	4	7	4	2	1	3	10	0	0	0	53	53
Peak Hour	2	1	0	2	5	3	1	0	2	6	0	0	0	19	19

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Westmoor Avenue				Westmoor Avenue				Skyline Boulevard				Skyline Boulevard				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	5
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	0	2	0	0	0	0	1	0	0	0	0	0	0	4	0	7	0
Peak Hour	0	0	2	0	0	0	0	1	0	0	0	0	0	0	2	0	5	0
Two-Hour Count Summaries - Bikes																		
Interval Start	Westmoor Avenue			Westmoor Avenue			Skyline Boulevard			Skyline Boulevard			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
5:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	1	3	0	5	
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	1	3	0	6	
5:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	7	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
Count Total	1	3	0	0	2	0	0	0	1	0	0	0	1	2	10	0	0	
Peak Hour	0	3	0	0	1	0	0	0	0	0	0	0	0	2	6	0	0	
<i>Note: U-Turn volumes for bikes are included in Left-Turn, if any.</i>																		

Appendix B

Volume Summary

Intersection Number: **1**
 Synchro/Traffic Node Number: 1
 Intersection Name: Sullivan Ave and Eastmoor Ave
 Peak Hour: AM
 Count Date: 02/13/20
 Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	228	572	0	55	206	186	213	120	7	94	446	104	2231
Proposed Project Trips	71	0	0	0	48	0	0	0	0	4	5	0	128
Existing + Project Conditions	299	572	0	55	254	186	213	120	7	98	451	104	2359 0
Cumulative No Project Conditions	232	620	0	55	252	232	234	123	8	111	473	99	2439
Cumulative + Project Conditions	303	620	0	55	300	232	234	123	8	115	478	99	2567 0

Intersection Number: **2**
 Synchro/Traffic Node Number: 2
 Intersection Name: St. Francis Blvd and Eastmoor Ave
 Peak Hour: AM
 Count Date: 02/13/20
 Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	0	0	0	0	297	101	88	0	91	34	441	0	1052
Proposed Project Trips	0	0	0	0	0	119	9	0	0	0	0	0	128
Existing + Project Conditions	0	0	0	0	297	220	97	0	91	34	441	0	1180 0
Cumulative No Project Conditions	0	0	0	0	300	121	78	0	93	41	468	0	1101
Cumulative + Project Conditions	0	0	0	0	300	240	87	0	93	41	468	0	1229 0

Intersection Number: **3**
 Synchro/Traffic Node Number: 3
 Intersection Name: Edgemont Dr and Westmoor Ave
 Peak Hour: AM
 Count Date: 02/23/21
 Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	0	0	0	0	183	80	52	0	12	17	188	0	532
Proposed Project Trips	0	0	0	0	0	0	0	0	5	103	0	0	108
Existing + Project Conditions	0	0	0	0	183	80	52	0	17	120	188	0	640 0
Cumulative No Project Conditions	0	0	0	0	195	80	52	0	12	17	200	0	556
Cumulative + Project Conditions	0	0	0	0	195	80	52	0	17	120	200	0	664 0

Intersection Number: **4**
 Synchro/Traffic Node Number: 4
 Intersection Name: St. Francis Blvd and Mariposa Ave
 Peak Hour: AM
 Count Date: 02/23/21
 Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	66	66	0	0	0	0	0	193	30	9	0	142	506
Proposed Project Trips	119	0	0	0	0	0	0	0	102	1	0	9	231
Existing + Project Conditions	185	66	0	0	0	0	0	193	132	10	0	151	737 0
Cumulative No Project Conditions	65	66	0	0	0	0	0	200	30	16	0	155	532
Cumulative + Project Conditions	184	66	0	0	0	0	0	200	132	17	0	164	763 0

Intersection Number: **5**
 Synchro/Traffic Node Number: 5
 Intersection Name: St. Francis Blvd and Southgate Ave
 Peak Hour: AM
 Count Date: 02/23/21
 Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	3	151	69	63	153	75	121	169	51	54	302	21	1232
Proposed Project Trips	0	0	1	31	0	0	0	72	16	0	0	0	120
Existing + Project Conditions	3	151	70	94	153	75	121	241	67	54	302	21	1352 0
Cumulative No Project Conditions	3	150	79	64	153	73	114	173	86	55	317	20	1287
Cumulative + Project Conditions	3	150	80	95	153	73	114	245	102	55	317	20	1407 0

Intersection Number: **6**
 Synchro/Traffic Node Number: 10
 Intersection Name: Southgate Ave and Westmoor Ave
 Peak Hour: AM
 Count Date: 02/23/21
 Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	79	224	15	9	143	76	40	112	270	239	145	97	1449
Proposed Project Trips	0	0	15	0	5	0	0	0	0	0	88	0	108
Existing + Project Conditions	79	224	30	9	148	76	40	112	270	239	233	97	1557 0
Cumulative No Project Conditions	78	282	15	9	149	82	47	138	270	239	153	97	1559
Cumulative + Project Conditions	78	282	30	9	154	82	47	138	270	239	241	97	1667 0

Intersection Number: **7**
 Synchro/Traffic Node Number: 15
 Intersection Name: Skyline Blvd and Westmoor Ave
 Peak Hour: AM
 Count Date: 02/23/21

Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	104	1421	96	281	130	297	255	1429	198	419	100	151	4881
<i>Proposed Project Trips</i>	0	0	32	1	0	4	56	0	0	0	0	0	93
Existing + Project Conditions	104	1421	128	282	130	301	311	1429	198	419	100	151	4974 0
Cumulative No Project Conditions	103	1669	96	281	134	292	257	1579	194	409	113	147	5274
Cumulative + Project Conditions	103	1669	128	282	134	296	313	1579	194	409	113	147	5367 0

Intersection Number: **1**
 Synchro/Traffic Node Number: 1
 Intersection Name: Sullivan Ave and Eastmoor Ave
 Peak Hour: PM
 Count Date: 02/13/20
 Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	340	623	0	86	282	200	154	184	17	110	305	73	2374
Proposed Project Trips	47	0	0	0	34	0	0	0	0	12	17	1	111
Existing + Project Conditions	387	623	0	86	316	200	154	184	17	122	322	74	2485
Cumulative No Project Conditions	327	675	0	87	345	256	246	180	18	128	344	69	2675
Cumulative + Project Conditions	374	675	0	87	379	256	246	180	18	140	361	70	2786

Intersection Number: **2**
 Synchro/Traffic Node Number: 2
 Intersection Name: St. Francis Blvd and Eastmoor Ave
 Peak Hour: PM
 Count Date: 02/13/20
 Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	0	0	0	0	409	110	83	0	60	35	348	0	1045
Proposed Project Trips	0	0	0	0	0	81	30	0	0	0	0	0	111
Existing + Project Conditions	0	0	0	0	409	191	113	0	60	35	348	0	1156
Cumulative No Project Conditions	0	0	0	0	413	114	84	0	81	42	363	0	1097
Cumulative + Project Conditions	0	0	0	0	413	195	114	0	81	42	363	0	1208

Intersection Number: **3**
 Synchro/Traffic Node Number: 3
 Intersection Name: Edgemont Dr and Westmoor Ave
 Peak Hour: PM
 Count Date: 02/23/21
 Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	0	0	0	0	208	36	41	0	25	23	184	0	517
Proposed Project Trips	0	0	0	0	0	0	0	0	16	69	0	0	85
Existing + Project Conditions	0	0	0	0	208	36	41	0	41	92	184	0	602
Cumulative No Project Conditions	0	0	0	0	207	36	40	0	25	23	174	0	505
Cumulative + Project Conditions	0	0	0	0	207	36	40	0	41	92	174	0	590

Intersection Number: **4**
 Synchro/Traffic Node Number: 4
 Intersection Name: St. Francis Blvd and Mariposa Ave
 Peak Hour: PM
 Count Date: 02/23/21
 Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	64	104	0	0	0	0	0	155	31	25	0	35	414
Proposed Project Trips	81	0	0	0	0	0	0	0	69	3	0	30	183
Existing + Project Conditions	145	104	0	0	0	0	0	155	100	28	0	65	597 0
Cumulative No Project Conditions	82	109	0	0	0	0	0	171	30	26	0	37	455
Cumulative + Project Conditions	163	109	0	0	0	0	0	171	99	29	0	67	638 0

Intersection Number: **5**
 Synchro/Traffic Node Number: 5
 Intersection Name: St. Francis Blvd and Southgate Ave
 Peak Hour: PM
 Count Date: 02/23/21
 Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	5	91	73	102	287	70	64	148	98	42	212	28	1220
Proposed Project Trips	0	1	2	22	0	0	0	47	11	1	0	0	84
Existing + Project Conditions	5	92	75	124	287	70	64	195	109	43	212	28	1304 0
Cumulative No Project Conditions	5	108	75	113	310	71	62	157	130	46	230	25	1332
Cumulative + Project Conditions	5	109	77	135	310	71	62	204	141	47	230	25	1416 0

Intersection Number: **6**
 Synchro/Traffic Node Number: 10
 Intersection Name: Southgate Ave and Westmoor Ave
 Peak Hour: PM
 Count Date: 02/23/21
 Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	57	125	9	7	152	81	78	155	195	161	128	104	1252
Proposed Project Trips	0	0	11	1	15	0	0	0	0	0	58	0	85
Existing + Project Conditions	57	125	20	8	167	81	78	155	195	161	186	104	1337 0
Cumulative No Project Conditions	66	140	9	7	156	91	69	162	199	161	132	107	1299
Cumulative + Project Conditions	66	140	20	8	171	91	69	162	199	161	190	107	1384 0

Intersection Number: **7**
 Synchro/Traffic Node Number: 15
 Intersection Name: Skyline Blvd and Westmoor Ave
 Peak Hour: PM
 Count Date: 02/23/21
 Date of Analysis: 04/23/21

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	138	1350	176	277	142	273	324	1363	267	173	83	66	4632
Proposed Project Trips	0	0	22	3	0	12	36	0	0	0	0	0	73
Existing + Project Conditions	138	1350	198	280	142	285	360	1363	267	173	83	66	4705
Cumulative No Project Conditions	137	1460	176	287	153	277	317	1555	267	178	86	66	4959
Cumulative + Project Conditions	137	1460	198	290	153	289	353	1555	267	178	86	66	5032

Adjustment Factors applied to New Counts

Volume Adjustment by % based on comparison of volumes at St. Francis Blvd/Eastmoor Ave and Skyline Blvd/John Daly Blvd

AM Peak Hour

Node #	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
1	1	1	1	1	1	1	1	1	1	1	1	1	No adjustment. Use 2020 Feb counts
2	1	1	1	1	1	1	1	1	1	1	1	1	No adjustment. Use 2020 Feb counts
3	249%		249%					196%	422%	422%	286%		Adjusted based on percent changes at St. Francis Blvd/Eastmoor Ave for EBT, WBT, SB departure, and NB approach
4	302%	302%	302%	302%	302%	302%	302%	302%	302%	302%	302%	302%	Adjusted based on percent changes at St. Francis Blvd/Eastmoor Ave for the south leg
5	302%	302%	302%	302%	302%	302%	302%	302%	302%	302%	302%	302%	Adjusted based on percent changes at St. Francis Blvd/Eastmoor Ave for the south leg
10	249%	249%	249%	302%	422%	302%	302%	196%	422%	422%	286%	302%	Adjusted based on percent changes at St. Francis Blvd/Eastmoor Ave for EBT, WBT, SB departure, NB approach, west leg, and south leg
15	248%	283%	207%	207%	314%	248%	248%	207%	248%	326%	326%	326%	Adjusted based on percent changes at Skyline Blvd/John Daly Blvd for NBT and SBT and at St. Francis Blvd/Eastmoor Ave for WB departure, EB approach, and west leg

PM Peak Hour





















Node #	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
1	1	1	1	1	1	1	1	1	1	1	1	1	No adjustment. Use 2020 Feb counts
2	1	1	1	1	1	1	1	1	1	1	1	1	No adjustment. Use 2020 Feb counts
3	147%		147%					113%	145%	145%	150%		Adjusted based on percent changes at St. Francis Blvd/Eastmoor Ave for EBT, WBT, SB departure, and NB approach
4	146%	146%	146%	146%	146%	146%	146%	146%	146%	146%	146%	146%	Adjusted based on percent changes at St. Francis Blvd/Eastmoor Ave for the south leg
5	146%	146%	146%	146%	146%	146%	146%	146%	146%	146%	146%	146%	Adjusted based on percent changes at St. Francis Blvd/Eastmoor Ave for the south leg
10	147%	147%	147%	146%	145%	146%	146%	113%	145%	145%	150%	146%	Adjusted based on percent changes at St. Francis Blvd/Eastmoor Ave for EBT, WBT, SB departure, NB approach, west leg, and south leg
15	134%	162%	114%	114%	182%	134%	134%	114%	134%	156%	156%	156%	Adjusted based on percent changes at Skyline Blvd/John Daly Blvd for NBT and SBT and at St. Francis Blvd/Eastmoor Ave for WB departure, EB approach, and west leg

Appendix C

Level of Service Calculations

HCM 2010 Signalized Intersection Summary
 1: Sullivan Ave & Eastmoor Ave/San Pedro Road

Existing AM
 04/28/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	446	94	186	206	55	7	120	213	0	572	228
Future Volume (veh/h)	104	446	94	186	206	55	7	120	213	0	572	228
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	0	1863	1863
Adj Flow Rate, veh/h	113	485	102	202	224	0	8	130	232	0	622	0
Adj No. of Lanes	1	2	0	2	1	0	1	2	0	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	0	2	2
Cap, veh/h	141	629	131	270	404	0	17	1041	931	0	1902	851
Arrive On Green	0.08	0.22	0.22	0.08	0.22	0.00	0.01	0.59	0.59	0.00	0.54	0.00
Sat Flow, veh/h	1774	2889	603	3442	1863	0	1774	1770	1583	0	3632	1583
Grp Volume(v), veh/h	113	296	291	202	224	0	8	130	232	0	622	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1723	1721	1863	0	1774	1770	1583	0	1770	1583
Q Serve(g_s), s	6.9	17.3	17.5	6.3	11.8	0.0	0.5	3.6	7.8	0.0	10.8	0.0
Cycle Q Clear(g_c), s	6.9	17.3	17.5	6.3	11.8	0.0	0.5	3.6	7.8	0.0	10.8	0.0
Prop In Lane	1.00		0.35	1.00		0.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	141	385	375	270	404	0	17	1041	931	0	1902	851
V/C Ratio(X)	0.80	0.77	0.78	0.75	0.56	0.00	0.46	0.12	0.25	0.00	0.33	0.00
Avail Cap(c_a), veh/h	282	563	548	454	542	0	89	1041	931	0	1902	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	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	49.8	40.4	40.5	49.6	38.4	0.0	54.2	10.1	10.9	0.0	14.3	0.0
Incr Delay (d2), s/veh	9.9	5.0	5.5	4.1	1.7	0.0	17.5	0.2	0.6	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	9.0	8.9	3.2	6.2	0.0	0.3	1.8	3.5	0.0	5.3	0.0
LnGrp Delay(d),s/veh	59.7	45.4	46.0	53.8	40.1	0.0	71.7	10.3	11.6	0.0	14.4	0.0
LnGrp LOS	E	D	D	D	D		E	B	B		B	
Approach Vol, veh/h		700			426			370			622	
Approach Delay, s/veh		48.0			46.6			12.4			14.4	
Approach LOS		D			D			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		68.9	13.1	28.0	5.6	63.3	13.3	27.8				
Change Period (Y+Rc), s		* 4.2	4.5	4.0	4.5	* 4.2	4.5	4.0				
Max Green Setting (Gmax), s		* 48	14.5	35.0	5.5	* 38	17.5	32.0				
Max Q Clear Time (g_c+I1), s		9.8	8.3	19.5	2.5	12.8	8.9	13.8				
Green Ext Time (p_c), s		3.6	0.3	4.4	0.0	6.2	0.2	1.6				
Intersection Summary												
HCM 2010 Ctrl Delay				31.6								
HCM 2010 LOS				C								
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	27
Intersection LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Traffic Vol, veh/h	441	34	101	297	91	88
Future Vol, veh/h	441	34	101	297	91	88
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	544	42	125	367	112	109
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	34.4	24.3	13.6
HCM LOS	D	C	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	51%	0%	25%
Vol Thru, %	0%	93%	75%
Vol Right, %	49%	7%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	179	475	398
LT Vol	91	0	101
Through Vol	0	441	297
RT Vol	88	34	0
Lane Flow Rate	221	586	491
Geometry Grp	1	1	1
Degree of Util (X)	0.393	0.875	0.761
Departure Headway (Hd)	6.402	5.37	5.576
Convergence, Y/N	Yes	Yes	Yes
Cap	559	674	644
Service Time	4.477	3.427	3.636
HCM Lane V/C Ratio	0.395	0.869	0.762
HCM Control Delay	13.6	34.4	24.3
HCM Lane LOS	B	D	C
HCM 95th-tile Q	1.9	10.5	7

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	188	17	80	183	12	52
Future Vol, veh/h	188	17	80	183	12	52
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	204	18	87	199	13	57
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	9	9.7	8.1
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	19%	0%	30%
Vol Thru, %	0%	92%	70%
Vol Right, %	81%	8%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	64	205	263
LT Vol	12	0	80
Through Vol	0	188	183
RT Vol	52	17	0
Lane Flow Rate	70	223	286
Geometry Grp	1	1	1
Degree of Util (X)	0.089	0.269	0.348
Departure Headway (Hd)	4.595	4.345	4.388
Convergence, Y/N	Yes	Yes	Yes
Cap	780	829	820
Service Time	2.621	2.363	2.405
HCM Lane V/C Ratio	0.09	0.269	0.349
HCM Control Delay	8.1	9	9.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	1.1	1.6

Intersection						
Int Delay, s/veh	4.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	142	9	30	193	66	66
Future Vol, veh/h	142	9	30	193	66	66
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	154	10	33	210	72	72





















Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	384	108	144	0	0
Stage 1	108	-	-	-	-
Stage 2	276	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	619	946	1438	-	-
Stage 1	916	-	-	-	-
Stage 2	771	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	603	946	1438	-	-
Mov Cap-2 Maneuver	603	-	-	-	-
Stage 1	892	-	-	-	-
Stage 2	771	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1438	-	616	-	-
HCM Lane V/C Ratio	0.023	-	0.266	-	-
HCM Control Delay (s)	7.6	0	13	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	1.1	-	-

HCM 2010 Signalized Intersection Summary
5: Southgate Ave & St. Francis Blvd

Existing AM
04/23/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	302	54	75	153	63	51	169	121	69	151	3
Future Volume (veh/h)	21	302	54	75	153	63	51	169	121	69	151	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	23	328	59	82	166	68	55	184	132	75	164	3
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	491	88	246	401	164	713	545	391	576	984	18
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.54	0.54	0.54	0.54	0.54	0.54
Sat Flow, veh/h	1142	1537	277	992	1257	515	1214	1010	725	1059	1824	33
Grp Volume(v), veh/h	23	0	387	82	0	234	55	0	316	75	0	167
Grp Sat Flow(s),veh/h/ln	1142	0	1814	992	0	1772	1214	0	1735	1059	0	1857
Q Serve(g_s), s	1.0	0.0	11.8	5.0	0.0	6.6	1.5	0.0	6.5	2.7	0.0	2.9
Cycle Q Clear(g_c), s	7.6	0.0	11.8	16.8	0.0	6.6	4.4	0.0	6.5	9.3	0.0	2.9
Prop In Lane	1.00		0.15	1.00		0.29	1.00		0.42	1.00		0.02
Lane Grp Cap(c), veh/h	359	0	579	246	0	566	713	0	937	576	0	1002
V/C Ratio(X)	0.06	0.00	0.67	0.33	0.00	0.41	0.08	0.00	0.34	0.13	0.00	0.17
Avail Cap(c_a), veh/h	646	0	1036	496	0	1012	713	0	937	576	0	1002
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	18.8	26.1	0.0	17.1	8.6	0.0	8.3	10.9	0.0	7.4
Incr Delay (d2), s/veh	0.1	0.0	1.3	0.8	0.0	0.5	0.2	0.0	1.0	0.5	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	6.1	1.4	0.0	3.3	0.5	0.0	3.3	0.9	0.0	1.6
LnGrp Delay(d),s/veh	20.1	0.0	20.2	26.9	0.0	17.5	8.8	0.0	9.2	11.4	0.0	7.8
LnGrp LOS	C		C	C		B	A		A	B		A
Approach Vol, veh/h		410			316			371			242	
Approach Delay, s/veh		20.2			20.0			9.2			8.9	
Approach LOS		C			B			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.0		24.9		39.0		24.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		34.5		36.5		34.5		36.5				
Max Q Clear Time (g_c+I1), s		8.5		13.8		11.3		18.8				
Green Ext Time (p_c), s		2.2		2.5		1.2		1.6				
Intersection Summary												
HCM 2010 Ctrl Delay			15.0									
HCM 2010 LOS			B									

Intersection	
Intersection Delay, s/veh	28.4
Intersection LOS	D

























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	97	145	239	76	143	9	270	112	40	15	224	79
Future Vol, veh/h	97	145	239	76	143	9	270	112	40	15	224	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	105	158	260	83	155	10	293	122	43	16	243	86
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	22.7	26.8	26.7	40.4
HCM LOS	C	D	D	E

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	40%	0%	33%	5%
Vol Thru, %	0%	74%	60%	0%	63%	70%
Vol Right, %	0%	26%	0%	100%	4%	25%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	270	152	242	239	228	318
LT Vol	270	0	97	0	76	15
Through Vol	0	112	145	0	143	224
RT Vol	0	40	0	239	9	79
Lane Flow Rate	293	165	263	260	248	346
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.731	0.379	0.634	0.559	0.632	0.819
Departure Headway (Hd)	8.971	8.262	8.682	7.749	9.176	8.535
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	402	435	416	465	394	425
Service Time	6.734	6.025	6.444	5.511	7.247	6.599
HCM Lane V/C Ratio	0.729	0.379	0.632	0.559	0.629	0.814
HCM Control Delay	32.7	16	25.4	20	26.8	40.4
HCM Lane LOS	D	C	D	C	D	E
HCM 95th-tile Q	5.7	1.7	4.2	3.4	4.2	7.6

HCM 2010 Signalized Intersection Summary
 15: Westmoor Ave & Skyline Blvd





















Existing AM
 05/07/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	100	419	297	130	281	198	1429	255	96	1421	104
Future Volume (veh/h)	151	100	419	297	130	281	198	1429	255	96	1421	104
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	164	109	455	323	141	0	215	1553	277	104	1545	0
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	335	470	302	455	490	207	1645	1005	116	1463	822
Arrive On Green	0.11	0.18	0.18	0.17	0.24	0.00	0.12	0.46	0.46	0.07	0.41	0.00
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	164	109	455	323	141	0	215	1553	277	104	1545	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	13.7	7.6	27.0	25.5	9.3	0.0	17.5	62.8	11.6	8.7	62.0	0.0
Cycle Q Clear(g_c), s	13.7	7.6	27.0	25.5	9.3	0.0	17.5	62.8	11.6	8.7	62.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	335	470	302	455	490	207	1645	1005	116	1463	822
V/C Ratio(X)	0.87	0.33	0.97	1.07	0.31	0.00	1.04	0.94	0.28	0.90	1.06	0.00
Avail Cap(c_a), veh/h	277	335	470	302	455	490	207	1645	1005	116	1463	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	66.1	53.6	52.1	62.3	46.4	0.0	66.3	38.3	12.1	69.6	44.0	0.0
Incr Delay (d2), s/veh	18.0	0.6	33.4	71.9	0.4	0.0	73.1	12.4	0.7	53.0	39.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	4.0	23.0	18.5	4.8	0.0	12.8	33.5	5.3	6.0	38.4	0.0
LnGrp Delay(d),s/veh	84.1	54.1	85.5	134.2	46.8	0.0	139.4	50.7	12.8	122.6	83.9	0.0
LnGrp LOS	F	D	F	F	D		F	D	B	F	F	
Approach Vol, veh/h		728			464			2045			1649	
Approach Delay, s/veh		80.5			107.6			54.9			86.4	
Approach LOS		F			F			D			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.3	74.2	30.0	31.5	22.0	66.5	20.4	41.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	9.8	69.7	25.5	27.0	17.5	62.0	23.4	29.1				
Max Q Clear Time (g_c+I1), s	10.7	64.8	27.5	29.0	19.5	64.0	15.7	11.3				
Green Ext Time (p_c), s	0.0	4.1	0.0	0.0	0.0	0.0	0.2	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			74.3									
HCM 2010 LOS			E									
Notes												

User approved changes to right turn type.

HCM 2010 Signalized Intersection Summary
 1: Sullivan Ave & Eastmoor Ave/San Pedro Road

Existing PM
 04/28/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	305	110	200	282	86	17	184	154	0	623	340
Future Volume (veh/h)	73	305	110	200	282	86	17	184	154	0	623	340
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	0	1863	1863
Adj Flow Rate, veh/h	75	314	113	206	291	0	18	190	159	0	642	0
Adj No. of Lanes	1	2	0	2	1	0	1	2	0	0	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	0	2	2
Cap, veh/h	97	519	183	289	435	0	36	1048	829	0	1704	762
Arrive On Green	0.05	0.20	0.20	0.08	0.23	0.00	0.02	0.56	0.56	0.00	0.48	0.00
Sat Flow, veh/h	1774	2542	894	3442	1863	0	1774	1881	1488	0	3632	1583
Grp Volume(v), veh/h	75	216	211	206	291	0	18	178	171	0	642	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1667	1721	1863	0	1774	1770	1600	0	1770	1583
Q Serve(g_s), s	3.4	9.1	9.4	4.8	11.6	0.0	0.8	4.1	4.3	0.0	9.4	0.0
Cycle Q Clear(g_c), s	3.4	9.1	9.4	4.8	11.6	0.0	0.8	4.1	4.3	0.0	9.4	0.0
Prop In Lane	1.00		0.54	1.00		0.00	1.00		0.93	0.00		1.00
Lane Grp Cap(c), veh/h	97	361	340	289	435	0	36	985	891	0	1704	762
V/C Ratio(X)	0.77	0.60	0.62	0.71	0.67	0.00	0.49	0.18	0.19	0.00	0.38	0.00
Avail Cap(c_a), veh/h	197	550	518	403	591	0	108	985	891	0	1704	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.3	29.6	29.7	36.6	28.5	0.0	39.7	9.0	9.0	0.0	13.5	0.0
Incr Delay (d2), s/veh	12.3	2.3	2.6	3.5	2.5	0.0	10.0	0.4	0.5	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	4.7	4.6	2.4	6.3	0.0	0.5	2.1	2.0	0.0	4.6	0.0
LnGrp Delay(d),s/veh	50.6	31.8	32.3	40.1	31.1	0.0	49.8	9.4	9.5	0.0	13.7	0.0
LnGrp LOS	D	C	C	D	C		D	A	A		B	
Approach Vol, veh/h		502			497			367			642	
Approach Delay, s/veh		34.8			34.8			11.4			13.7	
Approach LOS		C			C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		49.9	11.4	20.7	6.2	43.7	9.0	23.2				
Change Period (Y+Rc), s		* 4.2	4.5	4.0	4.5	* 4.2	4.5	4.0				
Max Green Setting (Gmax), s		* 34	9.6	25.5	5.0	* 25	9.1	26.0				
Max Q Clear Time (g_c+I1), s		6.3	6.8	11.4	2.8	11.4	5.4	13.6				
Green Ext Time (p_c), s		3.2	0.2	3.0	0.0	4.7	0.0	1.8				
Intersection Summary												
HCM 2010 Ctrl Delay			23.8									
HCM 2010 LOS			C									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	15.8
Intersection LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↘	
Traffic Vol, veh/h	348	35	110	409	60	83
Future Vol, veh/h	348	35	110	409	60	83
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	352	35	111	413	61	84
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	13.6	18.8	10.6
HCM LOS	B	C	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	42%	0%	21%
Vol Thru, %	0%	91%	79%
Vol Right, %	58%	9%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	143	383	519
LT Vol	60	0	110
Through Vol	0	348	409
RT Vol	83	35	0
Lane Flow Rate	144	387	524
Geometry Grp	1	1	1
Degree of Util (X)	0.233	0.537	0.704
Departure Headway (Hd)	5.814	4.994	4.937
Convergence, Y/N	Yes	Yes	Yes
Cap	620	727	739
Service Time	3.831	2.994	2.937
HCM Lane V/C Ratio	0.232	0.532	0.709
HCM Control Delay	10.6	13.6	18.8
HCM Lane LOS	B	B	C
HCM 95th-tile Q	0.9	3.2	5.9

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Traffic Vol, veh/h	184	23	36	208	25	41
Future Vol, veh/h	184	23	36	208	25	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	200	25	39	226	27	45
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.9	9.5	8.2
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	38%	0%	15%
Vol Thru, %	0%	89%	85%
Vol Right, %	62%	11%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	66	207	244
LT Vol	25	0	36
Through Vol	0	184	208
RT Vol	41	23	0
Lane Flow Rate	72	225	265
Geometry Grp	1	1	1
Degree of Util (X)	0.094	0.27	0.322
Departure Headway (Hd)	4.703	4.316	4.367
Convergence, Y/N	Yes	Yes	Yes
Cap	762	835	825
Service Time	2.731	2.333	2.385
HCM Lane V/C Ratio	0.094	0.269	0.321
HCM Control Delay	8.2	8.9	9.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	1.1	1.4

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	35	25	31	155	104	64
Future Vol, veh/h	35	25	31	155	104	64
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	27	34	168	113	70





















Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	384	148	183	0	-	0
Stage 1	148	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	619	899	1392	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	602	899	1392	-	-	-
Mov Cap-2 Maneuver	602	-	-	-	-	-
Stage 1	856	-	-	-	-	-
Stage 2	803	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.7	1.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1392	-	698	-	-
HCM Lane V/C Ratio	0.024	-	0.093	-	-
HCM Control Delay (s)	7.7	0	10.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

HCM 2010 Signalized Intersection Summary
5: Southgate Ave & St. Francis Blvd

Existing PM
04/23/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	212	42	70	287	102	98	148	64	73	91	5
Future Volume (veh/h)	28	212	42	70	287	102	98	148	64	73	91	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	30	230	46	76	312	111	107	161	70	79	99	5
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	471	94	336	410	146	770	650	282	651	927	47
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	960	1508	302	1099	1313	467	1285	1232	536	1145	1758	89
Grp Volume(v), veh/h	30	0	276	76	0	423	107	0	231	79	0	104
Grp Sat Flow(s),veh/h/ln	960	0	1810	1099	0	1780	1285	0	1768	1145	0	1847
Q Serve(g_s), s	1.6	0.0	6.9	3.4	0.0	12.0	2.5	0.0	4.0	2.3	0.0	1.6
Cycle Q Clear(g_c), s	13.6	0.0	6.9	10.3	0.0	12.0	4.1	0.0	4.0	6.2	0.0	1.6
Prop In Lane	1.00		0.17	1.00		0.26	1.00		0.30	1.00		0.05
Lane Grp Cap(c), veh/h	223	0	565	336	0	556	770	0	932	651	0	974
V/C Ratio(X)	0.13	0.00	0.49	0.23	0.00	0.76	0.14	0.00	0.25	0.12	0.00	0.11
Avail Cap(c_a), veh/h	635	0	1342	807	0	1320	770	0	932	651	0	974
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	15.6	19.8	0.0	17.4	7.7	0.0	7.2	8.9	0.0	6.6
Incr Delay (d2), s/veh	0.3	0.0	0.7	0.3	0.0	2.2	0.4	0.0	0.6	0.4	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	3.6	1.0	0.0	6.2	1.0	0.0	2.1	0.8	0.0	0.9
LnGrp Delay(d),s/veh	23.8	0.0	16.3	20.1	0.0	19.6	8.0	0.0	7.8	9.3	0.0	6.9
LnGrp LOS	C		B	C		B	A		A	A		A
Approach Vol, veh/h		306			499			338				183
Approach Delay, s/veh		17.0			19.6			7.9				7.9
Approach LOS		B			B			A				A
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.0		22.0		34.0		22.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		29.5		41.5		29.5		41.5				
Max Q Clear Time (g_c+I1), s		6.1		15.6		8.2		14.0				
Green Ext Time (p_c), s		1.7		1.8		0.8		3.2				
Intersection Summary												
HCM 2010 Ctrl Delay			14.4									
HCM 2010 LOS			B									

Intersection	
Intersection Delay, s/veh	17.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	104	128	161	81	152	7	195	155	78	9	125	57
Future Vol, veh/h	104	128	161	81	152	7	195	155	78	9	125	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	113	139	175	88	165	8	212	168	85	10	136	62
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	16.6	20.5	17.2	17.1
HCM LOS	C	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	45%	0%	34%	5%
Vol Thru, %	0%	67%	55%	0%	63%	65%
Vol Right, %	0%	33%	0%	100%	3%	30%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	195	233	232	161	240	191
LT Vol	195	0	104	0	81	9
Through Vol	0	155	128	0	152	125
RT Vol	0	78	0	161	7	57
Lane Flow Rate	212	253	252	175	261	208
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.466	0.504	0.539	0.328	0.564	0.449
Departure Headway (Hd)	7.915	7.162	7.694	6.745	7.784	7.79
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	454	501	467	532	462	461
Service Time	5.681	4.927	5.46	4.511	5.855	5.868
HCM Lane V/C Ratio	0.467	0.505	0.54	0.329	0.565	0.451
HCM Control Delay	17.5	17	19.2	12.8	20.5	17.1
HCM Lane LOS	C	C	C	B	C	C
HCM 95th-tile Q	2.4	2.8	3.1	1.4	3.4	2.3

HCM 2010 Signalized Intersection Summary
 15: Westmoor Ave & Skyline Blvd

Existing PM
 05/07/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	83	173	273	142	277	267	1363	324	176	1350	138
Future Volume (veh/h)	66	83	173	273	142	277	267	1363	324	176	1350	138
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	72	90	188	297	154	0	290	1482	352	191	1467	0
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	218	448	302	439	560	294	1649	1007	209	1479	743
Arrive On Green	0.05	0.12	0.12	0.17	0.24	0.00	0.17	0.47	0.47	0.12	0.42	0.00
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	72	90	188	297	154	0	290	1482	352	191	1467	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	5.6	6.2	13.5	23.2	9.6	0.0	22.7	53.6	14.5	14.8	57.4	0.0
Cycle Q Clear(g_c), s	5.6	6.2	13.5	23.2	9.6	0.0	22.7	53.6	14.5	14.8	57.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	91	218	448	302	439	560	294	1649	1007	209	1479	743
V/C Ratio(X)	0.79	0.41	0.42	0.98	0.35	0.00	0.99	0.90	0.35	0.91	0.99	0.00
Avail Cap(c_a), veh/h	160	361	569	302	510	620	294	1649	1007	209	1479	743
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	65.3	57.1	40.7	57.6	44.4	0.0	57.9	34.2	11.9	60.8	40.3	0.0
Incr Delay (d2), s/veh	13.9	1.3	0.6	47.2	0.5	0.0	48.4	8.2	1.0	39.4	21.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	3.3	6.0	15.3	5.0	0.0	15.1	28.0	6.6	9.6	32.3	0.0
LnGrp Delay(d),s/veh	79.2	58.3	41.3	104.9	44.8	0.0	106.3	42.4	12.8	100.2	61.9	0.0
LnGrp LOS	E	E	D	F	D		F	D	B	F	E	
Approach Vol, veh/h		350			451			2124			1658	
Approach Delay, s/veh		53.5			84.4			46.2			66.3	
Approach LOS		D			F			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.9	69.4	28.2	20.8	27.6	62.7	11.7	37.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	16.4	64.9	23.7	27.0	23.1	58.2	12.6	38.1				
Max Q Clear Time (g_c+I1), s	16.8	55.6	25.2	15.5	24.7	59.4	7.6	11.6				
Green Ext Time (p_c), s	0.0	7.1	0.0	0.8	0.0	0.0	0.1	0.8				
Intersection Summary												
HCM 2010 Ctrl Delay			57.8									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
 1: Sullivan Ave & Eastmoor Ave/San Pedro Road

Existing+Proj AM
 04/28/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	451	98	186	254	55	7	120	213	0	572	299
Future Volume (veh/h)	104	451	98	186	254	55	7	120	213	0	572	299
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	0	1863	1863
Adj Flow Rate, veh/h	113	490	107	202	276	0	8	130	232	0	622	0
Adj No. of Lanes	1	2	0	2	1	0	1	2	0	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	0	2	2
Cap, veh/h	141	633	137	270	409	0	17	1036	927	0	1892	846
Arrive On Green	0.08	0.22	0.22	0.08	0.22	0.00	0.01	0.59	0.59	0.00	0.53	0.00
Sat Flow, veh/h	1774	2867	622	3442	1863	0	1774	1770	1583	0	3632	1583
Grp Volume(v), veh/h	113	301	296	202	276	0	8	130	232	0	622	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1719	1721	1863	0	1774	1770	1583	0	1770	1583
Q Serve(g_s), s	6.9	17.6	17.8	6.3	14.9	0.0	0.5	3.6	7.8	0.0	10.9	0.0
Cycle Q Clear(g_c), s	6.9	17.6	17.8	6.3	14.9	0.0	0.5	3.6	7.8	0.0	10.9	0.0
Prop In Lane	1.00		0.36	1.00		0.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	141	391	379	270	409	0	17	1036	927	0	1892	846
V/C Ratio(X)	0.80	0.77	0.78	0.75	0.67	0.00	0.46	0.13	0.25	0.00	0.33	0.00
Avail Cap(c_a), veh/h	282	563	547	454	542	0	89	1036	927	0	1892	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	49.8	40.2	40.3	49.6	39.3	0.0	54.2	10.2	11.1	0.0	14.5	0.0
Incr Delay (d2), s/veh	9.9	5.2	5.8	4.1	2.9	0.0	17.5	0.2	0.6	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	9.2	9.1	3.2	8.0	0.0	0.3	1.8	3.6	0.0	5.3	0.0
LnGrp Delay(d),s/veh	59.7	45.5	46.1	53.8	42.2	0.0	71.7	10.5	11.7	0.0	14.6	0.0
LnGrp LOS	E	D	D	D	D		E	B	B		B	
Approach Vol, veh/h		710			478			370			622	
Approach Delay, s/veh		48.0			47.1			12.6			14.6	
Approach LOS		D			D			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		68.6	13.1	28.3	5.6	63.0	13.3	28.2				
Change Period (Y+Rc), s		* 4.2	4.5	4.0	4.5	* 4.2	4.5	4.0				
Max Green Setting (Gmax), s		* 48	14.5	35.0	5.5	* 38	17.5	32.0				
Max Q Clear Time (g_c+I1), s		9.8	8.3	19.8	2.5	12.9	8.9	16.9				
Green Ext Time (p_c), s		3.6	0.3	4.5	0.0	6.2	0.2	1.9				
Intersection Summary												
HCM 2010 Ctrl Delay			32.3									
HCM 2010 LOS			C									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	48.8
Intersection LOS	E

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Vol, veh/h	441	34	220	297	91	97
Future Vol, veh/h	441	34	220	297	91	97
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	544	42	272	367	112	120
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	44.5	65	15.1
HCM LOS	E	F	C

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	48%	0%	43%
Vol Thru, %	0%	93%	57%
Vol Right, %	52%	7%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	188	475	517
LT Vol	91	0	220
Through Vol	0	441	297
RT Vol	97	34	0
Lane Flow Rate	232	586	638
Geometry Grp	1	1	1
Degree of Util (X)	0.437	0.929	1.019
Departure Headway (Hd)	6.873	5.704	5.746
Convergence, Y/N	Yes	Yes	Yes
Cap	527	633	626
Service Time	4.873	3.791	3.83
HCM Lane V/C Ratio	0.44	0.926	1.019
HCM Control Delay	15.1	44.5	65
HCM Lane LOS	C	E	F
HCM 95th-tile Q	2.2	12.2	16.1

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	188	120	80	183	17	52
Future Vol, veh/h	188	120	80	183	17	52
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	204	130	87	199	18	57
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	9.9	10	8.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	25%	0%	30%
Vol Thru, %	0%	61%	70%
Vol Right, %	75%	39%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	69	308	263
LT Vol	17	0	80
Through Vol	0	188	183
RT Vol	52	120	0
Lane Flow Rate	75	335	286
Geometry Grp	1	1	1
Degree of Util (X)	0.101	0.39	0.358
Departure Headway (Hd)	4.853	4.19	4.512
Convergence, Y/N	Yes	Yes	Yes
Cap	737	860	798
Service Time	2.892	2.212	2.536
HCM Lane V/C Ratio	0.102	0.39	0.358
HCM Control Delay	8.4	9.9	10
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	1.9	1.6

Intersection						
Int Delay, s/veh	6.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	151	10	132	193	66	185
Future Vol, veh/h	151	10	132	193	66	185
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	164	11	143	210	72	201





















Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	669	173	273	0	-	0
Stage 1	173	-	-	-	-	-
Stage 2	496	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	423	871	1290	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	612	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	370	871	1290	-	-	-
Mov Cap-2 Maneuver	370	-	-	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	612	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22	3.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1290	-	384	-	-
HCM Lane V/C Ratio	0.111	-	0.456	-	-
HCM Control Delay (s)	8.1	0	22	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.4	-	2.3	-	-

HCM 2010 Signalized Intersection Summary
5: Southgate Ave & St. Francis Blvd

Existing+Proj AM
04/23/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	302	54	75	153	94	67	241	121	70	151	3
Future Volume (veh/h)	21	302	54	75	153	94	67	241	121	70	151	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	23	328	59	82	166	102	73	262	132	76	164	3
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	332	495	89	249	348	214	709	629	317	511	981	18
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.54	0.54	0.54	0.54	0.54	0.54
Sat Flow, veh/h	1107	1537	277	992	1081	664	1214	1170	589	986	1824	33
Grp Volume(v), veh/h	23	0	387	82	0	268	73	0	394	76	0	167
Grp Sat Flow(s),veh/h/ln	1107	0	1814	992	0	1746	1214	0	1759	986	0	1857
Q Serve(g_s), s	1.1	0.0	11.8	5.0	0.0	7.9	2.1	0.0	8.6	3.2	0.0	2.9
Cycle Q Clear(g_c), s	9.0	0.0	11.8	16.8	0.0	7.9	5.0	0.0	8.6	11.8	0.0	2.9
Prop In Lane	1.00		0.15	1.00		0.38	1.00		0.34	1.00		0.02
Lane Grp Cap(c), veh/h	332	0	584	249	0	562	709	0	946	511	0	999
V/C Ratio(X)	0.07	0.00	0.66	0.33	0.00	0.48	0.10	0.00	0.42	0.15	0.00	0.17
Avail Cap(c_a), veh/h	606	0	1032	494	0	993	709	0	946	511	0	999
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	18.7	26.0	0.0	17.4	8.8	0.0	8.8	12.3	0.0	7.5
Incr Delay (d2), s/veh	0.1	0.0	1.3	0.8	0.0	0.6	0.3	0.0	1.4	0.6	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	6.1	1.4	0.0	3.9	0.7	0.0	4.4	1.0	0.0	1.6
LnGrp Delay(d),s/veh	21.1	0.0	20.0	26.7	0.0	18.1	9.1	0.0	10.2	12.9	0.0	7.9
LnGrp LOS	C		C	C		B	A		B	B		A
Approach Vol, veh/h		410			350			467			243	
Approach Delay, s/veh		20.1			20.1			10.0			9.5	
Approach LOS		C			C			B			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.0		25.1		39.0		25.1				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		34.5		36.5		34.5		36.5				
Max Q Clear Time (g_c+I1), s		10.6		13.8		13.8		18.8				
Green Ext Time (p_c), s		2.9		2.5		1.2		1.9				
Intersection Summary												
HCM 2010 Ctrl Delay			15.1									
HCM 2010 LOS			B									

Intersection	
Intersection Delay, s/veh	39.3
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	97	233	239	76	148	9	270	112	40	30	224	79
Future Vol, veh/h	97	233	239	76	148	9	270	112	40	30	224	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	105	253	260	83	161	10	293	122	43	33	243	86
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	39.2	31.6	30.7	55.6
HCM LOS	E	D	D	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	29%	0%	33%	9%
Vol Thru, %	0%	74%	71%	0%	64%	67%
Vol Right, %	0%	26%	0%	100%	4%	24%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	270	152	330	239	233	333
LT Vol	270	0	97	0	76	30
Through Vol	0	112	233	0	148	224
RT Vol	0	40	0	239	9	79
Lane Flow Rate	293	165	359	260	253	362
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.773	0.403	0.891	0.581	0.684	0.907
Departure Headway (Hd)	9.487	8.775	8.938	8.058	9.729	9.016
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	382	410	405	447	370	402
Service Time	7.266	6.553	6.717	5.836	7.819	7.094
HCM Lane V/C Ratio	0.767	0.402	0.886	0.582	0.684	0.9
HCM Control Delay	38.2	17.4	52.1	21.5	31.6	55.6
HCM Lane LOS	E	C	F	C	D	F
HCM 95th-tile Q	6.4	1.9	9.1	3.6	4.9	9.5

HCM 2010 Signalized Intersection Summary
 15: Westmoor Ave & Skyline Blvd

Existing+Proj AM
 05/07/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	100	419	301	130	282	198	1429	311	128	1421	104
Future Volume (veh/h)	151	100	419	301	130	282	198	1429	311	128	1421	104
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	164	109	455	327	141	0	215	1553	338	139	1545	0
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	335	470	306	460	519	207	1578	980	144	1453	818
Arrive On Green	0.11	0.18	0.18	0.17	0.25	0.00	0.12	0.45	0.45	0.08	0.41	0.00
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	164	109	455	327	141	0	215	1553	338	139	1545	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	13.7	7.6	27.0	25.9	9.3	0.0	17.5	65.0	15.5	11.7	61.6	0.0
Cycle Q Clear(g_c), s	13.7	7.6	27.0	25.9	9.3	0.0	17.5	65.0	15.5	11.7	61.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	335	470	306	460	519	207	1578	980	144	1453	818
V/C Ratio(X)	0.87	0.33	0.97	1.07	0.31	0.00	1.04	0.98	0.35	0.96	1.06	0.00
Avail Cap(c_a), veh/h	277	335	470	306	460	519	207	1578	980	144	1453	818
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	66.1	53.6	52.1	62.0	46.0	0.0	66.3	41.0	13.9	68.7	44.2	0.0
Incr Delay (d2), s/veh	18.0	0.6	33.4	70.5	0.4	0.0	73.1	19.1	1.0	63.6	42.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	4.0	23.0	18.7	4.8	0.0	12.8	35.9	7.0	8.3	38.6	0.0
LnGrp Delay(d),s/veh	84.1	54.1	85.5	132.5	46.4	0.0	139.4	60.1	14.8	132.3	86.5	0.0
LnGrp LOS	F	D	F	F	D		F	E	B	F	F	
Approach Vol, veh/h		728			468			2106			1684	
Approach Delay, s/veh		80.5			106.6			61.0			90.3	
Approach LOS		F			F			E			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.7	71.4	30.4	31.5	22.0	66.1	20.4	41.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	12.2	66.9	25.9	27.0	17.5	61.6	23.4	29.5				
Max Q Clear Time (g_c+I1), s	13.7	67.0	27.9	29.0	19.5	63.6	15.7	11.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			78.0									
HCM 2010 LOS			E									
Notes												

User approved changes to right turn type.

HCM 2010 Signalized Intersection Summary
 1: Sullivan Ave & Eastmoor Ave/San Pedro Road

Existing+Proj PM
 04/28/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	322	122	200	316	86	17	184	154	0	623	387
Future Volume (veh/h)	74	322	122	200	316	86	17	184	154	0	623	387
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	0	1863	1863
Adj Flow Rate, veh/h	76	332	126	206	326	0	18	190	159	0	642	0
Adj No. of Lanes	1	2	0	2	1	0	1	2	0	0	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	0	2	2
Cap, veh/h	98	530	197	289	449	0	36	1033	817	0	1676	750
Arrive On Green	0.06	0.21	0.21	0.08	0.24	0.00	0.02	0.55	0.55	0.00	0.47	0.00
Sat Flow, veh/h	1774	2501	929	3442	1863	0	1774	1881	1488	0	3632	1583
Grp Volume(v), veh/h	76	233	225	206	326	0	18	178	171	0	642	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1660	1721	1863	0	1774	1770	1600	0	1770	1583
Q Serve(g_s), s	3.5	9.8	10.1	4.8	13.2	0.0	0.8	4.1	4.4	0.0	9.6	0.0
Cycle Q Clear(g_c), s	3.5	9.8	10.1	4.8	13.2	0.0	0.8	4.1	4.4	0.0	9.6	0.0
Prop In Lane	1.00		0.56	1.00		0.00	1.00		0.93	0.00		1.00
Lane Grp Cap(c), veh/h	98	375	352	289	449	0	36	971	878	0	1676	750
V/C Ratio(X)	0.77	0.62	0.64	0.71	0.73	0.00	0.49	0.18	0.19	0.00	0.38	0.00
Avail Cap(c_a), veh/h	197	550	516	403	591	0	108	971	878	0	1676	750
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.2	29.3	29.4	36.6	28.6	0.0	39.7	9.3	9.3	0.0	13.9	0.0
Incr Delay (d2), s/veh	12.2	2.4	2.7	3.5	3.9	0.0	10.0	0.4	0.5	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	5.0	4.9	2.4	7.3	0.0	0.5	2.1	2.1	0.0	4.7	0.0
LnGrp Delay(d),s/veh	50.4	31.7	32.2	40.1	32.6	0.0	49.8	9.7	9.8	0.0	14.1	0.0
LnGrp LOS	D	C	C	D	C		D	A	A		B	
Approach Vol, veh/h		534			532			367			642	
Approach Delay, s/veh		34.6			35.5			11.7			14.1	
Approach LOS		C			D			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		49.2	11.4	21.4	6.2	43.0	9.0	23.8				
Change Period (Y+Rc), s		* 4.2	4.5	4.0	4.5	* 4.2	4.5	4.0				
Max Green Setting (Gmax), s		* 34	9.6	25.5	5.0	* 25	9.1	26.0				
Max Q Clear Time (g_c+I1), s		6.4	6.8	12.1	2.8	11.6	5.5	15.2				
Green Ext Time (p_c), s		3.2	0.2	3.1	0.0	4.7	0.0	1.9				
Intersection Summary												
HCM 2010 Ctrl Delay			24.4									
HCM 2010 LOS			C									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	22.5
Intersection LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	348	35	191	409	60	113
Future Vol, veh/h	348	35	191	409	60	113
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	352	35	193	413	61	114
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	14.8	30.5	11.5
HCM LOS	B	D	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	35%	0%	32%
Vol Thru, %	0%	91%	68%
Vol Right, %	65%	9%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	173	383	600
LT Vol	60	0	191
Through Vol	0	348	409
RT Vol	113	35	0
Lane Flow Rate	175	387	606
Geometry Grp	1	1	1
Degree of Util (X)	0.291	0.563	0.855
Departure Headway (Hd)	5.998	5.235	5.08
Convergence, Y/N	Yes	Yes	Yes
Cap	598	689	715
Service Time	4.045	3.271	3.111
HCM Lane V/C Ratio	0.293	0.562	0.848
HCM Control Delay	11.5	14.8	30.5
HCM Lane LOS	B	B	D
HCM 95th-tile Q	1.2	3.5	9.9

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Traffic Vol, veh/h	184	92	36	208	41	41
Future Vol, veh/h	184	92	36	208	41	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	200	100	39	226	45	45
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	9.6	9.7	8.7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	50%	0%	15%
Vol Thru, %	0%	67%	85%
Vol Right, %	50%	33%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	82	276	244
LT Vol	41	0	36
Through Vol	0	184	208
RT Vol	41	92	0
Lane Flow Rate	89	300	265
Geometry Grp	1	1	1
Degree of Util (X)	0.123	0.354	0.331
Departure Headway (Hd)	4.95	4.245	4.493
Convergence, Y/N	Yes	Yes	Yes
Cap	723	849	801
Service Time	2.99	2.269	2.52
HCM Lane V/C Ratio	0.123	0.353	0.331
HCM Control Delay	8.7	9.6	9.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	1.6	1.5

Intersection						
Int Delay, s/veh	3.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	65	28	100	155	104	145
Future Vol, veh/h	65	28	100	155	104	145
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	71	30	109	168	113	158

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	578	192	271	0	-	0
Stage 1	192	-	-	-	-	-
Stage 2	386	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	478	850	1292	-	-	-
Stage 1	841	-	-	-	-	-
Stage 2	687	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	434	850	1292	-	-	-
Mov Cap-2 Maneuver	434	-	-	-	-	-
Stage 1	763	-	-	-	-	-
Stage 2	687	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.8	3.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1292	-	509	-	-
HCM Lane V/C Ratio	0.084	-	0.199	-	-
HCM Control Delay (s)	8	0	13.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.7	-	-

HCM 2010 Signalized Intersection Summary
5: Southgate Ave & St. Francis Blvd

Existing+Proj PM
04/23/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	212	43	70	287	124	109	195	64	75	92	5
Future Volume (veh/h)	28	212	43	70	287	124	109	195	64	75	92	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	30	230	47	76	312	135	118	212	70	82	100	5
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	217	488	100	349	402	174	753	694	229	592	910	45
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	939	1502	307	1098	1234	534	1284	1342	443	1093	1759	88
Grp Volume(v), veh/h	30	0	277	76	0	447	118	0	282	82	0	105
Grp Sat Flow(s),veh/h/ln	939	0	1809	1098	0	1768	1284	0	1785	1093	0	1847
Q Serve(g_s), s	1.7	0.0	7.0	3.4	0.0	13.0	3.0	0.0	5.2	2.7	0.0	1.7
Cycle Q Clear(g_c), s	14.7	0.0	7.0	10.3	0.0	13.0	4.6	0.0	5.2	7.8	0.0	1.7
Prop In Lane	1.00		0.17	1.00		0.30	1.00		0.25	1.00		0.05
Lane Grp Cap(c), veh/h	217	0	588	349	0	575	753	0	923	592	0	955
V/C Ratio(X)	0.14	0.00	0.47	0.22	0.00	0.78	0.16	0.00	0.31	0.14	0.00	0.11
Avail Cap(c_a), veh/h	595	0	1315	791	0	1286	753	0	923	592	0	955
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.0	0.0	15.3	19.5	0.0	17.4	8.2	0.0	7.9	10.1	0.0	7.1
Incr Delay (d2), s/veh	0.3	0.0	0.6	0.3	0.0	2.3	0.4	0.0	0.9	0.5	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	3.6	1.0	0.0	6.7	1.1	0.0	2.7	0.9	0.0	0.9
LnGrp Delay(d),s/veh	24.3	0.0	15.9	19.8	0.0	19.7	8.7	0.0	8.8	10.6	0.0	7.3
LnGrp LOS	C		B	B		B	A		A	B		A
Approach Vol, veh/h		307			523			400				187
Approach Delay, s/veh		16.7			19.7			8.7				8.8
Approach LOS		B			B			A				A
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.0		23.1		34.0		23.1				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		29.5		41.5		29.5		41.5				
Max Q Clear Time (g_c+I1), s		7.2		16.7		9.8		15.0				
Green Ext Time (p_c), s		2.1		1.8		0.8		3.4				
Intersection Summary												
HCM 2010 Ctrl Delay				14.5								
HCM 2010 LOS				B								

Intersection	
Intersection Delay, s/veh	21.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	104	186	161	81	167	8	195	155	78	20	125	57
Future Vol, veh/h	104	186	161	81	167	8	195	155	78	20	125	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	113	202	175	88	182	9	212	168	85	22	136	62
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	21.9	24.5	18.8	19.7
HCM LOS	C	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	36%	0%	32%	10%
Vol Thru, %	0%	67%	64%	0%	65%	62%
Vol Right, %	0%	33%	0%	100%	3%	28%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	195	233	290	161	256	202
LT Vol	195	0	104	0	81	20
Through Vol	0	155	186	0	167	125
RT Vol	0	78	0	161	8	57
Lane Flow Rate	212	253	315	175	278	220
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.489	0.531	0.69	0.339	0.636	0.508
Departure Headway (Hd)	8.424	7.667	7.988	7.083	8.229	8.33
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	430	474	454	511	442	435
Service Time	6.124	5.367	5.688	4.783	6.229	6.349
HCM Lane V/C Ratio	0.493	0.534	0.694	0.342	0.629	0.506
HCM Control Delay	18.9	18.7	26.6	13.4	24.5	19.7
HCM Lane LOS	C	C	D	B	C	C
HCM 95th-tile Q	2.6	3.1	5.2	1.5	4.3	2.8





















HCM 2010 Signalized Intersection Summary
 15: Westmoor Ave & Skyline Blvd

Existing+Proj PM
 05/07/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	83	173	285	142	280	267	1363	360	198	1350	138
Future Volume (veh/h)	66	83	173	285	142	280	267	1363	360	198	1350	138
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	72	90	188	310	154	0	290	1482	391	215	1467	0
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	218	448	313	451	591	294	1578	986	233	1456	733
Arrive On Green	0.05	0.12	0.12	0.18	0.24	0.00	0.17	0.45	0.45	0.13	0.41	0.00
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	72	90	188	310	154	0	290	1482	391	215	1467	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	5.6	6.2	13.5	24.3	9.5	0.0	22.7	55.6	17.2	16.7	57.3	0.0
Cycle Q Clear(g_c), s	5.6	6.2	13.5	24.3	9.5	0.0	22.7	55.6	17.2	16.7	57.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	91	218	448	313	451	591	294	1578	986	233	1456	733
V/C Ratio(X)	0.79	0.41	0.42	0.99	0.34	0.00	0.99	0.94	0.40	0.92	1.01	0.00
Avail Cap(c_a), veh/h	160	361	569	313	522	651	294	1578	986	233	1456	733
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	65.3	57.1	40.7	57.2	43.6	0.0	57.9	36.8	13.2	59.8	41.0	0.0
Incr Delay (d2), s/veh	13.9	1.3	0.6	47.8	0.4	0.0	48.4	12.2	1.2	38.4	25.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	3.3	6.0	16.0	5.0	0.0	15.1	29.8	7.8	10.7	33.1	0.0
LnGrp Delay(d),s/veh	79.2	58.3	41.3	105.1	44.1	0.0	106.3	49.0	14.4	98.2	66.4	0.0
LnGrp LOS	E	E	D	F	D		F	D	B	F	F	
Approach Vol, veh/h		350			464			2163			1682	
Approach Delay, s/veh		53.5			84.8			50.4			70.5	
Approach LOS		D			F			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.8	66.6	29.1	20.8	27.6	61.8	11.7	38.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	18.3	62.1	24.6	27.0	23.1	57.3	12.6	39.0				
Max Q Clear Time (g_c+I1), s	18.7	57.6	26.3	15.5	24.7	59.3	7.6	11.5				
Green Ext Time (p_c), s	0.0	3.7	0.0	0.8	0.0	0.0	0.1	0.8				
Intersection Summary												
HCM 2010 Ctrl Delay			61.3									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
 1: Sullivan Ave & Eastmoor Ave/San Pedro Road

Cumulative AM
 05/07/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	473	111	232	252	55	8	123	234	0	620	232
Future Volume (veh/h)	99	473	111	232	252	55	8	123	234	0	620	232
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	0	1863	1863
Adj Flow Rate, veh/h	108	514	121	252	274	0	9	134	254	0	674	0
Adj No. of Lanes	1	2	0	2	1	0	1	2	0	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	0	2	2
Cap, veh/h	135	651	152	322	462	0	19	992	887	0	1800	805
Arrive On Green	0.08	0.23	0.23	0.09	0.25	0.00	0.01	0.56	0.56	0.00	0.51	0.00
Sat Flow, veh/h	1774	2821	660	3442	1863	0	1774	1770	1583	0	3632	1583
Grp Volume(v), veh/h	108	321	314	252	274	0	9	134	254	0	674	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1711	1721	1863	0	1774	1770	1583	0	1770	1583
Q Serve(g_s), s	6.6	18.8	19.0	7.9	14.3	0.0	0.6	4.0	9.2	0.0	12.7	0.0
Cycle Q Clear(g_c), s	6.6	18.8	19.0	7.9	14.3	0.0	0.6	4.0	9.2	0.0	12.7	0.0
Prop In Lane	1.00		0.39	1.00		0.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	135	408	395	322	462	0	19	992	887	0	1800	805
V/C Ratio(X)	0.80	0.79	0.79	0.78	0.59	0.00	0.46	0.14	0.29	0.00	0.37	0.00
Avail Cap(c_a), veh/h	250	547	529	485	576	0	89	992	887	0	1800	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	50.0	39.8	39.9	48.8	36.5	0.0	54.1	11.5	12.7	0.0	16.4	0.0
Incr Delay (d2), s/veh	10.2	6.5	7.2	4.8	1.7	0.0	16.3	0.3	0.8	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	9.9	9.8	4.0	7.5	0.0	0.4	2.0	4.2	0.0	6.2	0.0
LnGrp Delay(d),s/veh	60.2	46.3	47.0	53.5	38.2	0.0	70.4	11.8	13.5	0.0	16.6	0.0
LnGrp LOS	E	D	D	D	D		E	B	B		B	
Approach Vol, veh/h		743			526			397			674	
Approach Delay, s/veh		48.6			45.5			14.2			16.6	
Approach LOS		D			D			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		65.8	14.8	29.4	5.7	60.1	12.9	31.3				
Change Period (Y+Rc), s		* 4.2	4.5	4.0	4.5	* 4.2	4.5	4.0				
Max Green Setting (Gmax), s		* 48	15.5	34.0	5.5	* 38	15.5	34.0				
Max Q Clear Time (g_c+I1), s		11.2	9.9	21.0	2.6	14.7	8.6	16.3				
Green Ext Time (p_c), s		3.9	0.4	4.4	0.0	6.6	0.1	2.0				
Intersection Summary												
HCM 2010 Ctrl Delay			32.9									
HCM 2010 LOS			C									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	34
Intersection LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	468	41	121	300	93	78
Future Vol, veh/h	468	41	121	300	93	78
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	578	51	149	370	115	96
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	45.2	28.7	13.8
HCM LOS	E	D	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	54%	0%	29%
Vol Thru, %	0%	92%	71%
Vol Right, %	46%	8%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	171	509	421
LT Vol	93	0	121
Through Vol	0	468	300
RT Vol	78	41	0
Lane Flow Rate	211	628	520
Geometry Grp	1	1	1
Degree of Util (X)	0.386	0.942	0.813
Departure Headway (Hd)	6.589	5.397	5.63
Convergence, Y/N	Yes	Yes	Yes
Cap	543	666	639
Service Time	4.67	3.457	3.694
HCM Lane V/C Ratio	0.389	0.943	0.814
HCM Control Delay	13.8	45.2	28.7
HCM Lane LOS	B	E	D
HCM 95th-tile Q	1.8	13.1	8.3

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	200	17	80	195	12	52
Future Vol, veh/h	200	17	80	195	12	52
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	217	18	87	212	13	57
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	9.1	9.9	8.1
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	19%	0%	29%
Vol Thru, %	0%	92%	71%
Vol Right, %	81%	8%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	64	217	275
LT Vol	12	0	80
Through Vol	0	200	195
RT Vol	52	17	0
Lane Flow Rate	70	236	299
Geometry Grp	1	1	1
Degree of Util (X)	0.09	0.286	0.365
Departure Headway (Hd)	4.652	4.363	4.4
Convergence, Y/N	Yes	Yes	Yes
Cap	770	826	819
Service Time	2.68	2.382	2.419
HCM Lane V/C Ratio	0.091	0.286	0.365
HCM Control Delay	8.1	9.1	9.9
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	1.2	1.7

Intersection						
Int Delay, s/veh	4.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	155	16	30	200	66	65
Future Vol, veh/h	155	16	30	200	66	65
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	168	17	33	217	72	71





















Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	391	108	143	0	0
Stage 1	108	-	-	-	-
Stage 2	283	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	613	946	1440	-	-
Stage 1	916	-	-	-	-
Stage 2	765	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	597	946	1440	-	-
Mov Cap-2 Maneuver	597	-	-	-	-
Stage 1	892	-	-	-	-
Stage 2	765	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.3	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1440	-	618	-	-
HCM Lane V/C Ratio	0.023	-	0.301	-	-
HCM Control Delay (s)	7.6	0	13.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	1.3	-	-

HCM 2010 Signalized Intersection Summary
5: Southgate Ave & St. Francis Blvd

Cumulative AM
05/07/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	317	55	73	153	64	86	173	114	79	150	3
Future Volume (veh/h)	20	317	55	73	153	64	86	173	114	79	150	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	22	345	60	79	166	70	93	188	124	86	163	3
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	369	506	88	245	408	172	702	556	367	568	967	18
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1140	1546	269	976	1245	525	1215	1049	692	1063	1823	34
Grp Volume(v), veh/h	22	0	405	79	0	236	93	0	312	86	0	166
Grp Sat Flow(s),veh/h/ln	1140	0	1815	976	0	1770	1215	0	1741	1063	0	1857
Q Serve(g_s), s	1.0	0.0	12.2	4.8	0.0	6.5	2.7	0.0	6.5	3.2	0.0	2.9
Cycle Q Clear(g_c), s	7.5	0.0	12.2	17.0	0.0	6.5	5.6	0.0	6.5	9.7	0.0	2.9
Prop In Lane	1.00		0.15	1.00		0.30	1.00		0.40	1.00		0.02
Lane Grp Cap(c), veh/h	369	0	594	245	0	580	702	0	923	568	0	984
V/C Ratio(X)	0.06	0.00	0.68	0.32	0.00	0.41	0.13	0.00	0.34	0.15	0.00	0.17
Avail Cap(c_a), veh/h	672	0	1077	505	0	1050	702	0	923	568	0	984
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	18.4	25.8	0.0	16.5	9.1	0.0	8.5	11.3	0.0	7.7
Incr Delay (d2), s/veh	0.1	0.0	1.4	0.8	0.0	0.5	0.4	0.0	1.0	0.6	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	6.3	1.3	0.0	3.2	1.0	0.0	3.3	1.0	0.0	1.6
LnGrp Delay(d),s/veh	19.5	0.0	19.8	26.5	0.0	17.0	9.5	0.0	9.5	11.8	0.0	8.0
LnGrp LOS	B		B	C		B	A		A	B		A
Approach Vol, veh/h		427			315			405			252	
Approach Delay, s/veh		19.8			19.4			9.5			9.3	
Approach LOS		B			B			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		38.0		25.2		38.0		25.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		33.5		37.5		33.5		37.5				
Max Q Clear Time (g_c+I1), s		8.5		14.2		11.7		19.0				
Green Ext Time (p_c), s		2.3		2.7		1.2		1.7				
Intersection Summary												
HCM 2010 Ctrl Delay			14.8									
HCM 2010 LOS			B									

Intersection	
Intersection Delay, s/veh	41.5
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	97	153	239	82	149	9	270	138	47	15	282	78
Future Vol, veh/h	97	153	239	82	149	9	270	138	47	15	282	78
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	105	166	260	89	162	10	293	150	51	16	307	85
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	26.6	33.3	30.4	79.5
HCM LOS	D	D	D	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	39%	0%	34%	4%
Vol Thru, %	0%	75%	61%	0%	62%	75%
Vol Right, %	0%	25%	0%	100%	4%	21%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	270	185	250	239	240	375
LT Vol	270	0	97	0	82	15
Through Vol	0	138	153	0	149	282
RT Vol	0	47	0	239	9	78
Lane Flow Rate	293	201	272	260	261	408
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.767	0.487	0.69	0.595	0.702	1.015
Departure Headway (Hd)	9.595	8.888	9.34	8.408	9.944	8.964
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	379	408	389	431	365	408
Service Time	7.295	6.588	7.04	6.108	7.944	6.984
HCM Lane V/C Ratio	0.773	0.493	0.699	0.603	0.715	1
HCM Control Delay	37.7	19.7	30.4	22.7	33.3	79.5
HCM Lane LOS	E	C	D	C	D	F
HCM 95th-tile Q	6.3	2.6	5	3.8	5.1	12.7

HCM 2010 Signalized Intersection Summary
 15: Westmoor Ave & Skyline Blvd





















Cumulative AM
 05/07/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	113	409	292	134	281	194	1579	257	96	1669	103
Future Volume (veh/h)	147	113	409	292	134	281	194	1579	257	96	1669	103
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	160	123	445	317	146	0	211	1716	279	104	1814	0
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	335	449	266	423	459	183	1725	1009	111	1581	870
Arrive On Green	0.10	0.18	0.18	0.15	0.23	0.00	0.10	0.49	0.49	0.06	0.45	0.00
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	160	123	445	317	146	0	211	1716	279	104	1814	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	13.3	8.7	27.0	22.5	9.9	0.0	15.5	72.4	11.6	8.8	67.0	0.0
Cycle Q Clear(g_c), s	13.3	8.7	27.0	22.5	9.9	0.0	15.5	72.4	11.6	8.8	67.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	182	335	449	266	423	459	183	1725	1009	111	1581	870
V/C Ratio(X)	0.88	0.37	0.99	1.19	0.34	0.00	1.15	0.99	0.28	0.94	1.15	0.00
Avail Cap(c_a), veh/h	213	335	449	266	423	459	183	1725	1009	111	1581	870
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	66.4	54.0	53.6	63.8	48.6	0.0	67.3	38.3	12.0	70.0	41.5	0.0
Incr Delay (d2), s/veh	28.4	0.7	40.3	117.0	0.5	0.0	113.0	20.5	0.7	65.1	74.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	4.5	23.4	19.7	5.1	0.0	13.3	40.2	5.3	6.3	49.0	0.0
LnGrp Delay(d),s/veh	94.8	54.7	93.9	180.8	49.1	0.0	180.2	58.8	12.7	135.1	115.8	0.0
LnGrp LOS	F	D	F	F	D		F	E	B	F	F	
Approach Vol, veh/h		728			463			2206			1918	
Approach Delay, s/veh		87.4			139.3			64.6			116.8	
Approach LOS		F			F			E			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.9	77.6	27.0	31.5	20.0	71.5	19.9	38.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	9.4	73.1	22.5	27.0	15.5	67.0	18.0	31.5				
Max Q Clear Time (g_c+I1), s	10.8	74.4	24.5	29.0	17.5	69.0	15.3	11.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			93.1									
HCM 2010 LOS			F									
Notes												

User approved changes to right turn type.

HCM 2010 Signalized Intersection Summary
 1: Sullivan Ave & Eastmoor Ave/San Pedro Road

Cumulative PM
 05/07/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	344	128	256	345	87	18	180	246	0	675	327
Future Volume (veh/h)	69	344	128	256	345	87	18	180	246	0	675	327
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	0	1863	1863
Adj Flow Rate, veh/h	71	355	132	264	356	0	19	186	254	0	696	0
Adj No. of Lanes	1	2	0	2	1	0	1	2	0	0	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	0	2	2
Cap, veh/h	91	549	200	347	498	0	38	931	833	0	1593	713
Arrive On Green	0.05	0.22	0.22	0.10	0.27	0.00	0.02	0.53	0.53	0.00	0.45	0.00
Sat Flow, veh/h	1774	2516	918	3442	1863	0	1774	1770	1583	0	3632	1583
Grp Volume(v), veh/h	71	248	239	264	356	0	19	186	254	0	696	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1664	1721	1863	0	1774	1770	1583	0	1770	1583
Q Serve(g_s), s	3.2	10.4	10.8	6.1	14.2	0.0	0.9	4.6	7.4	0.0	11.0	0.0
Cycle Q Clear(g_c), s	3.2	10.4	10.8	6.1	14.2	0.0	0.9	4.6	7.4	0.0	11.0	0.0
Prop In Lane	1.00		0.55	1.00		0.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	91	386	363	347	498	0	38	931	833	0	1593	713
V/C Ratio(X)	0.78	0.64	0.66	0.76	0.71	0.00	0.50	0.20	0.30	0.00	0.44	0.00
Avail Cap(c_a), veh/h	162	535	503	407	613	0	108	931	833	0	1593	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	0.00	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.4	29.1	29.3	35.9	27.2	0.0	39.7	10.3	11.0	0.0	15.4	0.0
Incr Delay (d2), s/veh	13.1	2.5	2.9	7.0	3.7	0.0	9.8	0.5	0.9	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.4	5.2	3.2	7.8	0.0	0.5	2.3	3.5	0.0	5.4	0.0
LnGrp Delay(d),s/veh	51.6	31.7	32.2	42.9	30.9	0.0	49.5	10.8	11.9	0.0	15.7	0.0
LnGrp LOS	D	C	C	D	C		D	B	B		B	
Approach Vol, veh/h		558			620			459			696	
Approach Delay, s/veh		34.4			36.0			13.0			15.7	
Approach LOS		C			D			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		47.4	12.8	21.9	6.3	41.1	8.7	25.9				
Change Period (Y+Rc), s		* 4.2	4.5	4.0	4.5	* 4.2	4.5	4.0				
Max Green Setting (Gmax), s		* 35	9.7	24.8	5.0	* 25	7.5	27.0				
Max Q Clear Time (g_c+I1), s		9.4	8.1	12.8	2.9	13.0	5.2	16.2				
Green Ext Time (p_c), s		4.1	0.1	3.2	0.0	4.9	0.0	2.1				
Intersection Summary												
HCM 2010 Ctrl Delay			25.0									
HCM 2010 LOS			C									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	17.5
Intersection LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	363	42	114	413	81	84
Future Vol, veh/h	363	42	114	413	81	84
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	367	42	115	417	82	85
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	14.9	21.4	11.3
HCM LOS	B	C	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	49%	0%	22%
Vol Thru, %	0%	90%	78%
Vol Right, %	51%	10%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	165	405	527
LT Vol	81	0	114
Through Vol	0	363	413
RT Vol	84	42	0
Lane Flow Rate	167	409	532
Geometry Grp	1	1	1
Degree of Util (X)	0.277	0.579	0.746
Departure Headway (Hd)	5.975	5.097	5.048
Convergence, Y/N	Yes	Yes	Yes
Cap	602	708	719
Service Time	4.016	3.127	3.075
HCM Lane V/C Ratio	0.277	0.578	0.74
HCM Control Delay	11.3	14.9	21.4
HCM Lane LOS	B	B	C
HCM 95th-tile Q	1.1	3.7	6.8

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	174	23	36	207	25	40
Future Vol, veh/h	174	23	36	207	25	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	189	25	39	225	27	43
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.8	9.4	8.2
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	38%	0%	15%
Vol Thru, %	0%	88%	85%
Vol Right, %	62%	12%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	65	197	243
LT Vol	25	0	36
Through Vol	0	174	207
RT Vol	40	23	0
Lane Flow Rate	71	214	264
Geometry Grp	1	1	1
Degree of Util (X)	0.092	0.256	0.319
Departure Headway (Hd)	4.682	4.307	4.352
Convergence, Y/N	Yes	Yes	Yes
Cap	766	835	829
Service Time	2.707	2.323	2.368
HCM Lane V/C Ratio	0.093	0.256	0.318
HCM Control Delay	8.2	8.8	9.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	1	1.4

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	37	26	30	171	109	82
Future Vol, veh/h	37	26	30	171	109	82
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	28	33	186	118	89





















Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	415	163	207	0	-	0
Stage 1	163	-	-	-	-	-
Stage 2	252	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	594	882	1364	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	790	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	578	882	1364	-	-	-
Mov Cap-2 Maneuver	578	-	-	-	-	-
Stage 1	843	-	-	-	-	-
Stage 2	790	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	1.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1364	-	674	-	-
HCM Lane V/C Ratio	0.024	-	0.102	-	-
HCM Control Delay (s)	7.7	0	10.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

HCM 2010 Signalized Intersection Summary
5: Southgate Ave & St. Francis Blvd

Cumulative PM
05/07/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	230	46	71	310	113	130	157	62	75	108	5
Future Volume (veh/h)	25	230	46	71	310	113	130	157	62	75	108	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	27	250	50	77	337	123	141	171	67	82	117	5
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	501	100	343	433	158	726	647	254	619	900	38
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	928	1508	302	1075	1303	476	1264	1275	500	1138	1774	76
Grp Volume(v), veh/h	27	0	300	77	0	460	141	0	238	82	0	122
Grp Sat Flow(s),veh/h/ln	928	0	1810	1075	0	1779	1264	0	1775	1138	0	1849
Q Serve(g_s), s	1.5	0.0	7.5	3.5	0.0	13.1	3.7	0.0	4.3	2.5	0.0	2.0
Cycle Q Clear(g_c), s	14.6	0.0	7.5	10.9	0.0	13.1	5.7	0.0	4.3	6.8	0.0	2.0
Prop In Lane	1.00		0.17	1.00		0.27	1.00		0.28	1.00		0.04
Lane Grp Cap(c), veh/h	220	0	601	343	0	591	726	0	901	619	0	939
V/C Ratio(X)	0.12	0.00	0.50	0.22	0.00	0.78	0.19	0.00	0.26	0.13	0.00	0.13
Avail Cap(c_a), veh/h	614	0	1370	799	0	1346	726	0	901	619	0	939
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	15.0	19.4	0.0	16.9	8.8	0.0	7.9	9.8	0.0	7.3
Incr Delay (d2), s/veh	0.2	0.0	0.6	0.3	0.0	2.3	0.6	0.0	0.7	0.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	3.8	1.1	0.0	6.8	1.4	0.0	2.2	0.9	0.0	1.1
LnGrp Delay(d),s/veh	23.7	0.0	15.7	19.7	0.0	19.2	9.4	0.0	8.6	10.2	0.0	7.6
LnGrp LOS	C		B	B		B	A		A	B		A
Approach Vol, veh/h		327			537			379			204	
Approach Delay, s/veh		16.3			19.2			8.9			8.6	
Approach LOS		B			B			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		33.0		23.2		33.0		23.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		28.5		42.5		28.5		42.5				
Max Q Clear Time (g_c+I1), s		7.7		16.6		8.8		15.1				
Green Ext Time (p_c), s		1.8		2.0		0.9		3.6				
Intersection Summary												
HCM 2010 Ctrl Delay			14.4									
HCM 2010 LOS			B									

Intersection	
Intersection Delay, s/veh	19.3
Intersection LOS	C

























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	107	132	161	91	156	7	199	162	69	9	140	66
Future Vol, veh/h	107	132	161	91	156	7	199	162	69	9	140	66
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	116	143	175	99	170	8	216	176	75	10	152	72
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	17.8	23.2	18.3	19.4
HCM LOS	C	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	45%	0%	36%	4%
Vol Thru, %	0%	70%	55%	0%	61%	65%
Vol Right, %	0%	30%	0%	100%	3%	31%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	199	231	239	161	254	215
LT Vol	199	0	107	0	91	9
Through Vol	0	162	132	0	156	140
RT Vol	0	69	0	161	7	66
Lane Flow Rate	216	251	260	175	276	234
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.49	0.518	0.572	0.339	0.615	0.518
Departure Headway (Hd)	8.153	7.424	7.925	6.975	8.019	7.983
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	441	482	455	513	447	449
Service Time	5.937	5.207	5.708	4.757	6.109	6.078
HCM Lane V/C Ratio	0.49	0.521	0.571	0.341	0.617	0.521
HCM Control Delay	18.6	18	20.9	13.3	23.2	19.4
HCM Lane LOS	C	C	C	B	C	C
HCM 95th-tile Q	2.6	2.9	3.5	1.5	4	2.9





















HCM 2010 Signalized Intersection Summary
 15: Westmoor Ave & Skyline Blvd

Cumulative PM
 05/07/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	86	178	277	153	287	267	1555	317	176	1460	137
Future Volume (veh/h)	66	86	178	277	153	287	267	1555	317	176	1460	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	72	93	193	301	166	0	290	1690	345	191	1587	0
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	225	435	285	429	529	273	1720	1024	184	1543	772
Arrive On Green	0.05	0.12	0.12	0.16	0.23	0.00	0.15	0.49	0.49	0.10	0.44	0.00
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	72	93	193	301	166	0	290	1690	345	191	1587	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	5.6	6.5	14.1	22.5	10.5	0.0	21.5	65.7	13.8	14.5	61.0	0.0
Cycle Q Clear(g_c), s	5.6	6.5	14.1	22.5	10.5	0.0	21.5	65.7	13.8	14.5	61.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	91	225	435	285	429	529	273	1720	1024	184	1543	772
V/C Ratio(X)	0.79	0.41	0.44	1.06	0.39	0.00	1.06	0.98	0.34	1.04	1.03	0.00
Avail Cap(c_a), veh/h	160	359	549	285	491	582	273	1720	1024	184	1543	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	65.6	56.9	41.9	58.7	45.5	0.0	59.2	35.4	11.2	62.7	39.5	0.0
Incr Delay (d2), s/veh	13.9	1.2	0.7	68.5	0.6	0.0	72.4	17.9	0.9	77.0	30.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	3.4	6.2	16.4	5.5	0.0	16.0	36.2	6.2	11.0	36.3	0.0
LnGrp Delay(d),s/veh	79.5	58.1	42.6	127.3	46.1	0.0	131.6	53.3	12.1	139.8	70.0	0.0
LnGrp LOS	E	E	D	F	D		F	D	B	F	F	
Approach Vol, veh/h		358			467			2325			1778	
Approach Delay, s/veh		54.1			98.4			57.0			77.5	
Approach LOS		D			F			E			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.0	72.5	27.0	21.4	26.0	65.5	11.7	36.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	14.5	68.0	22.5	27.0	21.5	61.0	12.6	36.9				
Max Q Clear Time (g_c+I1), s	16.5	67.7	24.5	16.1	23.5	63.0	7.6	12.5				
Green Ext Time (p_c), s	0.0	0.2	0.0	0.8	0.0	0.0	0.1	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			68.1									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
 1: Sullivan Ave & Eastmoor Ave/San Pedro Road

05/07/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	478	115	232	300	55	8	123	234	0	620	303
Future Volume (veh/h)	99	478	115	232	300	55	8	123	234	0	620	303
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	0	1863	1863
Adj Flow Rate, veh/h	108	520	125	252	326	0	9	134	254	0	674	0
Adj No. of Lanes	1	2	0	2	1	0	1	2	0	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	0	2	2
Cap, veh/h	135	664	159	322	473	0	19	981	878	0	1779	796
Arrive On Green	0.08	0.24	0.24	0.09	0.25	0.00	0.01	0.55	0.55	0.00	0.50	0.00
Sat Flow, veh/h	1774	2808	671	3442	1863	0	1774	1770	1583	0	3632	1583
Grp Volume(v), veh/h	108	327	318	252	326	0	9	134	254	0	674	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1710	1721	1863	0	1774	1770	1583	0	1770	1583
Q Serve(g_s), s	6.6	19.0	19.2	7.9	17.4	0.0	0.6	4.0	9.4	0.0	12.9	0.0
Cycle Q Clear(g_c), s	6.6	19.0	19.2	7.9	17.4	0.0	0.6	4.0	9.4	0.0	12.9	0.0
Prop In Lane	1.00		0.39	1.00		0.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	135	419	404	322	473	0	19	981	878	0	1779	796
V/C Ratio(X)	0.80	0.78	0.79	0.78	0.69	0.00	0.46	0.14	0.29	0.00	0.38	0.00
Avail Cap(c_a), veh/h	234	579	560	485	627	0	89	981	878	0	1779	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	50.0	39.3	39.4	48.8	37.1	0.0	54.1	11.8	13.0	0.0	16.8	0.0
Incr Delay (d2), s/veh	10.3	5.7	6.2	4.8	2.8	0.0	16.3	0.3	0.8	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	9.9	9.7	4.0	9.3	0.0	0.4	2.1	4.3	0.0	6.3	0.0
LnGrp Delay(d),s/veh	60.3	45.0	45.6	53.5	39.9	0.0	70.4	12.1	13.8	0.0	17.0	0.0
LnGrp LOS	E	D	D	D	D		E	B	B		B	
Approach Vol, veh/h		753			578			397			674	
Approach Delay, s/veh		47.5			45.8			14.5			17.0	
Approach LOS		D			D			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		65.2	14.8	30.0	5.7	59.5	12.9	31.9				
Change Period (Y+Rc), s		* 4.2	4.5	4.0	4.5	* 4.2	4.5	4.0				
Max Green Setting (Gmax), s		* 46	15.5	36.0	5.5	* 36	14.5	37.0				
Max Q Clear Time (g_c+I1), s		11.4	9.9	21.2	2.6	14.9	8.6	19.4				
Green Ext Time (p_c), s		3.8	0.4	4.8	0.0	6.3	0.1	2.5				
Intersection Summary												
HCM 2010 Ctrl Delay			33.1									
HCM 2010 LOS			C									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	61
Intersection LOS	F

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	468	41	240	300	93	87
Future Vol, veh/h	468	41	240	300	93	87
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	578	51	296	370	115	107
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	55.8	81.2	15
HCM LOS	F	F	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	52%	0%	44%
Vol Thru, %	0%	92%	56%
Vol Right, %	48%	8%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	180	509	540
LT Vol	93	0	240
Through Vol	0	468	300
RT Vol	87	41	0
Lane Flow Rate	222	628	667
Geometry Grp	1	1	1
Degree of Util (X)	0.42	0.983	1.074
Departure Headway (Hd)	7.038	5.8	5.798
Convergence, Y/N	Yes	Yes	Yes
Cap	516	628	627
Service Time	5.038	3.8	3.848
HCM Lane V/C Ratio	0.43	1	1.064
HCM Control Delay	15	55.8	81.2
HCM Lane LOS	B	F	F
HCM 95th-tile Q	2.1	14.5	18.8

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	200	120	80	195	17	52
Future Vol, veh/h	200	120	80	195	17	52
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	217	130	87	212	18	57
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	10.1	10.3	8.5
HCM LOS	B	B	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	25%	0%	29%
Vol Thru, %	0%	62%	71%
Vol Right, %	75%	38%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	69	320	275
LT Vol	17	0	80
Through Vol	0	200	195
RT Vol	52	120	0
Lane Flow Rate	75	348	299
Geometry Grp	1	1	1
Degree of Util (X)	0.102	0.407	0.376
Departure Headway (Hd)	4.909	4.216	4.525
Convergence, Y/N	Yes	Yes	Yes
Cap	728	856	795
Service Time	2.951	2.238	2.55
HCM Lane V/C Ratio	0.103	0.407	0.376
HCM Control Delay	8.5	10.1	10.3
HCM Lane LOS	A	B	B
HCM 95th-tile Q	0.3	2	1.8

Intersection						
Int Delay, s/veh	7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	164	17	132	200	66	184
Future Vol, veh/h	164	17	132	200	66	184
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	178	18	143	217	72	200





















Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	675	172	272	0	-	0
Stage 1	172	-	-	-	-	-
Stage 2	503	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	419	872	1291	-	-	-
Stage 1	858	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	366	872	1291	-	-	-
Mov Cap-2 Maneuver	366	-	-	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	607	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.5	3.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1291	-	387	-	-
HCM Lane V/C Ratio	0.111	-	0.508	-	-
HCM Control Delay (s)	8.1	0	23.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.4	-	2.8	-	-

HCM 2010 Signalized Intersection Summary
 5: Southgate Ave & St. Francis Blvd

05/07/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	317	55	73	153	95	102	245	114	80	150	3
Future Volume (veh/h)	20	317	55	73	153	95	102	245	114	80	150	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	22	345	60	79	166	103	111	266	124	87	163	3
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	503	87	235	350	217	710	651	304	514	987	18
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.54	0.54	0.54	0.54	0.54	0.54
Sat Flow, veh/h	1106	1546	269	976	1077	668	1215	1203	561	990	1823	34
Grp Volume(v), veh/h	22	0	405	79	0	269	111	0	390	87	0	166
Grp Sat Flow(s),veh/h/ln	1106	0	1815	976	0	1745	1215	0	1764	990	0	1857
Q Serve(g_s), s	1.1	0.0	13.1	5.2	0.0	8.3	3.4	0.0	8.8	3.8	0.0	3.0
Cycle Q Clear(g_c), s	9.4	0.0	13.1	18.2	0.0	8.3	6.5	0.0	8.8	12.6	0.0	3.0
Prop In Lane	1.00		0.15	1.00		0.38	1.00		0.32	1.00		0.02
Lane Grp Cap(c), veh/h	330	0	590	235	0	567	710	0	955	514	0	1005
V/C Ratio(X)	0.07	0.00	0.69	0.34	0.00	0.47	0.16	0.00	0.41	0.17	0.00	0.17
Avail Cap(c_a), veh/h	537	0	929	417	0	893	710	0	955	514	0	1005
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	19.8	27.7	0.0	18.1	9.4	0.0	9.1	12.8	0.0	7.8
Incr Delay (d2), s/veh	0.1	0.0	1.4	0.8	0.0	0.6	0.5	0.0	1.3	0.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	6.8	1.4	0.0	4.1	1.2	0.0	4.6	1.1	0.0	1.6
LnGrp Delay(d),s/veh	22.0	0.0	21.2	28.5	0.0	18.8	9.9	0.0	10.4	13.5	0.0	8.1
LnGrp LOS	C		C	C		B	A		B	B		A
Approach Vol, veh/h		427			348			501			253	
Approach Delay, s/veh		21.2			21.0			10.3			10.0	
Approach LOS		C			C			B			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.0		26.4		41.0		26.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		36.5		34.5		36.5		34.5				
Max Q Clear Time (g_c+I1), s		10.8		15.1		14.6		20.2				
Green Ext Time (p_c), s		3.0		2.5		1.3		1.7				
Intersection Summary												
HCM 2010 Ctrl Delay			15.7									
HCM 2010 LOS			B									

Intersection	
Intersection Delay, s/veh	54.2
Intersection LOS	F

























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↗			↔	
Traffic Vol, veh/h	97	241	239	82	154	9	270	138	47	30	282	78
Future Vol, veh/h	97	241	239	82	154	9	270	138	47	30	282	78
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	105	262	260	89	167	10	293	150	51	33	307	85
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	45.3	37	32.6	103.2
HCM LOS	E	E	D	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	29%	0%	33%	8%
Vol Thru, %	0%	75%	71%	0%	63%	72%
Vol Right, %	0%	25%	0%	100%	4%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	270	185	338	239	245	390
LT Vol	270	0	97	0	82	30
Through Vol	0	138	241	0	154	282
RT Vol	0	47	0	239	9	78
Lane Flow Rate	293	201	367	260	266	424
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.782	0.498	0.927	0.595	0.73	1.09
Departure Headway (Hd)	10.021	9.312	9.507	8.625	10.414	9.253
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	364	390	386	421	349	394
Service Time	7.721	7.012	7.207	6.325	8.414	7.33
HCM Lane V/C Ratio	0.805	0.515	0.951	0.618	0.762	1.076
HCM Control Delay	40.7	20.9	60.9	23.2	37	103.2
HCM Lane LOS	E	C	F	C	E	F
HCM 95th-tile Q	6.5	2.7	9.9	3.7	5.5	14.9

HCM 2010 Signalized Intersection Summary
 15: Westmoor Ave & Skyline Blvd





















05/07/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	113	409	296	134	282	194	1579	313	128	1669	103
Future Volume (veh/h)	147	113	409	296	134	282	194	1579	313	128	1669	103
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	160	123	445	322	146	0	211	1716	340	139	1814	0
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	335	449	266	423	479	183	1680	989	134	1581	870
Arrive On Green	0.10	0.18	0.18	0.15	0.23	0.00	0.10	0.47	0.47	0.08	0.45	0.00
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	160	123	445	322	146	0	211	1716	340	139	1814	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	13.3	8.7	27.0	22.5	9.9	0.0	15.5	71.2	15.4	11.3	67.0	0.0
Cycle Q Clear(g_c), s	13.3	8.7	27.0	22.5	9.9	0.0	15.5	71.2	15.4	11.3	67.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	335	449	266	423	479	183	1680	989	134	1581	870
V/C Ratio(X)	0.88	0.37	0.99	1.21	0.35	0.00	1.15	1.02	0.34	1.04	1.15	0.00
Avail Cap(c_a), veh/h	225	335	449	266	423	479	183	1680	989	134	1581	870
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	66.3	54.0	53.6	63.8	48.6	0.0	67.3	39.4	13.5	69.3	41.5	0.0
Incr Delay (d2), s/veh	26.0	0.7	40.3	124.2	0.5	0.0	113.0	27.5	1.0	88.9	74.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	4.5	23.4	20.2	5.1	0.0	13.3	41.2	7.0	8.8	49.0	0.0
LnGrp Delay(d),s/veh	92.3	54.7	93.9	187.9	49.1	0.0	180.2	66.9	14.4	158.7	115.8	0.0
LnGrp LOS	F	D	F	F	D		F	F	B	F	F	
Approach Vol, veh/h		728			468			2267			1953	
Approach Delay, s/veh		86.9			144.6			69.6			118.8	
Approach LOS		F			F			E			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.8	75.7	27.0	31.5	20.0	71.5	20.0	38.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	11.3	71.2	22.5	27.0	15.5	67.0	19.0	30.5				
Max Q Clear Time (g_c+I1), s	13.3	73.2	24.5	29.0	17.5	69.0	15.3	11.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			96.2									
HCM 2010 LOS			F									
Notes												

User approved changes to right turn type.

HCM 2010 Signalized Intersection Summary
 1: Sullivan Ave & Eastmoor Ave/San Pedro Road

Cumulative+Proj PM
 05/07/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	361	140	256	379	87	18	180	246	0	675	374
Future Volume (veh/h)	70	361	140	256	379	87	18	180	246	0	675	374
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	0	1863	1863
Adj Flow Rate, veh/h	72	372	144	264	391	0	19	186	254	0	696	0
Adj No. of Lanes	1	2	0	2	1	0	1	2	0	0	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	0	2	2
Cap, veh/h	92	559	213	347	510	0	38	919	822	0	1568	702
Arrive On Green	0.05	0.23	0.23	0.10	0.27	0.00	0.02	0.52	0.52	0.00	0.44	0.00
Sat Flow, veh/h	1774	2484	945	3442	1863	0	1774	1770	1583	0	3632	1583
Grp Volume(v), veh/h	72	263	253	264	391	0	19	186	254	0	696	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1659	1721	1863	0	1774	1770	1583	0	1770	1583
Q Serve(g_s), s	3.3	11.1	11.4	6.1	15.8	0.0	0.9	4.6	7.5	0.0	11.2	0.0
Cycle Q Clear(g_c), s	3.3	11.1	11.4	6.1	15.8	0.0	0.9	4.6	7.5	0.0	11.2	0.0
Prop In Lane	1.00		0.57	1.00		0.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	92	398	373	347	510	0	38	919	822	0	1568	702
V/C Ratio(X)	0.78	0.66	0.68	0.76	0.77	0.00	0.50	0.20	0.31	0.00	0.44	0.00
Avail Cap(c_a), veh/h	141	535	502	407	636	0	108	919	822	0	1568	702
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.4	28.9	29.0	35.9	27.4	0.0	39.7	10.6	11.3	0.0	15.8	0.0
Incr Delay (d2), s/veh	14.1	2.7	3.1	7.0	5.2	0.0	9.8	0.5	1.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	5.7	5.5	3.2	8.9	0.0	0.5	2.4	3.5	0.0	5.5	0.0
LnGrp Delay(d),s/veh	52.5	31.6	32.1	42.9	32.6	0.0	49.5	11.1	12.3	0.0	16.1	0.0
LnGrp LOS	D	C	C	D	C		D	B	B		B	
Approach Vol, veh/h		588			655			459			696	
Approach Delay, s/veh		34.4			36.7			13.3			16.1	
Approach LOS		C			D			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		46.8	12.8	22.5	6.3	40.5	8.8	26.4				
Change Period (Y+Rc), s		* 4.2	4.5	4.0	4.5	* 4.2	4.5	4.0				
Max Green Setting (Gmax), s		* 35	9.7	24.8	5.0	* 25	6.5	28.0				
Max Q Clear Time (g_c+I1), s		9.5	8.1	13.4	2.9	13.2	5.3	17.8				
Green Ext Time (p_c), s		4.1	0.1	3.2	0.0	4.9	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay				25.7								
HCM 2010 LOS				C								
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	25.5
Intersection LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	363	42	195	413	81	114
Future Vol, veh/h	363	42	195	413	81	114
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	367	42	197	417	82	115
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	16.5	35.7	12.3
HCM LOS	C	E	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	42%	0%	32%
Vol Thru, %	0%	90%	68%
Vol Right, %	58%	10%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	195	405	608
LT Vol	81	0	195
Through Vol	0	363	413
RT Vol	114	42	0
Lane Flow Rate	197	409	614
Geometry Grp	1	1	1
Degree of Util (X)	0.337	0.609	0.89
Departure Headway (Hd)	6.158	5.359	5.219
Convergence, Y/N	Yes	Yes	Yes
Cap	581	671	694
Service Time	4.218	3.405	3.259
HCM Lane V/C Ratio	0.339	0.61	0.885
HCM Control Delay	12.3	16.5	35.7
HCM Lane LOS	B	C	E
HCM 95th-tile Q	1.5	4.1	11.1

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	174	92	36	207	41	40
Future Vol, veh/h	174	92	36	207	41	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	189	100	39	225	45	43
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	9.4	9.7	8.6
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	51%	0%	15%
Vol Thru, %	0%	65%	85%
Vol Right, %	49%	35%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	81	266	243
LT Vol	41	0	36
Through Vol	0	174	207
RT Vol	40	92	0
Lane Flow Rate	88	289	264
Geometry Grp	1	1	1
Degree of Util (X)	0.121	0.34	0.329
Departure Headway (Hd)	4.928	4.231	4.478
Convergence, Y/N	Yes	Yes	Yes
Cap	726	850	803
Service Time	2.967	2.255	2.503
HCM Lane V/C Ratio	0.121	0.34	0.329
HCM Control Delay	8.6	9.4	9.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	1.5	1.4

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	67	29	99	171	109	163
Future Vol, veh/h	67	29	99	171	109	163
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	73	32	108	186	118	177

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	609	207	295	0	-	0
Stage 1	207	-	-	-	-	-
Stage 2	402	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	458	833	1266	-	-	-
Stage 1	828	-	-	-	-	-
Stage 2	676	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	414	833	1266	-	-	-
Mov Cap-2 Maneuver	414	-	-	-	-	-
Stage 1	749	-	-	-	-	-
Stage 2	676	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1266	-	488	-	-
HCM Lane V/C Ratio	0.085	-	0.214	-	-
HCM Control Delay (s)	8.1	0	14.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.8	-	-

HCM 2010 Signalized Intersection Summary
5: Southgate Ave & St. Francis Blvd

Cumulative+Proj PM
05/07/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	230	47	71	310	135	141	204	62	77	109	5
Future Volume (veh/h)	25	230	47	71	310	135	141	204	62	77	109	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	27	250	51	77	337	147	153	222	67	84	118	5
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	518	106	352	424	185	712	690	208	564	891	38
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	908	1502	306	1074	1231	537	1263	1375	415	1086	1774	75
Grp Volume(v), veh/h	27	0	301	77	0	484	153	0	289	84	0	123
Grp Sat Flow(s),veh/h/ln	908	0	1809	1074	0	1768	1263	0	1790	1086	0	1849
Q Serve(g_s), s	1.6	0.0	7.7	3.6	0.0	14.5	4.3	0.0	5.6	2.9	0.0	2.1
Cycle Q Clear(g_c), s	16.1	0.0	7.7	11.3	0.0	14.5	6.4	0.0	5.6	8.6	0.0	2.1
Prop In Lane	1.00		0.17	1.00		0.30	1.00		0.23	1.00		0.04
Lane Grp Cap(c), veh/h	211	0	623	352	0	609	712	0	899	564	0	929
V/C Ratio(X)	0.13	0.00	0.48	0.22	0.00	0.79	0.21	0.00	0.32	0.15	0.00	0.13
Avail Cap(c_a), veh/h	540	0	1278	741	0	1249	712	0	899	564	0	929
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	15.1	19.6	0.0	17.4	9.5	0.0	8.7	11.2	0.0	7.8
Incr Delay (d2), s/veh	0.3	0.0	0.6	0.3	0.0	2.4	0.7	0.0	0.9	0.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	3.9	1.1	0.0	7.4	1.6	0.0	3.0	1.0	0.0	1.1
LnGrp Delay(d),s/veh	24.9	0.0	15.7	19.9	0.0	19.8	10.2	0.0	9.6	11.8	0.0	8.1
LnGrp LOS	C		B	B		B	B		A	B		A
Approach Vol, veh/h		328			561			442			207	
Approach Delay, s/veh		16.5			19.8			9.8			9.6	
Approach LOS		B			B			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.0		24.7		34.0		24.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		29.5		41.5		29.5		41.5				
Max Q Clear Time (g_c+I1), s		8.4		18.1		10.6		16.5				
Green Ext Time (p_c), s		2.2		2.0		0.9		3.7				
Intersection Summary												
HCM 2010 Ctrl Delay				14.8								
HCM 2010 LOS				B								

Intersection	
Intersection Delay, s/veh	24
Intersection LOS	C

























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	107	190	161	91	171	8	199	162	69	20	140	66
Future Vol, veh/h	107	190	161	91	171	8	199	162	69	20	140	66
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	116	207	175	99	186	9	216	176	75	22	152	72
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	25.1	28.7	20.4	23
HCM LOS	D	D	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	36%	0%	34%	9%
Vol Thru, %	0%	70%	64%	0%	63%	62%
Vol Right, %	0%	30%	0%	100%	3%	29%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	199	231	297	161	270	226
LT Vol	199	0	107	0	91	20
Through Vol	0	162	190	0	171	140
RT Vol	0	69	0	161	8	66
Lane Flow Rate	216	251	323	175	293	246
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.522	0.555	0.739	0.356	0.693	0.584
Departure Headway (Hd)	8.684	7.952	8.238	7.33	8.5	8.561
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	415	454	439	490	426	423
Service Time	6.433	5.7	5.986	5.077	6.551	6.618
HCM Lane V/C Ratio	0.52	0.553	0.736	0.357	0.688	0.582
HCM Control Delay	20.6	20.2	31	14.1	28.7	23
HCM Lane LOS	C	C	D	B	D	C
HCM 95th-tile Q	2.9	3.3	6	1.6	5.1	3.6

HCM 2010 Signalized Intersection Summary
 15: Westmoor Ave & Skyline Blvd

Cumulative+Proj PM
 05/07/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	86	178	289	153	290	267	1555	353	198	1460	137
Future Volume (veh/h)	66	86	178	289	153	290	267	1555	353	198	1460	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	72	93	193	314	166	0	290	1690	384	215	1587	0
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	225	435	298	442	563	273	1644	1001	209	1518	760
Arrive On Green	0.05	0.12	0.12	0.17	0.24	0.00	0.15	0.46	0.46	0.12	0.43	0.00
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	72	93	193	314	166	0	290	1690	384	215	1587	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	5.6	6.5	14.1	23.5	10.4	0.0	21.5	65.0	16.5	16.5	60.0	0.0
Cycle Q Clear(g_c), s	5.6	6.5	14.1	23.5	10.4	0.0	21.5	65.0	16.5	16.5	60.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	91	225	435	298	442	563	273	1644	1001	209	1518	760
V/C Ratio(X)	0.79	0.41	0.44	1.05	0.38	0.00	1.06	1.03	0.38	1.03	1.05	0.00
Avail Cap(c_a), veh/h	160	359	549	298	505	616	273	1644	1001	209	1518	760
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	65.6	56.9	41.9	58.2	44.7	0.0	59.2	37.5	12.5	61.7	40.0	0.0
Incr Delay (d2), s/veh	13.9	1.2	0.7	67.0	0.5	0.0	72.4	29.7	1.1	69.6	36.1	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	0.2	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	3.4	6.2	17.0	5.5	0.0	16.0	38.5	7.5	12.1	36.9	0.0
LnGrp Delay(d),s/veh	79.5	58.1	42.6	125.2	45.2	0.0	131.6	67.1	13.6	131.5	76.0	0.0
LnGrp LOS	E	E	D	F	D		F	F	B	F	F	
Approach Vol, veh/h		358			480			2364			1802	
Approach Delay, s/veh		54.1			97.5			66.3			82.6	
Approach LOS		D			F			E			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.0	69.5	28.0	21.4	26.0	64.5	11.7	37.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	16.5	65.0	23.5	27.0	21.5	60.0	12.6	37.9				
Max Q Clear Time (g_c+I1), s	18.5	67.0	25.5	16.1	23.5	62.0	7.6	12.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.8	0.0	0.0	0.1	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			74.3									
HCM 2010 LOS			E									

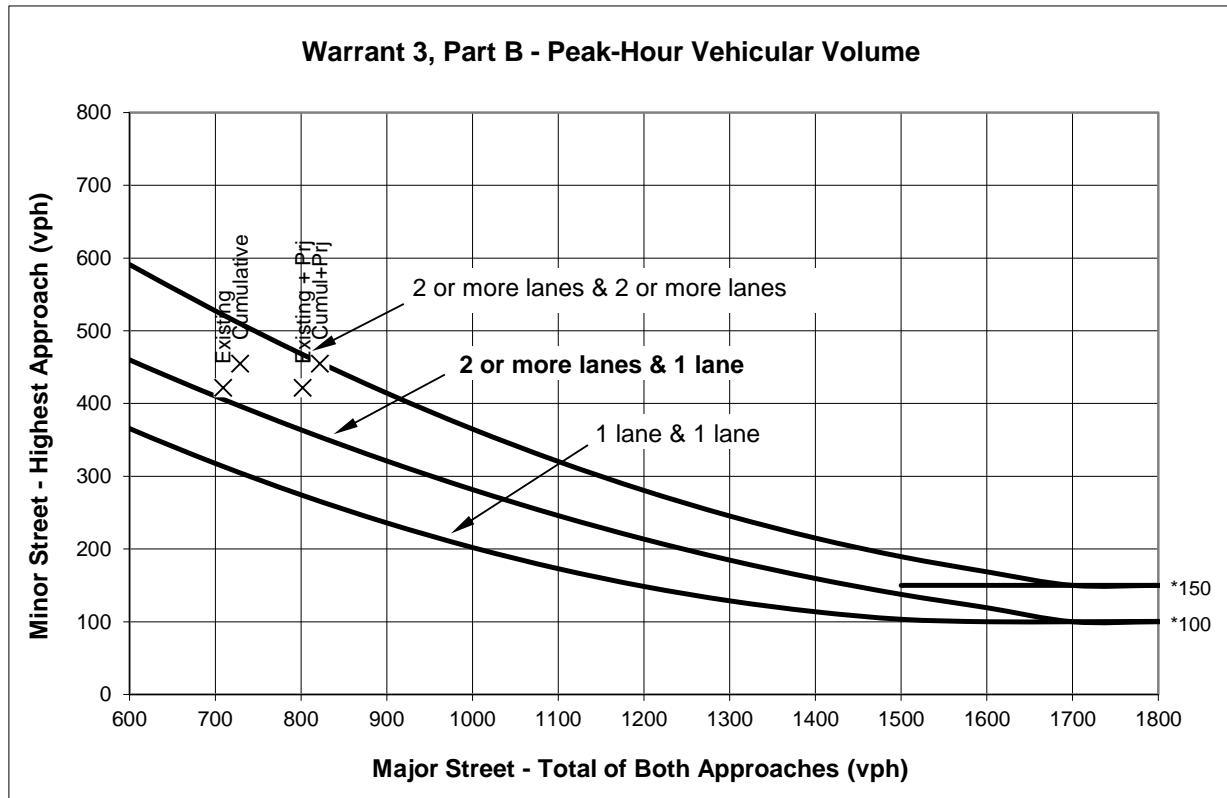
Appendix D

Peak-Hour Signal Warrant Analysis

123 Edgemont Drive

Southgate Ave & Westmoor Ave

AM PEAK PERIOD



Source: Figure 4C-3 California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2009 Edition, as amended for use in California).

* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Warrant 3, Part B - Peak-Hour Vehicular Volume

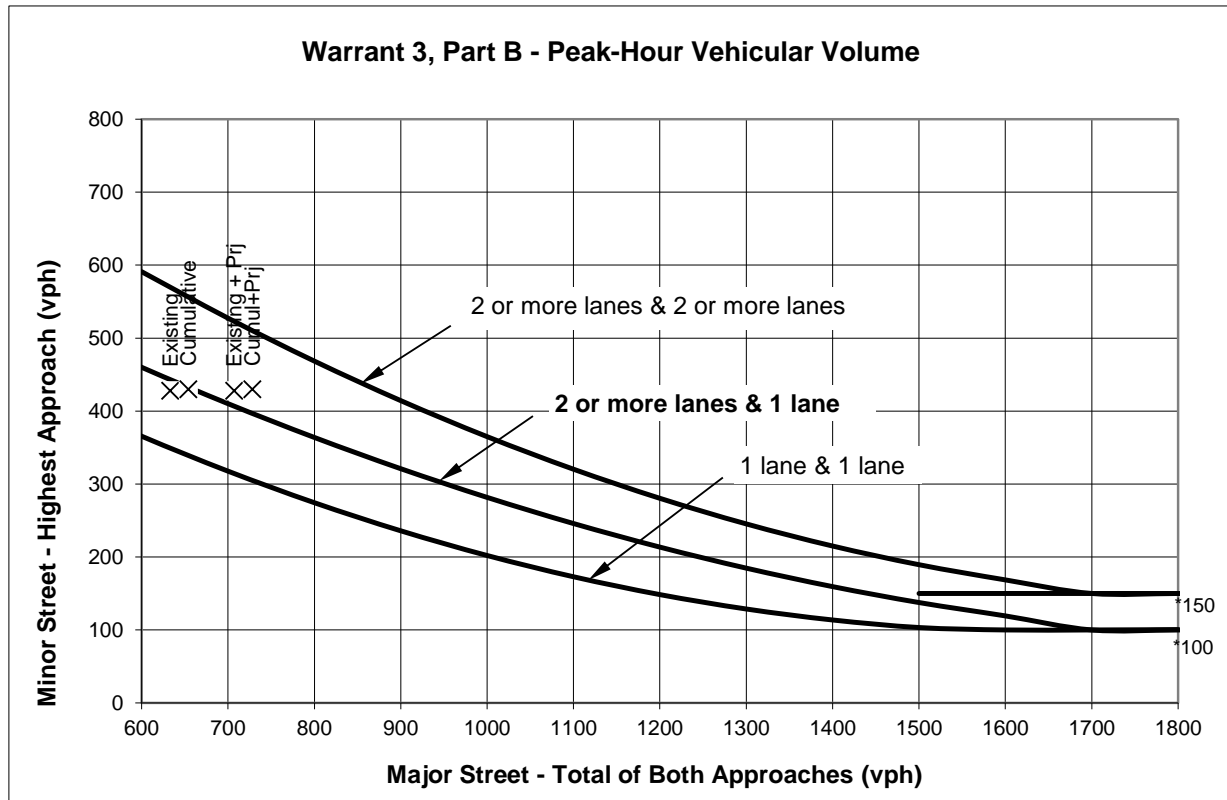
		Approach Lanes		AM PEAK PERIOD									
				Existing	Existing + Proj	Cumulative	Cumul+Proj						
		2 or One	More										
Major Street - Both Approaches	Westmoor Ave	X		709	802	729	822						
Minor Street - Highest Approach	Southgate Ave	X		422	422	455	455						
Signal Warranted Based on Part B - Peak-Hour Volumes?				Yes	Yes	Yes	Yes						

*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

123 Edgemont Drive

Southgate Ave & Westmoor Ave

PM PEAK HOUR



Source: Figure 4C-3 California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2009 Edition, as amended for use in California).

* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Warrant 3, Part B - Peak-Hour Vehicular Volume

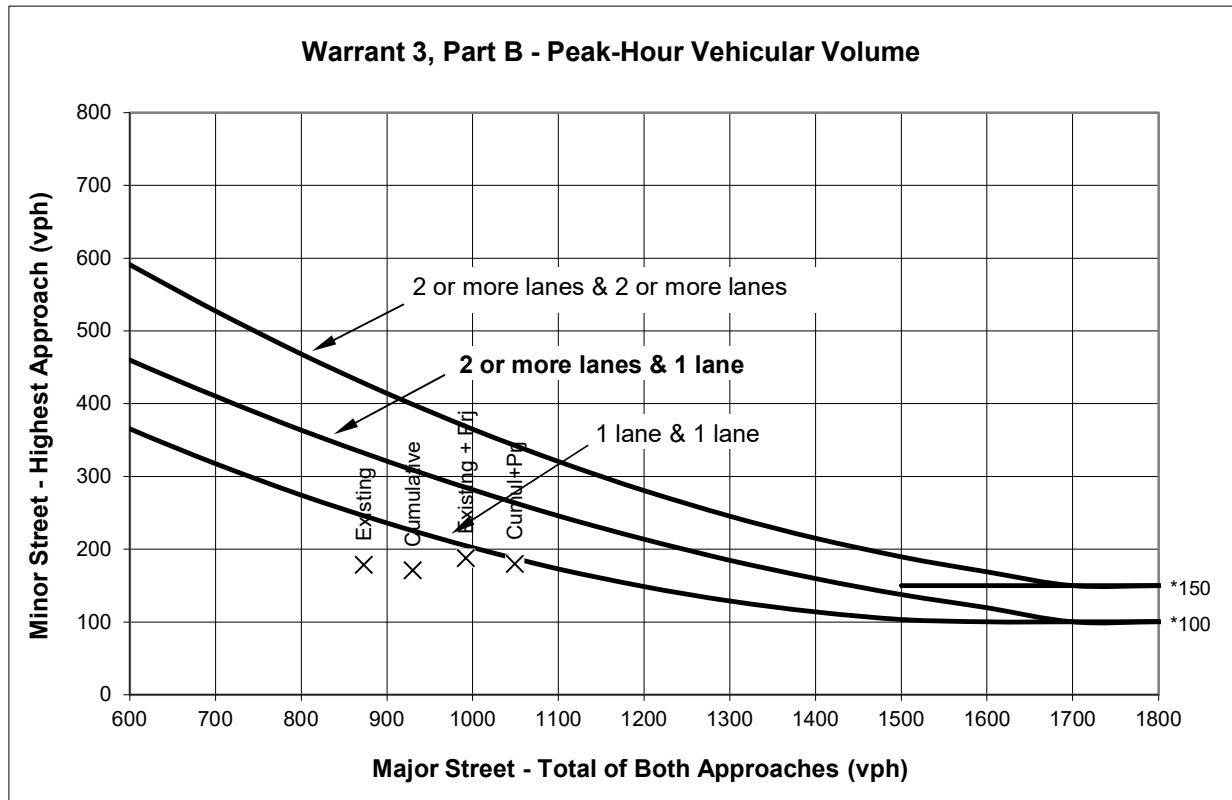
		Approach Lanes		PM PEAK HOUR							
				Existing	Existing + Prj	Cumulative	Cumul+Prj				
		2 or One	More								
Major Street - Both Approaches	Westmoor Ave	X		633	707	654	728				
Minor Street - Highest Approach	Southgate Ave	X		428	428	430	430				
Signal Warranted Based on Part B - Peak-Hour Volumes?				Yes	Yes	Yes	Yes				

*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

123 Edgemont Drive

St. Francis Blvd & Eastmoor Ave

AM PEAK PERIOD



Source: Figure 4C-3 California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2009 Edition, as amended for use in California).

* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Warrant 3, Part B - Peak-Hour Vehicular Volume

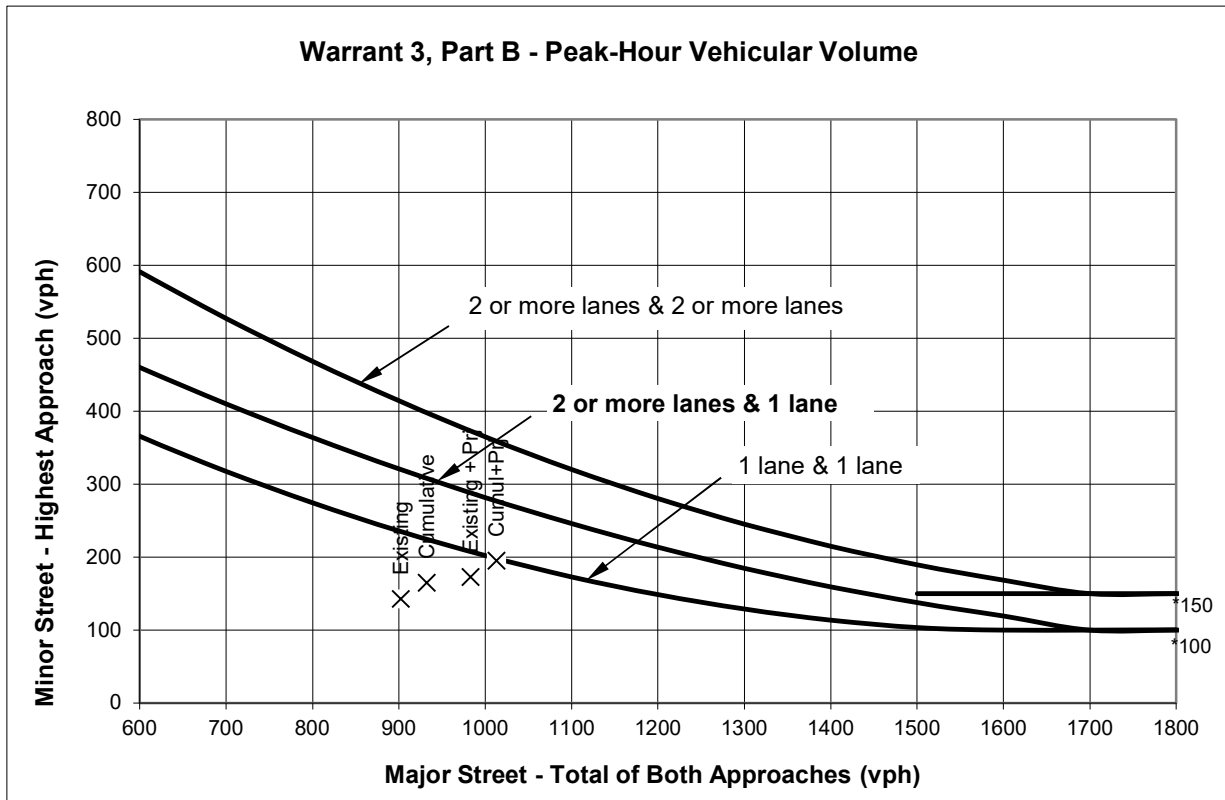
		Approach Lanes		AM PEAK PERIOD									
		One	Two or More	Existing	Existing + Prj	Cumulative	Cumul+Prj						
Major Street - Both Approaches	Eastmoor Avenue	X		873	992	930	1049						
Minor Street - Highest Approach	St. Francis Blvd	X		179	188	171	180						
Signal Warranted Based on Part B - Peak-Hour Volumes?				No	No	No	No						

*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

123 Edgemont Drive

St. Francis Blvd & Eastmoor Ave

PM PEAK HOUR



Source: Figure 4C-3 California Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA's MUTCD 2009 Edition, as amended for use in California).

* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Warrant 3, Part B - Peak-Hour Vehicular Volume

		Approach Lanes		PM PEAK HOUR							
				Existing	Existing + Prj	Cumulative	Cumul+Prj				
		2 or One	More								
Major Street - Both Approaches	Eastmoor Avenue	X		902	983	932	1013				
Minor Street - Highest Approach	St. Francis Blvd	X		143	173	165	195				
Signal Warranted Based on Part B - Peak-Hour Volumes?				No	No	No	No				

*Warrant is satisfied if plotted points fall above the appropriate curve in graph above.

Appendix E

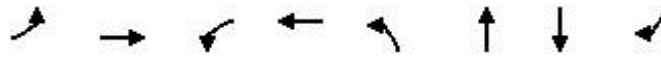
Vehicle Queuing Calculations

Queues

Existing AM

1: Sullivan Ave & Eastmoor Ave/San Pedro Road

05/10/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	113	587	202	284	8	362	622	248
v/c Ratio	0.57	0.73	0.55	0.69	0.08	0.19	0.33	0.27
Control Delay	57.1	43.0	52.1	46.1	50.7	5.5	17.7	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.1	43.0	52.1	46.1	50.7	5.5	17.7	3.6
Queue Length 50th (ft)	77	195	70	177	6	21	121	0
Queue Length 95th (ft)	130	237	105	255	22	54	235	53
Internal Link Dist (ft)		373		362		306	348	
Turn Bay Length (ft)	125		300		120			
Base Capacity (vph)	281	1102	455	533	97	1865	1865	917
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	0.40	0.53	0.44	0.53	0.08	0.19	0.33	0.27

Intersection Summary

Queues
5: Southgate Ave & St. Francis Blvd

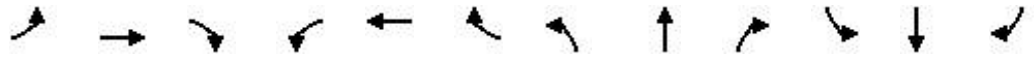
Existing AM
05/10/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	23	387	82	234	55	316	75	167
v/c Ratio	0.08	0.72	0.49	0.43	0.08	0.31	0.13	0.16
Control Delay	15.5	26.8	28.5	17.2	8.3	7.8	8.8	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	26.8	28.5	17.2	8.3	7.8	8.8	8.2
Queue Length 50th (ft)	6	122	25	59	8	43	11	26
Queue Length 95th (ft)	20	203	63	110	29	112	38	69
Internal Link Dist (ft)		116		161		180		161
Turn Bay Length (ft)								
Base Capacity (vph)	602	1090	343	1075	683	1007	576	1046
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	0.04	0.36	0.24	0.22	0.08	0.31	0.13	0.16
Intersection Summary								

Queues
15: Westmoor Ave & Skyline Blvd

Existing AM
05/10/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	164	109	455	323	141	305	215	1553	277	104	1545	113
v/c Ratio	0.74	0.48	0.96	1.00	0.43	0.61	0.97	0.88	0.23	0.84	0.99	0.11
Control Delay	78.9	63.8	77.8	108.1	56.4	37.7	115.3	39.7	1.4	111.6	58.7	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.9	63.8	77.8	108.1	56.4	37.7	115.3	39.7	1.4	111.6	58.7	4.4
Queue Length 50th (ft)	144	94	378	294	116	178	196	636	0	94	707	10
Queue Length 95th (ft)	233	156	#559	#549	192	294	#399	#920	30	#221	#1008	38
Internal Link Dist (ft)		369			277			797			780	
Turn Bay Length (ft)							625		350	725		225
Base Capacity (vph)	295	358	473	322	386	502	221	1760	1206	124	1566	1045
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.30	0.96	1.00	0.37	0.61	0.97	0.88	0.23	0.84	0.99	0.11

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

Existing PM

1: Sullivan Ave & Eastmoor Ave/San Pedro Road

05/10/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	75	427	206	380	18	349	642	351
v/c Ratio	0.44	0.49	0.54	0.73	0.15	0.21	0.41	0.40
Control Delay	42.6	23.4	39.8	33.8	39.2	7.7	19.3	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.6	23.4	39.8	33.8	39.2	7.7	19.3	4.3
Queue Length 50th (ft)	37	81	51	169	9	27	108	0
Queue Length 95th (ft)	77	115	85	252	30	57	202	59
Internal Link Dist (ft)		373		362		306	348	
Turn Bay Length (ft)	125		300		120			
Base Capacity (vph)	196	1090	406	583	121	1701	1560	870
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	0.38	0.39	0.51	0.65	0.15	0.21	0.41	0.40

Intersection Summary

Queues
5: Southgate Ave & St. Francis Blvd

Existing PM
05/10/2021

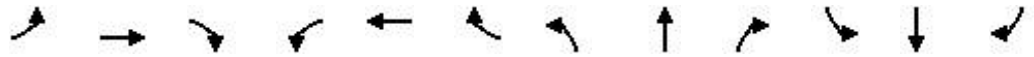


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	30	276	76	423	107	231	79	104
v/c Ratio	0.17	0.47	0.25	0.72	0.16	0.24	0.13	0.11
Control Delay	15.5	16.7	16.0	22.9	9.7	8.5	9.5	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	16.7	16.0	22.9	9.7	8.5	9.5	8.7
Queue Length 50th (ft)	7	68	19	114	17	33	12	16
Queue Length 95th (ft)	23	121	45	194	52	89	41	47
Internal Link Dist (ft)		116		161		180		161
Turn Bay Length (ft)								
Base Capacity (vph)	415	1342	695	1327	672	946	600	970
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	0.21	0.11	0.32	0.16	0.24	0.13	0.11

Intersection Summary

Queues
15: Westmoor Ave & Skyline Blvd

Existing PM
05/10/2021



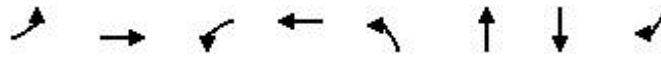
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	72	90	188	297	154	301	290	1482	352	191	1467	150
v/c Ratio	0.54	0.50	0.36	0.96	0.42	0.50	0.97	0.88	0.30	0.90	0.97	0.17
Control Delay	76.4	67.6	23.4	99.1	52.3	29.0	100.5	40.0	1.6	99.2	55.6	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.4	67.6	23.4	99.1	52.3	29.0	100.5	40.0	1.6	99.2	55.6	5.8
Queue Length 50th (ft)	62	77	75	261	121	157	254	596	0	167	646	16
Queue Length 95th (ft)	120	134	141	#490	193	251	#482	#854	35	#342	#924	56
Internal Link Dist (ft)		369			320			745				858
Turn Bay Length (ft)							625		350	725		225
Base Capacity (vph)	163	369	527	308	521	601	300	1686	1193	213	1512	923
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.24	0.36	0.96	0.30	0.50	0.97	0.88	0.30	0.90	0.97	0.16

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
1: Sullivan Ave & Eastmoor Ave/San Pedro Road

Existing+Proj AM
05/10/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	113	597	202	336	8	362	622	325
v/c Ratio	0.57	0.70	0.55	0.77	0.08	0.20	0.34	0.35
Control Delay	57.1	40.4	52.1	49.2	50.7	6.0	19.0	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.1	40.4	52.1	49.2	50.7	6.0	19.0	3.8
Queue Length 50th (ft)	77	195	70	216	6	22	124	0
Queue Length 95th (ft)	130	230	105	293	22	57	247	63
Internal Link Dist (ft)		373		362		306	348	
Turn Bay Length (ft)	125		300		120			
Base Capacity (vph)	281	1104	455	539	97	1827	1832	943
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	0.40	0.54	0.44	0.62	0.08	0.20	0.34	0.34

Intersection Summary

Queues
5: Southgate Ave & St. Francis Blvd

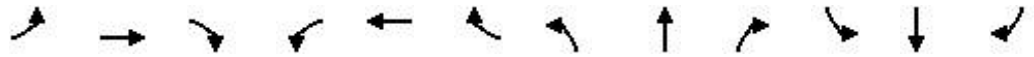
Existing+Proj AM
05/10/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	23	387	82	268	73	394	76	167
v/c Ratio	0.09	0.72	0.49	0.49	0.11	0.39	0.15	0.16
Control Delay	15.8	26.8	28.5	17.3	8.4	9.2	9.1	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.8	26.8	28.5	17.3	8.4	9.2	9.1	8.2
Queue Length 50th (ft)	6	122	25	65	11	63	12	26
Queue Length 95th (ft)	20	203	63	122	36	154	40	69
Internal Link Dist (ft)		116		161		180		161
Turn Bay Length (ft)								
Base Capacity (vph)	544	1090	343	1067	683	1014	507	1046
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	0.04	0.36	0.24	0.25	0.11	0.39	0.15	0.16
Intersection Summary								

Queues
15: Westmoor Ave & Skyline Blvd

Existing+Proj AM
05/10/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	164	109	455	327	141	307	215	1553	338	139	1545	113
v/c Ratio	0.73	0.49	0.97	1.00	0.42	0.58	0.97	0.92	0.28	0.90	0.99	0.12
Control Delay	78.5	64.2	79.0	106.2	56.0	35.3	114.7	44.3	1.5	114.0	59.8	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.5	64.2	79.0	106.2	56.0	35.3	114.7	44.3	1.5	114.0	59.8	4.4
Queue Length 50th (ft)	143	94	378	295	116	175	194	658	0	125	705	10
Queue Length 95th (ft)	233	156	#559	#554	191	288	#399	#955	34	#282	#1013	39
Internal Link Dist (ft)		369			277			797				780
Turn Bay Length (ft)							625		350	725		225
Base Capacity (vph)	296	359	471	327	393	522	221	1693	1204	154	1559	1043
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.30	0.97	1.00	0.36	0.59	0.97	0.92	0.28	0.90	0.99	0.11

Intersection Summary

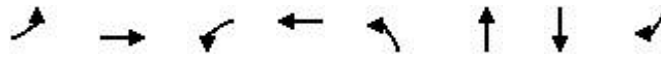
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

Existing+Proj PM

1: Sullivan Ave & Eastmoor Ave/San Pedro Road

05/10/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	76	458	206	415	18	349	642	399
v/c Ratio	0.44	0.50	0.54	0.77	0.15	0.21	0.42	0.45
Control Delay	42.8	23.1	39.8	35.6	39.5	7.9	19.7	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.8	23.1	39.8	35.6	39.5	7.9	19.7	4.4
Queue Length 50th (ft)	37	85	51	185	9	28	113	0
Queue Length 95th (ft)	78	123	85	281	30	57	202	62
Internal Link Dist (ft)		373		362		306	348	
Turn Bay Length (ft)	125		300		120			
Base Capacity (vph)	196	1093	406	583	117	1669	1529	887
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	0.39	0.42	0.51	0.71	0.15	0.21	0.42	0.45

Intersection Summary

Queues
5: Southgate Ave & St. Francis Blvd

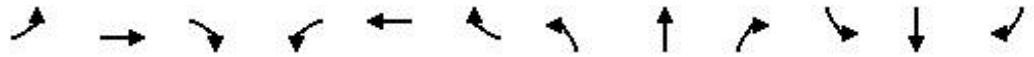
Existing+Proj PM
05/10/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	30	277	76	447	118	282	82	105
v/c Ratio	0.17	0.46	0.24	0.73	0.18	0.30	0.15	0.11
Control Delay	15.4	16.2	15.5	22.9	10.5	9.9	10.5	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.4	16.2	15.5	22.9	10.5	9.9	10.5	9.3
Queue Length 50th (ft)	7	68	19	120	20	46	14	16
Queue Length 95th (ft)	23	120	44	204	61	121	46	51
Internal Link Dist (ft)		116		161		180		161
Turn Bay Length (ft)								
Base Capacity (vph)	381	1320	687	1299	660	935	549	954
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	0.21	0.11	0.34	0.18	0.30	0.15	0.11
Intersection Summary								

Queues
15: Westmoor Ave & Skyline Blvd

Existing+Proj PM
05/10/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	72	90	188	310	154	304	290	1482	391	215	1467	150
v/c Ratio	0.54	0.52	0.36	0.97	0.42	0.48	0.96	0.92	0.33	0.90	0.98	0.17
Control Delay	75.8	68.8	23.6	97.9	51.6	27.4	99.4	44.7	1.8	95.8	58.3	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.8	68.8	23.6	97.9	51.6	27.4	99.4	44.7	1.8	95.8	58.3	5.8
Queue Length 50th (ft)	62	77	75	272	120	154	254	622	2	188	654	16
Queue Length 95th (ft)	120	134	142	#503	191	245	#477	#876	40	#369	#921	56
Internal Link Dist (ft)		369			320			745			858	
Turn Bay Length (ft)							625		350	725		225
Base Capacity (vph)	164	370	523	320	535	629	301	1619	1189	238	1494	916
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.24	0.36	0.97	0.29	0.48	0.96	0.92	0.33	0.90	0.98	0.16

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.