



HEXAGON TRANSPORTATION CONSULTANTS, INC.

1933 Pulgas Avenue Residential Development

Transportation Analysis

Prepared for:

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Executive Summary

This report presents the results of the transportation analysis (TA) for the proposed residential development at 1933 Pulgas Avenue in East Palo Alto, California. The project proposes to subdivide a 2.536-acre parcel and construct 58 townhomes with a below-grade parking garage on a 2.124-acre lot and retain the existing retail commercial building on a 0.412-acre lot. The 2.124 acre lot was recently rezoned to R-MD-2 (Multiple-Family Medium Density Residential Zone). The project would demolish four existing single-family homes and storage space on site. Vehicle access to the underground parking garage of the residential parcel will be provided by two entrances on Pulgas Avenue. Access to the existing retail building would be unchanged.

The transportation impacts of the project were evaluated following the standards and methodologies established by the City of East Palo Alto. The transportation analysis report for the project includes an analysis on vehicle miles traveled (VMT) in accordance with the California Environmental Quality Act (CEQA) and a local transportation analysis (LTA) as required by the City.

CEQA Transportation Impacts

Based on the City's VMT Guidelines, a proposed project exceeding the existing East Palo Alto citywide reference average VMT per capita shall be presumed to cause a significant transportation impact. Due to the City's small size and lack of rail transit service, the project-generated VMT for all residential developments are assumed to be equal to the citywide average home-based VMT per capita.

The project will implement a TDM program that includes planning and design measures that encourage walking, biking, and the use of transit measures for reducing single-occupant vehicle trips and encouraging residents to use alternative modes of transportation. The TDM Plan will include an implementation strategy and a monitoring system. The proposed TDM measures will reduce the project VMT to a less than significant level.

Local Transportation Analysis

Project Trip Generation

The magnitude of traffic added to the roadway system by the proposed project was estimated by applying the trip generate rates for "Single-Family Attached Housing - in a General Urban/Suburban area" (Land Use 215) published in the Institute of Transportation Engineers' (ITE) manual entitled *Trip Generation Manual, 11th Edition* (2019). Based on the published trip rates, the project is expected to generate 418 daily trips.

After applying the 40 percent TDM trip reduction and existing trip credits, the proposed residential development is expected to generate a net total of 213 daily trips with 13 trips (4 in and 9 out) during the AM peak hour and 15 trips (8 in and 7 out) during the PM peak hour.

Existing Plus Project Intersection Levels of Service

During the AM peak hour, the intersection of Pulgas Avenue and East Bayshore Road would continue operating at an unacceptable LOS E and the project trips would cause a minimal increase in the average delay considering all movements (+0.1 seconds). However, since the project would not cause the critical-movement delay at this intersection to increase by four or more seconds and would not increase volume-to-capacity ratio (V/C ratio) by 0.01 compared to existing conditions, the project would not have an adverse effect on the operation of this intersection. The other study intersection at Pulgas Avenue and Camellia Drive would continue to operate at an acceptable LOS D during the AM peak hour under existing plus project conditions.

During the PM peak hour, both study intersections would continue operating at an acceptable level of service.

Cumulative Plus Project Intersection Levels of Service

During the AM peak hour, the intersection of Pulgas Avenue and East Bayshore Road would continue operating at an unacceptable LOS E and the project trips would cause a minimal increase in the average delay considering all movements (+0.1 seconds). However, since the project would not cause the volume-to-capacity ratio (V/C ratio) to increase by more than 0.01 compared to cumulative no project conditions, the project would not have an adverse effect on the operation of this intersection. The other study intersection at Pulgas Avenue and Camellia Drive would continue to operate at an acceptable LOS D during the AM peak hour under cumulative plus project conditions.

During the PM peak hour, both study intersections are expected to continue operating at an acceptable level of service.

Project Driveway Operations

Two project driveways would provide access to and from the underground parking garage; one located directly opposite Camellia Drive and the other located approximately 350 feet north of the Pulgas/Camellia intersection.

The level of service analysis indicates that, with one exception, vehicles turning in and out of both project driveways would experience minimal delay equivalent to LOS A or B conditions during both peak hours under existing plus project and cumulative plus project conditions.

The inbound left-turn movement from northbound Pulgas Avenue to the south project driveway would operate at LOS C during the PM peak hour under existing plus project conditions. Under cumulative plus project conditions, this movement would degrade to LOS E. While the project would add only four northbound left-turn trips and two northbound through trips at the all-way stop-controlled Pulgas/Camellia intersection, the relatively high delay on the northbound Pulgas Avenue approach is primarily due to the increase in through traffic on Pulgas Avenue projected to occur under cumulative conditions. As described above, considering the overall average delay on all approaches, the Pulgas/Camellia intersection would operate at an acceptable level of service, and the project would cause a minimal increase in delay (less than three seconds) on the most congested northbound approach during the PM peak hour.

Sight Distance

The proposed driveway locations were evaluated to determine if the sight distance at the driveways would be adequate. The two full-access driveways on Pulgas Avenue would be located along a straight segment of Pulgas Avenue with no roadway curves, on-street parking, or other structures that obstruct a driver's ability to see down the road on Pulgas Avenue. Landscaping should be maintained to a height of no more than 3.5 feet tall to ensure that it does not interfere with the driveway sight distance.

On-Site Circulation

On-site circulation was reviewed in accordance with the City of East Palo Alto Zoning Code and generally accepted traffic engineering standards. On-site parking for the proposed project would be provided via a below grade parking garage with one double-loaded aisle with 90-degree parking spaces for the residences. The width of the parking garage drive aisle meets the City of East Palo Alto minimum requirement. Additional buffer space should be provided next to the last parking spaces in the dead-end aisle to facilitate vehicle maneuvers in and out of these spaces.

The speed ramps (non-parking ramps) to enter and exit the garage are uncovered and have a maximum slope of 20% with 10% transitions on each end. Commonly cited parking publications recommend grades up to 16% on ramps where no parking is permitted, but grades of up to 20% are cited as acceptable when ramps are covered (i.e., protected from weather) and not used for pedestrian walk ways. The final garage ramp design should be reviewed and approved by the Public Works Department.

Emergency Access and Loading

The site plan indicates that emergency response vehicles would be able to access the project site from four dead-end fire apparatus roads. Turnaround provisions are not required because the dead-end roads would not exceed 150 feet long.

The two dead-end roadways at the center of the site will also be accessible to moving vans and delivery vehicles with space for vehicles to stop and load/unload past the end of the fire access roadway near the western edge of the project site. The south central dead-end roadway would also enable mail trucks to access the mail room, which would be located along the western edge of the site. Vehicles accessing these dead-end roadways would have to back into the site or back out onto Pulgas Avenue.

Trash Collection

The site plan shows two trash enclosures, with one located at the north and one located at the south end of the site with access provided via Pulgas Avenue. Thus, all garbage collection activities would occur on site. Trash collection vehicles would have to back into the site or back out onto Pulgas Avenue.

Potential Impacts on Pedestrians, Bicycles and Transit

Pedestrian access to the project site is provided via sidewalks on Pulgas Avenue and crosswalks at the nearby intersections. The project proposes to construct a seven-foot-wide sidewalk along the project frontage and will construct a multiuse sidewalk/bike lane north of the project site to connect to the existing sidewalk.

Within the immediate project vicinity, striped bike lanes are present on Pulgas Avenue south of Oakes Street. In the northbound direction, the Pulgas Avenue bike lane is provided along the entire segment between East Bayshore Road and Oakes Street. In the southbound direction, the Pulgas Avenue bike lane ends approximately 100 feet north of the project site, and bike route markings (sharrows) continue south to East Bayshore Road. O'Connor Street also has bike lanes between Pulgas Avenue and Clarke

Avenue. The project will provide a bike lane along the project frontage on the west side of Pulgas Avenue and a multiuse sidewalk/bike lane north of the project site to connect to the existing bike lane. This measure will encourage residents to bike to nearby destinations and is consistent with the East Palo Alto Bicycle Transportation Plan.

The study area is served by three SamTrans bus routes. The closest bus stop to the project site is located on Pulgas Avenue at East Bayshore Road approximately 200 feet south of the proposed residential development. Residents may also access SamTrans Route 296 at a bus stop on Clarke Avenue at O'Connor Street approximately 0.5 miles away. Access between this bus stop and the project site is provided via sidewalks on Pulgas Avenue, Oakes Street, Tate Street, Tinsley Street, and Clarke Avenue. The existing public transit services are expected to serve the additional trips generated by the proposed project.

Parking

City of East Palo Alto Parking Code Requirements

Based on the unit mix listed in the proposed plans and the parking rates for multiple-unit dwelling developments specified in the East Palo Alto Municipal Code Section 18.30.050 (A), the project would require a total of 124 spaces (112 spaces for residents and 12 spaces for visitors). The project proposes to provide 120 total spaces with 108 residential spaces (which includes 3 ADA spaces) and 12 guest spaces (which includes 1 ADA space), which would not meet the city's standard parking requirement that is typically applied to market-rate residential developments.

Reduced Parking Ratios for Affordable Housing Development

Due to its inclusion of affordable dwelling units, the proposed project would qualify for a density bonus. Based on the East Palo Alto Municipal Code Section 18.36.040 (F), the required parking ratios would be reduced in compliance with Government Code Section 65915(p). Based on the reduced ratios, the project would be required to provide a total of 112 parking spaces (including spaces for residents and visitors), which equates to 1.93 spaces per unit. The proposed parking supply of 120 spaces, which equates to a ratio of 2.07 spaces per unit, satisfies the reduced parking requirement for affordable housing.

Parking Stall Dimensions

The site plan shows that, with the exception of ADA stalls, all parking stalls on site would measure 8 feet wide by 18 feet long. The City of East Palo Alto Zoning Code (Section 18.30.070.C) states that affordable housing developments granted a density bonus may include up to 50 percent of the required off-street parking spaces as compact spaces. The minimum dimensions for compact spaces are 8 feet wide by 16 feet long. The developer is requesting a waiver to decrease the size of standard stalls below the normal minimum dimensions of 9 feet wide by 18 feet long, to 8 feet wide by 18 feet long.

The dimensions of the accessible ADA stalls and access aisles would meet ADA standards.

Bicycle Parking

For bicycle parking requirements, the City of East Palo Alto requires facilities to be in compliance with *VTA Bicycle Technical Guidelines*. Based on the proposed number of units, the project would require 58 long-term bicycle parking spaces and 3 short-term bicycle parking spaces. Based on the proposed plans, the project would include a bike parking area for long-term storage with 58 long-term bicycle parking spaces in the southwest corner of the site and 4 short term bicycle parking spaces along the project frontage on Pulgas Avenue, which would meet the City's standards to be in compliance with VTA Guidelines.

1.

Introduction

This report presents the results of the transportation analysis (TA) for the proposed residential development at 1933 Pulgas Avenue in East Palo Alto, California (see Figure 1). The project proposes to subdivide a 2.536-acre parcel and construct 58 townhomes with a below-grade parking garage on a 2.124-acre lot and retain the existing retail commercial building on a 0.412-acre lot (see Figure 2). The project would demolish three existing single-family homes and storage space on site. Vehicle access to the underground parking garage of the residential parcel **will be provided by an entrance on Pulgas Avenue**. Access to the existing retail building would be unchanged.

Scope of Study

The project **proposes to rezone a 2.124 acre portion of the 2.536-acre site from the current zoning of R-MD-1 to R-MD-2 (Multiple-Family Medium Density Residential Zone)**. The purpose of this transportation analysis is to satisfy the requirements of the California Environmental Quality Act (CEQA), the City of East Palo Alto, and the City/County Association of Governments of San Mateo County (C/CAG). C/CAG administers the San Mateo County Congestion Management Program (CMP). The City of East Palo Alto requires a transportation analysis be conducted to evaluate the project's impact on vehicle miles traveled (VMT) in accordance with the California Environmental Quality Act (CEQA). Although LOS can no longer be used to identify impacts under CEQA, the City has retained the LOS standard set forth in the General Plan, continues to require an assessment of intersection levels of service, and may condition project approvals on improvements needed to maintain the adopted LOS standard and/or other operational issues related to transportation. Thus, the transportation analysis also includes an evaluation of the project's effects on nearby roadway intersections based on the LOS standards set forth in the General Plan. Due to the small number of trips that would be generated by the proposed new townhomes, it is expected that the project would have a negligible effect on the operation of nearby freeway segments. Thus, this transportation analysis is limited to an analysis of VMT, project trip generation, and intersection levels of service to support the rezoning application. In addition, this report presents a review of site access, on-site circulation, and parking.



Figure 1
Site Location and Study Intersections

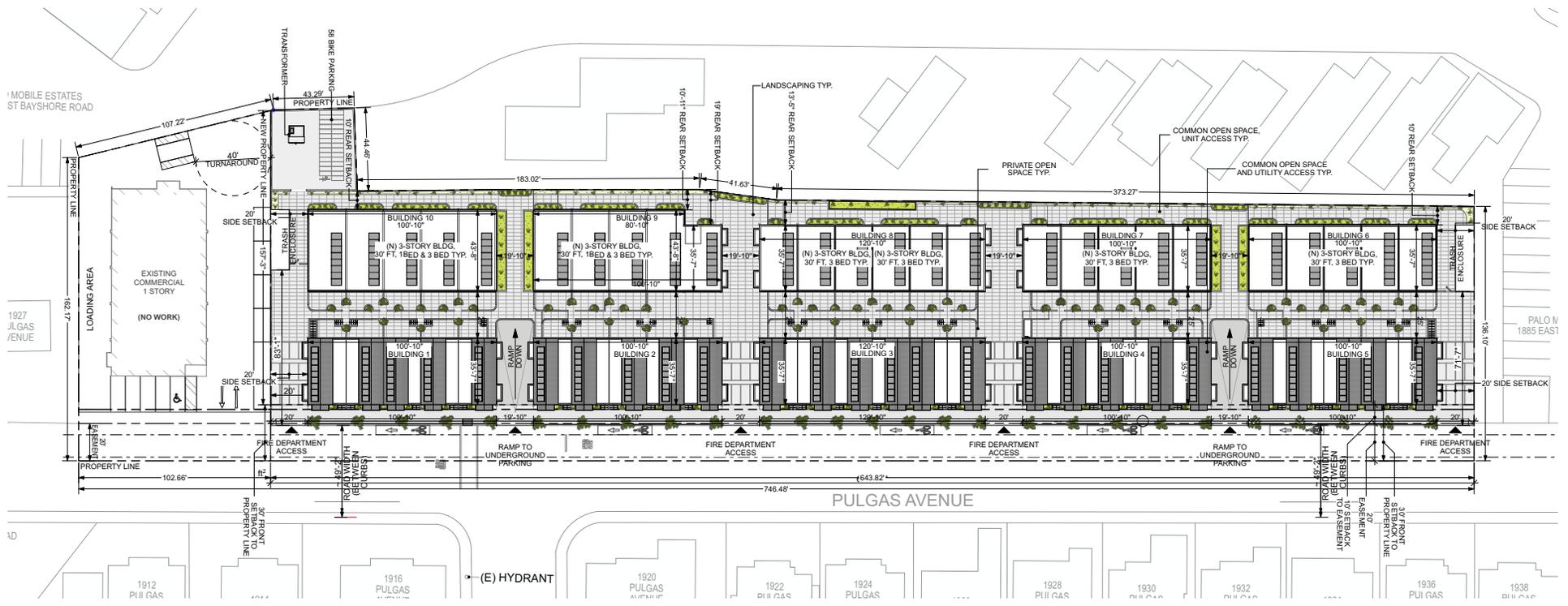


Figure 2
Proposed Project Site Plan

CEQA Transportation Analysis Scope

The City of East Palo Alto's Transportation Analysis Policy establishes procedures for determining project impacts on Vehicle Miles Traveled (VMT) based on the project description and characteristics. VMT is the total miles of travel by personal motor vehicles a project is expected to generate in a day. VMT measures the full distance of vehicle trips with one end within the project.

The City of East Palo Alto's policy regarding vehicle miles travelled (VMT) defines screening criteria, the analysis methodology, and impact thresholds to be used in CEQA analyses. The proposed new residential development does not meet any of the VMT screening criteria, so a VMT analysis is required.

Local Transportation Analysis Scope

The LTA includes an analysis of weekday AM and PM peak-hour traffic conditions and determine the traffic effects of the proposed residential development on two key intersections in the vicinity of the site as follow:

- Pulgas Avenue and East Bayshore Road
- Pulgas Avenue and Camellia Drive (unsignalized)

An analysis of freeway segments and freeway ramps is not required since the project is expected to generate a negligible number of trips on area freeways.

Traffic conditions at the intersections were analyzed for the weekday AM and PM peak hours of traffic. The AM peak hour of traffic is between 7:00 and 9:00 AM, and the PM peak hour is between 4:00 and 6:00 PM. It is during these periods that the most congested traffic conditions occur on an average day.

Traffic conditions were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* Existing traffic conditions are based on new turning-movement counts conducted in January and October 2024.

Scenario 2: *Existing Plus Project Conditions.* Existing plus project traffic volumes were estimated by adding to existing traffic volumes the trips associated with the proposed project.

Scenario 3: *2040 Cumulative Conditions.* Cumulative conditions represent future traffic volumes with all foreseeable development expected to occur by the year 2040 on the future transportation network. Cumulative traffic volumes were based on cumulative traffic projections developed for the Ravenswood Specific Plan Update 3.35M s.f. option without Loop Road. The trips associated with the proposed project were added to the cumulative traffic projections developed for Ravenswood Specific Plan Update to obtain traffic volumes for cumulative plus project conditions. Cumulative plus project conditions were evaluated relative to cumulative no project conditions in order to determine potential adverse effects.

Intersection Operations Analysis Methodology

This section presents the methods used to determine the traffic conditions at the study intersections and the potential adverse operational effects due to the project. It includes descriptions of the data requirements, the analysis methodologies, the applicable intersection level of service standards, and the criteria used to determine adverse effects on intersection operations.

Data Requirements

The data required for the analysis were obtained from new traffic counts, the City of East Palo Alto and field observations. The following data were collected from these sources:

- Existing traffic, bicycle, and pedestrian volumes
- Existing intersection lane configurations
- Existing signal timing and phasing

Analysis Methodologies and Level of Service Standards

Traffic conditions 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 forced-flow conditions with extreme delays. The City of East Palo Alto level of service standard for all intersections is LOS D or better.

Signalized Intersections

The signalized study intersection was evaluated using the TRAFFIX software based on the *2000 Highway Capacity Manual (HCM)* methodology. The *2000 HCM* evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. Table 1 shows the level of service definitions for signalized intersections.

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. The HCM 6th Editions uses the same LOS definitions for signalized intersections.

Unsignalized Intersections

Peak-hour levels of motor vehicle delay at the stop-controlled study intersection were estimated using the method described in Chapter 17 of the *2000 HCM*. With this method, operations are defined by the average control delay per vehicle (measured in seconds) for each movement that must yield the right-of-way. For all-way stop-controlled intersections, the reported delay (and LOS) is the average for all movements. Table 2 summarizes the relationship between average control delay per vehicle and LOS for stop-controlled intersections.

Table 2
Unsignalized Intersection Level of Service Definitions Based on Average 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. The HCM 6th Editions uses the same LOS definitions for unsignalized intersections.

City of East Palo Alto Definition of Adverse Intersection Effects

The City of East Palo Alto assesses motor vehicle delays using a level of service standard of LOS D for intersections. Specifically, an adverse effect on intersection operations would occur at an intersection if for any peak hour the project would result in any of the following:

At a signalized intersection, the project is considered to have an adverse effect if it:

- a) Causes operations to degrade from LOS D (or better) to LOS E or F; or
- b) Exacerbates LOS E or F conditions by both increasing critical movement delay by four or more seconds and increasing volume-to-capacity ratio (V/C ratio) by 0.01; or
- c) Increases the V/C ratio by > 0.01 at an intersection that exhibits unacceptable operations, even if the calculated LOS is acceptable.

At an unsignalized intersection, the project is considered to have an adverse effect if it:

- a) Causes operations to degrade from LOS D or better to LOS E or F; or
- b) Exacerbates LOS E or F conditions by increasing control delay by five or more seconds; and
- c) Causes volumes under project conditions to exceed the Caltrans Peak-Hour Volume Warrant Criteria.

Report Organization

This report has a total of four chapters. Chapter 2 describes existing conditions, including the existing roadway network, transit service, bicycle and pedestrian facilities, and intersection operations. Chapter 3 describes the CEQA transportation analysis, including the project VMT impact analysis and mitigation measures to reduce the VMT impact. Chapter 4 describes the local transportation analysis including operations of study intersections, the methods used to estimate project-generated traffic, the project's effect on the transportation system, and an analysis of other transportation issues including transit services, bicycle and pedestrian facilities, and project driveway operations.

2. Existing Conditions

This chapter describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities. The effect of project traffic on existing intersection operations is analyzed as part of the Local Transportation Analysis (Chapter 4).

Existing Roadway Network

Regional access to the project site is provided by US 101.

US 101 is a north-south freeway in the vicinity of the site. US 101 extends northward through San Francisco and southward through San Jose. Within East Palo Alto, US 101 has three general-purpose travel lanes, one high-occupancy vehicle (HOV) lane, and one auxiliary lane in each direction. Access to and from the project study area is provided via interchanges at Embarcadero Road and University Avenue.

Local access to the project site is provided via Pulgas Avenue and East Bayshore Road. These facilities are described below.

Pulgas Avenue is a two-lane north-south neighborhood connector extending from East Bayshore Road in the south to a dead end about 900 feet north of Bay Road. The posted speed limit is 25 mph. Sidewalks are provided along both sides of the street between Oakes Street/Gaillardia Way and Bay Road. South of Oakes Street/Gaillardia Way, sidewalks are provided along the east side of the street. Between East Bayshore Road and Oakes Street/Gaillardia Way, there is a bike lane on the east side of the street. On-street parking is provided along both sides of the street in most locations, however on-street parking is currently not permitted along the project frontage. Pulgas Avenue provides direct access to the project site.

East Bayshore Road is a two-lane east-west frontage road with two disjointed segments directly north of and parallel to US 101. East Bayshore Road extends southward from Saratoga Avenue near Willow Road to Euclid Avenue, where it becomes Donohoe Street. East of University Avenue, East Bayshore Road extends southward from Donohoe Street to San Antonio Road. East Bayshore Road is classified as a connector street and has a posted speed limit of 25 mph. East Bayshore Road has continuous sidewalks on the north side of the street with no on-street parking. East Bayshore Road provides access to the project site via Pulgas Avenue.

Existing Bicycle Facilities

Bicycle facilities in the vicinity of the Plan Area include bike/pedestrian paths, bike lanes, and bike routes. Bike/pedestrian paths (Class I facilities) are off-street paths with exclusive right-of-way for non-motorized transportation used for commuting as well as recreation. Bike lanes (Class II facilities) are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes (Class III) are existing rights-of-way that accommodate bicycles but are not separate from the existing travel lanes. The existing bicycle facilities within the study area are described below and are shown on Figure 3.

The Bay Trail runs roughly parallel to Pulgas Avenue between the Ravenswood Open Space Preserve and San Francisquito Creek's intersection with E. Bayshore Road. The trail can be accessed from Verbena Drive, approximately one-quarter mile southeast of the project site, from Daphne Way, approximately one-half mile southeast of the project site, or from O'Connor Street, approximately one-half mile northeast of the project site. There is also a bridge for pedestrians and bicycles to cross US 101 at Clarke Avenue and Newell Road. A two-way cycle track is found on the west side of Clarke Avenue between the US 101 crossing and Tinsley Street.

Within the immediate project vicinity, striped bike lanes are present on Pulgas Avenue south of Oakes Street. In the northbound direction, the Pulgas Avenue bike lane is provided along the entire segment between East Bayshore Road and Oakes Street. In the southbound direction, the Pulgas Avenue bike lane ends approximately 100 feet north of the project site, and bike route markings (sharrows) continue south to East Bayshore Road. O'Connor Street also has bike lanes between Pulgas Avenue and Clarke Avenue. The project will provide a bike lane along the project frontage on the west side of Pulgas Avenue. This measure will encourage residents to bike to nearby destinations and is consistent with the East Palo Alto Bicycle Transportation Plan.

Hexagon conducted bicycle counts at the study intersection and determined that bicycle volumes at the study intersection are quite low. All bicycle counts are included in Appendix A.



Figure 3
Existing Bicycle Facilities

Existing Pedestrian Facilities

The pedestrian facilities within the study area include sidewalks along many of the streets and striped crosswalks at major intersections. Sidewalks are present along the north side of East Bayshore Road and on both sides of Pulgas Avenue with the exception of the project frontage on the west side of Pulgas Avenue and extending approximately 100 feet to the north. Pedestrians also have access to the Bay Trail east of the project site.

The intersection of Pulgas Avenue and East Bayshore Road has a marked crosswalk on only the north leg (Pulgas Avenue). Crosswalks are not needed on the east and west approaches because the US 101 freeway directly abuts East Bayshore Road so there is no sidewalk on the south side of the street. The intersection of Pulgas Avenue and Camellia Drive operates under all-way-stop control and has marked crosswalks across the south and east legs, which would facilitate residents walking to and from the Bay Trail via Verbena Drive. The two-way stop-controlled intersection of Pulgas Avenue and Oakes Street has marked crosswalks across the west and south legs. A crosswalk is also missing at the south approach at the Pulgas/O'Connor intersection.

The project proposes to construct a seven-foot sidewalk along the project frontage and will construct a multi-use sidewalk/bike lane north of the project site to connect to the existing sidewalk to provide a safe and comfortable pedestrian connection to the Pulgas/Oakes intersection, where bus stops are located, to facilitate multimodal transportation options.

Existing Transit Services

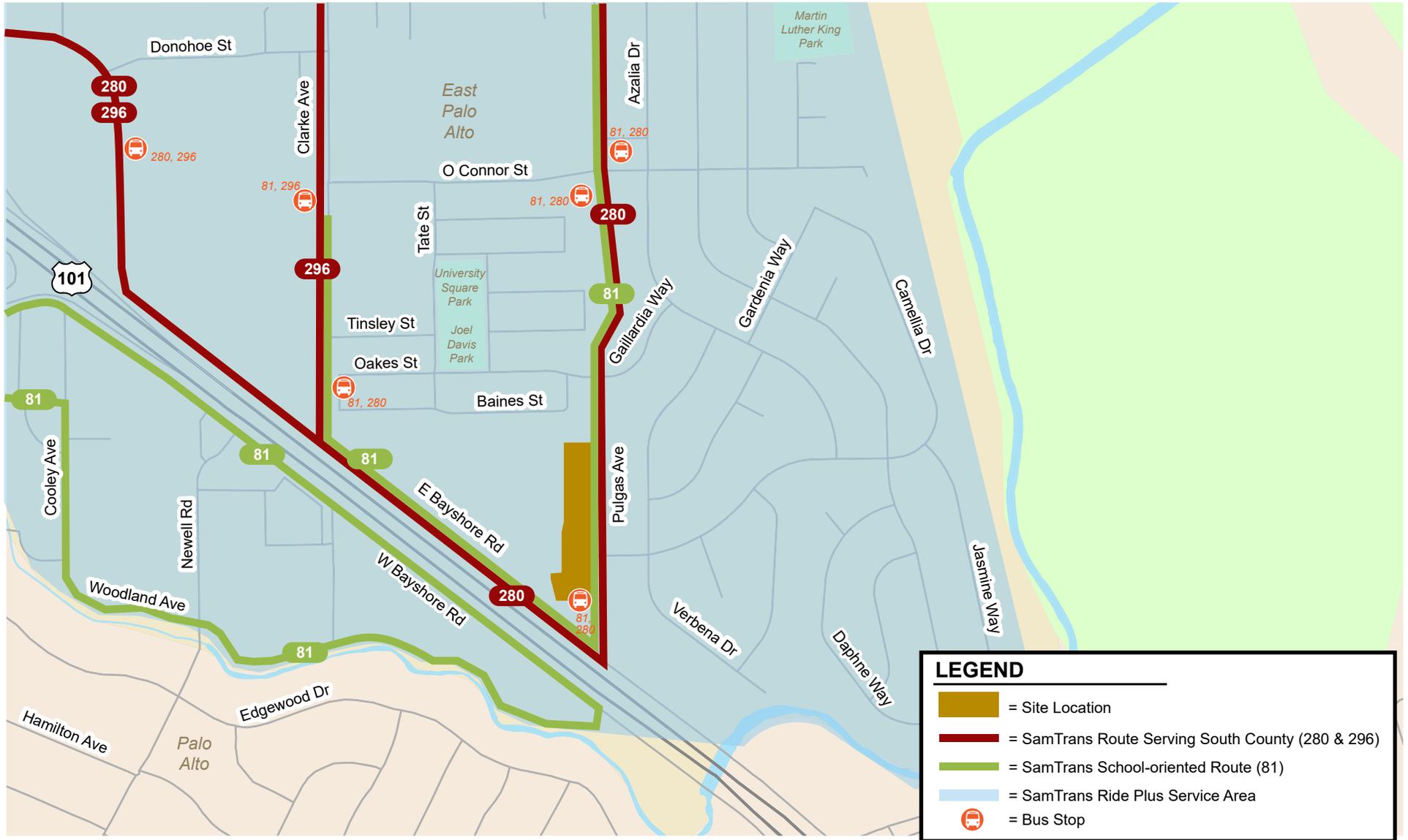
Existing bus service to the study area is provided by the San Mateo County Transit District (SamTrans). SamTrans provides bus service within East Palo Alto and throughout San Mateo County. The closest bus stop to the project site is located on Pulgas Avenue at East Bayshore Road approximately 200 feet south of the proposed residential development. This bus stop serves SamTrans Routes 81 and 280. Residents may also access SamTrans Route 296 at a bus stop on Clarke Avenue at O'Connor Street approximately 0.5 miles away. Access between this bus stop and the project site is provided via sidewalks on Pulgas Avenue, Oakes Street, Tate Street, Tinsley Street, and Clarke Avenue. The existing SamTrans service¹ in the project vicinity is described below and shown on Figure 4. The closest bus stops within walking distance of the project site are also shown on Figure 4.

SamTrans Route 81. Route 81 is a school-oriented route that provides service between various neighborhoods in East Palo Alto, Menlo Park, and Atherton. There is one run at the Pulgas/East Bayshore stop in the morning and two runs in the afternoon except for on Thursday afternoon, which only has one run.

SamTrans Route 280. Route 280 operates between the University Village neighborhood at the intersection of Purdue Avenue and Fordham Street and the Palo Alto Transit Center via University Avenue and Pulgas Avenue with 70-minute headways during the weekday hours of 5:30 AM to 11:00 PM.

SamTrans Route 296. Route 296 provides service between the Redwood City Transit Center and the Ravenswood 101 retail center with 15-minute headways during the weekday hours of 5:15 AM to 11:00 PM. Within the project vicinity, Route 296 operates on Clarke Avenue and East Bayshore Road.

¹ SamTrans routes and schedule effective February 23, 2025. Samtrans.com accessed on February 26, 2025.



LEGEND

- = Site Location
- = SamTrans Route Serving South County (280 & 296)
- = SamTrans School-oriented Route (81)
- = SamTrans Ride Plus Service Area
- = Bus Stop

Figure 4
Existing Transit Services

Existing Lane Configurations and Traffic Volumes

The existing intersection lane configurations were obtained from field observations and previous studies (see Figure 5). Existing traffic volumes were obtained from turning movement counts collected on January 23, 2024, and October 1, 2024, between 7:00 and 9:00 AM and between 4:00 and 6:00 PM when area schools were in session. The existing peak-hour intersection volumes are shown in Figure 5. The intersection turning-movement counts conducted for this analysis are presented in Appendix A. The volumes for all study scenarios are included in Appendix B.

Observed Existing Traffic Conditions

Traffic conditions were observed in the field to identify existing operational deficiencies. Field observations conducted on October 3, 2024, revealed the following noteworthy operational issues.

Pulgas Avenue and East Bayshore Road

During the AM peak hour, the eastbound through traffic on East Bayshore Road is extremely heavy. Eastbound traffic at the downstream intersection of East Bayshore Road and Laura Lane spillbacks to Pulgas Avenue and impedes the flow of eastbound through traffic on East Bayshore Road and southbound left-turn traffic from Pulgas Avenue. Eastbound queues extend all the way back to the upstream intersection at Clarke Avenue. Southbound queues on Pulgas Avenue extend beyond Camellia Drive and extend all the way back to Oakes Street/Gaillardia Way. Due to this congestion, it takes multiple green cycles for these movements to clear the intersection.

During the PM peak hour, the westbound through traffic on East Bayshore Road is heavy, however most vehicles clear in a single cycle. Occasionally, it takes two cycles for the westbound traffic to go through the intersection. Up to eight vehicles were observed queuing on southbound Pulgas Avenue but all vehicles clear in one cycle.

Pulgas Avenue and Camellia Drive

During the AM peak hour, the southbound through traffic on Pulgas Avenue is extremely heavy. Southbound queues extend all the way back to Oakes Street/Gaillardia Way. Southbound traffic at the downstream intersection of Pulgas Avenue and East Bayshore Road spillbacks to Camellia Drive and impedes the flow of southbound through traffic on Pulgas Avenue and westbound left-turn traffic from Camellia Drive. Westbound traffic on Camellia Drive constantly extends beyond Verbena Drive and impedes the follow of westbound through traffic on Camellia Drive, the southbound right-turn and northbound left-turn traffic from Verbena Drive.

During the PM peak hour, there were no noticeable operational issues at this intersection.

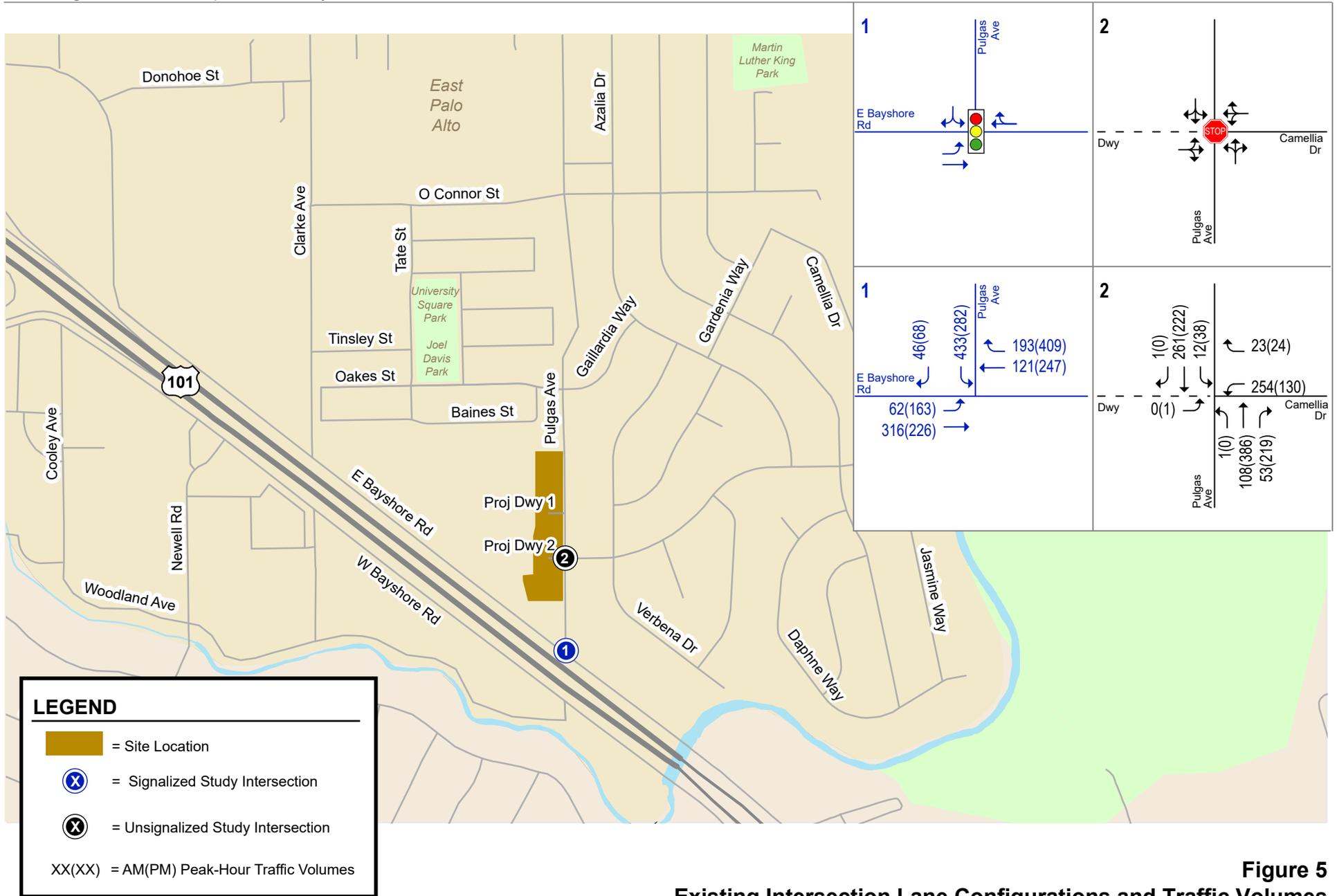


Figure 5
Existing Intersection Lane Configurations and Traffic Volumes

3.

CEQA VMT Analysis

In adherence with State of California Senate Bill 743 (SB 743), the City of East Palo Alto's transportation analysis policy that establishes the thresholds for transportation impacts under CEQA based on VMT instead of intersection LOS. VMT measures the amount of daily vehicle trip making and trip length across the entire system and is usually expressed per person. Using VMT as a metric for transportation analysis incentivizes infrastructure and policies that support modes of transportation besides the vehicle. The intent of this change from LOS to VMT is to shift the focus of transportation analysis under CEQA from vehicle delay and roadway auto capacity to a reduction in vehicle emissions, and to create robust multimodal networks that support integrated land uses. All new projects are required to analyze transportation impacts using the VMT metric.

Screening for VMT Analysis

The City of East Palo Alto VMT Policy establishes screening criteria for **developments that are presumed to have a less than significant impact on VMT and are not required to prepare further VMT analysis**. The City of East Palo Alto VMT Policy provides the following screening criteria based on location, project size, or land use to exempt development projects from conducting a full VMT analysis:

- Small infill developments – **Projects that generate fewer than 110 trips per day.**
- Local Serving Retail – Retail developments containing up to 35,000 gross square feet.
- Affordable Housing – 100% affordable Housing development
- Local-Serving Public Facilities

The **estimated 418 daily vehicle trips generated** by the proposed project exceeds the 110 daily trip threshold used to define small projects. The project would not contain 100% affordable housing. Therefore, the project does not meet any of the VMT screening criteria.

VMT Analysis

Based on the City's VMT Guidelines, a proposed project exceeding the existing East Palo Alto citywide reference average VMT per capita shall be presumed to cause a significant transportation impact. Due to the City's small size and lack of rail transit service, the project-generated VMT for all residential developments are assumed to be equal to the citywide average home-based VMT per capita.

Based on Section 10.32.090 (F) of the Municipal Code, residential developments are required to achieve a 40 percent reduction from baseline conditions in average daily trips. The project will implement a TDM program that includes planning and design measures that encourage walking, biking, and the use of transit measures for reducing single-occupant vehicle trips and encouraging residents to use alternative modes of transportation. The TDM Plan will include an implementation strategy and a

monitoring system. The proposed TDM measures (see Table 3) will reduce the project VMT to a less than significant level. The TDM Plan will be submitted to the City during the development review process.

**Table 3
Proposed TDM Measures**

TDM Measure	Implementation Responsibility
<p>Affordable Housing</p> <p>9 Inclusionary Units (20% of 46 units base density)</p>	<p>Building Developer</p>
<p>Program Administration</p> <p>Designate a TDM Coordinator</p> <p>Orientation, education or materials distribution of transit, wayfinding and other TDM information and programs to new residents as they move in and annually to all residents</p>	<p>Homeowners' Association</p> <p>Homeowners' Association</p>
<p>Proximity to Commercial Uses</p> <p>Provide on-site amenities (gym, dog park, dog washing station)</p>	<p>Building Developer</p>
<p>Participation in Commute.Org</p> <p>Certified participation in Commute.org Certified Developer Program</p>	<p>Building Developer and Homeowners' Association</p>
<p>Bicycle Facilities</p> <p>Bicycle parking</p> <p>Bicycle repair station</p>	<p>Building Developer</p> <p>Building Developer</p>
<p>Access Improvements</p> <p>New sidewalk and bike lane along project frontage and extending approx. 100 ft. to the north to connect with existing facilities</p>	<p>Building Developer</p>
<p>Delivery Amenities</p> <p>Central mail and package delivery area</p>	<p>Building Developer</p>
<p>Family-Supportive Amenities</p> <p>On-site secure storage for car seats, strollers, and cargo bikes</p>	<p>Building Developer</p>

4. Local Transportation Analysis

This chapter describes the local transportation analysis including the method by which project traffic is estimated, any adverse effects to intersection level of service caused by the project under existing and cumulative conditions, intersection vehicle queuing analysis, site access review, effects on bicycle, pedestrian, and transit facilities, and parking.

Intersection Operations Analysis

The intersection operations analysis is intended to quantify the operations of the study intersections and to identify potential adverse effects due to the addition of project traffic. Information required for the intersection operations analysis related to project trip generation, trip distribution, and trip assignment are presented in this section. The study intersections are evaluated based on the City's intersection analysis methodology and standards in determining potential adverse operational effects due to the project, as described in Chapter 1.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are 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 entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific streets and intersections. These procedures are described below.

Trip Generation

Through empirical research, data have been collected that quantify the amount of traffic produced by common land uses. Thus, for the most common land uses there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from a new development. The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates by the size of the development. For the proposed project, the trip generation rates published in the Institute of Transportation Engineers' (ITE) manual entitled *Trip Generation Manual, 11th Edition* (2019) for "Single-Family Attached Housing - in a General Urban/Suburban area" (Land Use 215) were used. Based on the published trip rates, the project is expected to generate 446 daily trips (see Table 4).

The City of East Palo Alto requires new nonresidential developments greater than 10,000 square feet and new residential developments with 10 or more units to implement a Transportation Demand

Management (TDM) program that achieves a 40 percent daily trip reduction from ITE trip estimates. The proposed project would construct 58 townhomes; therefore, the project would be subject to the TDM requirements expressed in the City’s Code (Municipal Code Section 10.32.040).

The project would receive credit for trips generated by the existing uses on the site. Currently, the project site is occupied by four single family housing units. Trips generated by the existing single-family houses were estimated based on the ITE rates for Land Use Code 210 "Single-Family Detached Housing in a General Urban/Suburban area".

After applying the TDM trip reduction and existing trip credits, the proposed residential development is expected to generate a net total of 213 daily trips with 13 trips (4 in and 9 out) during the AM peak hour and 15 trips (8 in and 7 out) during the PM peak hour (see Table 4).

**Table 4
Project Trip Generation Estimates**

Land Use	Size	Daily Rate	Daily Trips	AM Peak Hour			PM Peak Hour				
				Rate	In	Out	Total	Rate	In	Out	Total
Proposed											
Townhomes ¹	58 d.u.	7.20	418	0.48	9	19	28	0.57	19	14	33
	<i>40% TDM Reductions</i>		(167)		(4)	(8)	(12)		(8)	(6)	(14)
Proposed Total			251		5	11	16		11	8	19
Existing											
Single-Family Dettached Housing ²	4 d.u.	9.43	(38)	0.70	(1)	(2)	(3)	0.94	(3)	(1)	(4)
Net Project Trips			213		4	9	13		8	7	15

Notes

d.u. = dwelling units

¹ Trip generation rates for the proposed project are based on the ITE's *Trip Generation Manual, 11th Edition* rates for Land Use Code Land Use Code 215 "Single-Family Attached Housing in a General Urban/Suburban area."

² Trip generation rates for the existing use are based on the ITE's *Trip Generation Manual, 11th Edition* rates for Land Use Code Land Use Code 210 "Single-Family Detached Housing in a General Urban/Suburban area."

Trip Distribution and Assignment

The trip distribution pattern for the proposed project was estimated based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. The project trip distribution pattern is shown on Figure 6. The project trips were assigned to the roadway network based on the directions of approach and departure, the roadway network connections, and the location of project driveways. Figure 6 also presents the assignment of the net project trips at the study intersection.

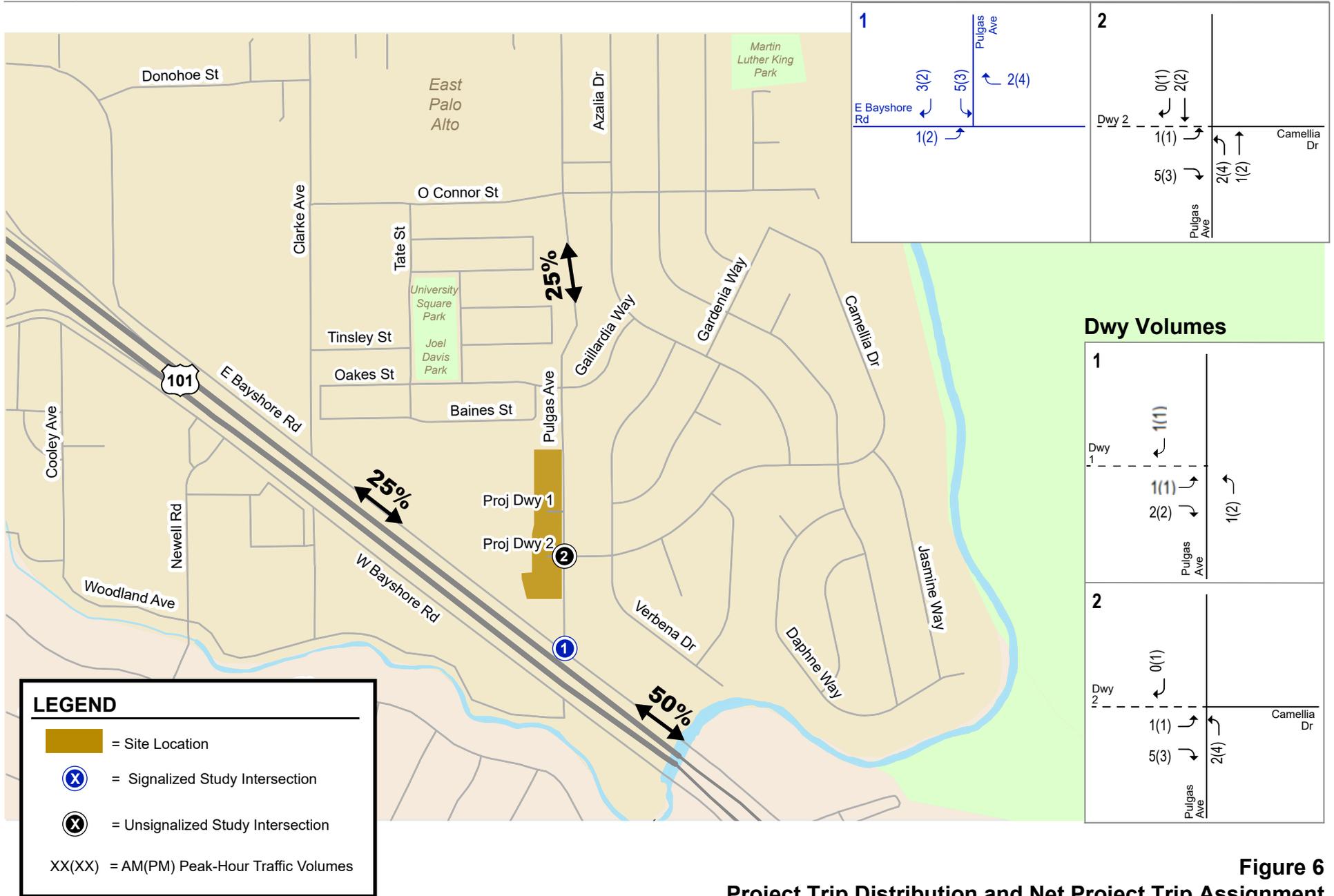


Figure 6
Project Trip Distribution and Net Project Trip Assignment

Existing Conditions

The existing lane configurations at the study intersections and existing traffic volumes are shown in Figure 5.

As discussed in Chapter 3 – Existing Field Observations, during the AM peak hour, the eastbound through traffic on East Bayshore Road is extremely heavy. Eastbound traffic at the downstream intersection at East Bayshore Road and Laura Lane spillbacks to Pulgas Avenue and impedes the flow of eastbound through traffic on East Bayshore Road and southbound left-turn traffic from Pulgas Avenue. Eastbound queues extend all the way back to the upstream intersection at Clarke Avenue. At the intersection of Pulgas Avenue and Camellia Drive, the southbound through traffic on Pulgas Avenue is extremely heavy. Southbound traffic at the downstream intersection at Pulgas Avenue and East Bayshore Road spillbacks to Camellia Drive and impedes the flow of southbound through traffic on Pulgas Avenue and westbound left-turn traffic from Camellia Drive. Therefore, the turning movement counts during the AM peak hour at both study intersections only reflect the vehicles that passed through the intersections and do not reflect the actual traffic demand.

To reflect the actual traffic demand at the intersection of Pulgas Avenue and East Bayshore Road, the intersection level of service calculations include initial observed queues for the southbound left turn and eastbound through movements based on the *Initial Queue Delay Calculation* method included in the 2000 *HCM*. At the unsignalized intersection of Pulgas Avenue and Camellia Drive, the HCM method does not have any way of directly accounting for initial queues. To account for the initial queues at this intersection, delay adjustment factors were applied for all movements on the southbound and westbound approaches.

The results of the intersection level of service analysis with these adjustments (see Table 5) are consistent with field observations and show that the intersection at Pulgas Avenue and East Bayshore Road is operating at unacceptable LOS E and the unsignalized intersection of Pulgas Avenue and Camellia Drive is operating at an acceptable LOS D during the AM peak hour. During the PM peak hour, both study intersections operate at acceptable levels of service. The intersection level of service calculation sheets for the project are included in Appendix C.

Table 5
Existing Intersection Levels of Service

#	Intersection	LOS Standards	Peak Hour	Count Date	Existing	
					Avg. Delay (sec/veh)	LOS
1	Pulgas Avenue and East Bayshore Road	D	AM	1/23/24 *	69.7	E
			PM	1/23/24	24.2	C
2	Pulgas Avenue and Camellia Drive (All-way Stop)	D	AM	10/1/24 *	27.0	D
			PM	10/1/24	16.0	C

Notes:

* The turning movement counts during the AM peak hour only reflect the vehicles that passed through the intersections and do not reflect the actual traffic demand. Initial queues or delay adjustment factors were applied when calculating the LOS and delay at the study intersections to account for the observed congestion.

Existing Plus Project Conditions

The roadway network under existing plus project conditions would be the same as existing conditions because there are no planned and funded transportation improvements at the study intersections that would alter the existing intersection lane configurations, and the project would not alter the existing intersection lane configurations.

Existing Plus Project Traffic Volumes

Project trips, as represented in the above project trip assignment, were added to existing traffic volumes to obtain existing plus project traffic volumes (see Figure 7).

Existing Plus Project Intersection Levels of Service

The analysis of intersection levels of service under existing plus project conditions in the AM peak hour uses the same special adjustment factors as the analysis of existing conditions. The results of the LOS analysis under existing plus project conditions are shown in Table 6. During the AM peak hour, the intersection of Pulgas Avenue and East Bayshore Road would continue operating at an unacceptable LOS E and the project trips would cause a minimal increase in the average delay considering all movements (+0.1 seconds). However, since the project would not cause the critical-movement delay at this intersection to increase by four or more seconds and would not increase volume-to-capacity ratio (V/C ratio) by 0.01 compared to existing conditions, the project would not have an adverse effect on the operation of this intersection. The other study intersection at Pulgas Avenue and Camellia Drive would continue to operate at an acceptable LOS D during the AM peak hour under existing plus project conditions.

During the PM peak hour, both study intersections would continue operating at an acceptable level of service. The intersection level of service calculation sheets are included in Appendix C.

**Table 6
Existing Plus Project Intersection Levels of Service**

#	Intersection	LOS Standards	Peak Hour	Existing		Existing Plus Project			
				Avg Delay (sec/veh)	LOS	Avg Delay (sec/veh)	LOS	Incr. In Crit. Delay (sec)	Incr. In Crit. V/C
1	Pulgas Avenue and East Bayshore Road	D	AM	69.7	E	69.8	E	0.5	0.007
			PM	24.2	C	24.6	C	0.5	0.008
2	Pulgas Avenue and Camellia Drive (All-way Stop)	D	AM	27.0	D	27.1	D	0.0	0.002
			PM	16.0	C	16.5	C	0.4	0.011



Figure 7
Existing Plus Project Traffic Volumes

Cumulative Conditions

Cumulative Transportation Network

The transportation network under cumulative conditions is assumed to be the same as existing conditions because there are no planned and funded transportation improvements at the study intersections.

Cumulative Traffic Volumes

Cumulative conditions reflect trips generated by all foreseeable development expected to occur by the year 2040. Cumulative traffic volumes (see Figure 8) were based on cumulative traffic projections developed for Ravenswood Specific Plan Update 3.35M s.f. option without Loop Road. Cumulative plus project peak-hour traffic volumes were estimated by adding to cumulative traffic volumes the additional traffic generated by the project. The cumulative plus project traffic volumes are shown in Figure 9. Peak-hour intersection volumes for the study intersections are tabulated in Appendix B.

Cumulative Conditions Intersection Levels of Service

Cumulative plus project conditions were evaluated relative to cumulative no-project conditions in order to determine potential project effects. The analysis of cumulative intersection levels of service uses the same special adjustment factors for the AM peak hour as the analysis of existing conditions. Cumulative level of service results are shown in Table 7. The intersection levels of service calculation sheets are included in Appendix C.

During the AM peak hour, the intersection of Pulgas Avenue and East Bayshore Road would continue operating at an unacceptable LOS E and the project trips would cause a minimal increase in the average delay considering all movements (+0.1 seconds). However, since the project would not cause the volume-to-capacity ratio (V/C ratio) to increase by more than 0.01 compared to cumulative no project conditions, the project would not have an adverse effect on the operation of this intersection. The other study intersection at Pulgas Avenue and Camellia Drive would continue to operate at an acceptable LOS D during the AM peak hour under cumulative plus project conditions.

During the PM peak hour, both study intersections are expected to continue operating at an acceptable level of service.

Table 7
Cumulative Condition Intersection Levels of Service

#	Intersection	LOS Standards	Peak Hour	Cumulative No Project		Cumulative Plus Project			
				Avg Delay (sec/veh)	LOS	Avg Delay (sec/veh)	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1	Pulgas Avenue and East Bayshore Road	D	AM	72.8	E	72.9	E	0.6	0.007
			PM	49.5	D	51.0	D	1.8	0.007
2	Pulgas Avenue and Camellia Drive (All-way Stop)	D	AM	27.4	D	27.5	D	0.1	0.007
			PM	30.9	D	32.6	D	1.7	0.013



Figure 8
Cumulative No Project Traffic Volumes



Figure 9
Cumulative Plus Project Traffic Volumes

Vehicular Site Access and Circulation

A review of the project site plan was performed to determine whether adequate site access and circulation would be provided. The review is based on the site plan prepared by RG Architecture dated March 3, 2025.

Project Driveway Operations

Two project driveways would provide access to and from the underground parking garage; one located directly opposite Camellia Drive and the other located approximately 350 feet north of the Pulgas/Camellia intersection. Upon completion of the project, five project trips are expected at the north driveway (two inbound and three outbound) during the AM peak hour and six trips (three inbound and three outbound) are expected during the PM peak hour, while eight project trips are expected at the south driveway opposite Camellia Drive (two inbound and six outbound) during the AM peak hour and nine trips (five inbound and four outbound) during the PM peak hour.

During the AM peak hour, as the field observations show, the southbound through traffic on Pulgas Avenue is extremely heavy. Queues extend on southbound Pulgas Avenue from the downstream intersection at East Bayshore Road beyond Camellia Drive to Oakes Street/Gaillardia Way. The northern project driveway would be consistently blocked by the queues on southbound Pulgas Avenue during the AM peak hour. At locations where there are long stopped queues, drivers frequently cooperate with other vehicles that are attempting to cross the queue (such as an inbound vehicle attempting to turn left into the project site) or join the queue (such as an outbound vehicle turning right out of the project site). Such driver curtesy may be needed to accommodate the few vehicles that may attempt to turn left into the north project driveway during the peak morning commute period. Because the underground parking area would include a continuous drive aisle running the length of the site, residents could use either driveway to enter or exit the site. **It is expected that the majority of residents turning left into the project site would use the south project driveway since it is located at an all-way stop intersection** that would facilitate left turns. During the PM peak hour, there are no noticeable queuing issues on Pulgas Avenue in front of the project site.

North Project Driveway

The project driveway north of the intersection of Pulgas Avenue and Camellia Drive would **operate as a two-way stop intersection**. The intersection levels of service calculation sheets are included in Appendix C.

AM Peak Hour

Under project conditions, there would be few inbound left turns (less than five) during the AM peak hour so it is likely that some vehicles stopped in a queue on southbound Pulgas Avenue will be courteous and let other vehicles cross to enter the project driveway. Similarly, vehicles exiting the site would need to depend on the courtesy of southbound Pulgas Avenue traffic. The level of service analysis indicates that under existing plus project conditions, the inbound left-turn movement from northbound Pulgas Avenue to the north project driveway would experience an average delay of 7.8 seconds per vehicle (LOS A). The outbound movements from the north project driveway to Pulgas Avenue also would have very few trips (less than five) during the AM peak hour and experience an average delay of 10.4 seconds (LOS B). Under cumulative plus project conditions, the inbound left-turn movements would continue to operate at LOS A with an average delay of 7.8 seconds, while the outbound movements would continue to operate at LOS B with an average delay of 11.2 seconds.

PM Peak Hour

There are no noticeable queuing issues on Pulgas Avenue in front of the project site during the PM peak hour. The level of service analysis indicates that under existing plus project conditions, the

inbound left-turn movement from northbound Pulgas Avenue to the north project driveway would have very few trips (<5) and experience an average delay of 7.7 seconds (LOS A). The outbound movements from the north project driveway to Pulgas Avenue also would have very few trips (less than five) during the PM peak hour and experience an average delay of 11 seconds (LOS B). Under cumulative plus project conditions, the level of service for turn movements in and out of the north project driveway would be unchanged with inbound left-turn movements experiencing an average delay of 8.2 seconds (LOS A) and outbound movements experiencing an average delay of 13.1 seconds (LOS B).

South Project Driveway (directly opposite Camellia Drive)

The project driveway at the intersection of Pulgas Avenue and Camellia Drive would operate under all-way stop control. The intersection levels of service calculation sheets are included in Appendix C.

AM Peak Hour

The level of service analysis indicates that outbound vehicles at the project driveway on Camellia Drive would experience LOS A conditions with an average delay of 7.9 seconds per vehicle during the AM peak hour under existing plus project conditions. The northbound left-turn movement from Pulgas Avenue to the project driveway would have very few trips (less than five) during the AM peak hour and experience a delay of 9.1 seconds per vehicle (LOS A). Under cumulative plus project conditions, the outbound vehicles at the project driveway would experience an average delay of 8.5 seconds per vehicle (LOS A) and the northbound left-turn vehicles from Pulgas Avenue to the project driveway would experience a delay of 12.0 seconds per vehicle (LOS B) during the AM peak hour.

PM Peak Hour

The level of service analysis indicates that outbound vehicles at the project driveway would experience LOS A conditions with an average delay of 8.9 seconds per vehicle under existing plus project conditions. The northbound left-turn movement from Pulgas Avenue to the project driveway would experience a delay of 20.3 seconds per vehicle (LOS C). Under cumulative plus project conditions, the outbound vehicles at the project driveway would experience an average delay of 9.7 seconds per vehicle (LOS A) and the northbound left-turn vehicles from Pulgas Avenue to the project driveway would experience a delay of 46.5 seconds per vehicle (LOS E). While the project would add only four northbound left-turn trips and two northbound through trips at the all-way stop-controlled Pulgas/Camellia intersection, the relatively high delay on the northbound Pulgas Avenue approach is primarily due to the increase in through traffic on Pulgas Avenue projected to occur under cumulative conditions. As described above, considering the overall average delay on all approaches, the Pulgas/Camellia intersection would operate at an acceptable level of service, and the project would cause a minimal increase in delay (less than three seconds) on the most congested northbound approach during the PM peak hour.

Sight Distance

The proposed driveway locations were evaluated to determine if the sight distance at the driveways would be adequate. The project driveways should be free and clear of any obstructions to optimize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on adjacent roadways. Any landscaping and signage should be located in such a way as to ensure an unobstructed view for drivers entering and exiting the site. Adequate sight distance reduces the likelihood of a collision at driveways and provides drivers with the ability to locate sufficient gaps in traffic to exit a driveway. Sight distance of a driveway is evaluated based on the stopping sight distance recommended by Caltrans for a given design speed.

The two full-access driveways on Pulgas Avenue would be located along a straight segment of Pulgas Avenue. The speed limit along Pulgas Avenue is 25 mph. The Caltrans recommended stopping sight

distance on Pulgas Avenue is 200 feet for a design speed of 30 mph. The project driveways should be kept free of any signage or landscaping that would block sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on Pulgas Avenue. Currently, there are no roadway curves or tall structures that obstruct a driver's ability to see down the road on Pulgas Avenue. Furthermore, on-street parking would not be permitted on Pulgas Avenue along the project frontage so parked vehicles would not obstruct the vision of exiting drivers. Landscaping should be maintained to a height of no more than 3.5 feet tall to ensure that it does not interfere with the driveway sight distance.

On-Site Circulation

On-site circulation was reviewed in accordance with the City of East Palo Alto Zoning Code and generally accepted traffic engineering standards. On-site parking for the proposed project would be provided via a below grade parking garage with one double-loaded aisle with 90-degree parking spaces for the residences (see Figure 10). The parking garage would have a 24-foot wide drive aisle running north-south, which meets the City of East Palo Alto minimum requirement (24 feet) for drive aisles next to 90-degree parking spaces. The garage plan a dead-end at the north and south ends of the garage without sufficient buffer space adjacent to the last parking space at each dead end. It would be difficult for drivers who park in the last stalls to back out of the stall, complete a three-point turn, and then drive out of the drive aisle. Additional buffer space should be provided next to the last parking spaces in the dead-end aisle to facilitate vehicle maneuvers in and out of these spaces.

The speed ramps (non-parking ramps) to enter and exit the garage are uncovered and have a maximum slope of 20% with 10% transitions on each end. Commonly cited parking publications recommend grades up to 16% on ramps where no parking is permitted, but grades of up to 20% are cited as acceptable when ramps are covered (i.e., protected from weather) and not used for pedestrian walk ways. The final garage ramp design should be reviewed and approved by the Public Works Department.

The proposed project would alter the parking lot of the existing commercial property immediately south of the proposed residential development. The existing commercial parking lot has 26 parking spaces at 90-degrees where spaces are accessed either by a two-way drive aisle or directly off of Pulgas Avenue. The proposed alteration would reduce the number of parking spaces to 12. Five of the spaces (accessed directly from Pulgas Avenue) are existing to remain as is. The two-way drive aisle would shift to be adjacent to the building and six parallel parking spaces would be provided on the north side of the aisle instead of the 90-degree parking spaces. The City's minimum standard dimensions for parallel parking spaces is 9 feet wide and 18 feet long with a 12 foot wide drive aisle. The two-way drive aisle would be 25 feet wide and the new parallel parking spaces would be 9 feet wide by 18 feet long, which meet City standards. One angled parking space is proposed on the west side of the building. A 40-foot diameter turnaround is provided at the end of the drive aisle to facilitate vehicles to turn around. The loading area would remain on the south side of the building, and vehicular circulation around the building would not be permitted.

Emergency Access

The site plan indicates that emergency response vehicles would be able to access the project site from four locations (see Figure 11). The four proposed dead-end roads that provide fire truck access would be 20 feet wide and 71 to 85 feet long. These dead-end roads would not be wide enough for emergency vehicles to turn around on site, so vehicles would have to back into the site or back out onto Pulgas Avenue. Turnaround provisions are not required for dead-end fire apparatus access roads that do not exceed 150 feet long.

The two dead-end roadways at the center of the site will also be accessible to moving vans and delivery vehicles with space for vehicles to stop and load/unload past the end of the fire access

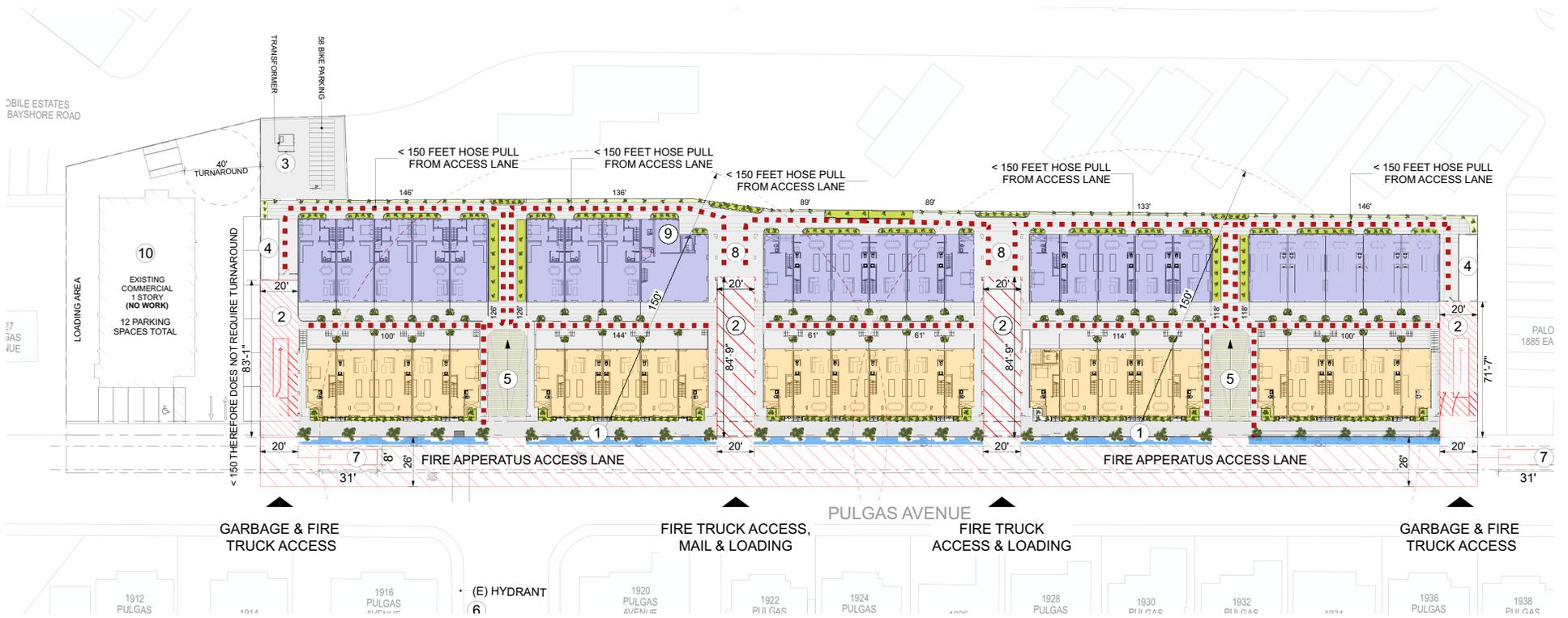


Figure 11
Truck Access and Circulation

roadway near the western edge of the project site. The south central dead-end roadway would also enable mail trucks to access the mail room, which would be located along the western edge of the site. Vehicles accessing these dead-end roadways would have to back into the site or back out onto Pulgas Avenue.

Trash Collection

The site plan shows two trash enclosures, with one located at the north and one located at the south end of the site with access provided via Pulgas Avenue. Thus, all garbage collection activities would occur on site. Trash collection vehicles would have to back into the site or back out onto Pulgas Avenue.

Potential Impacts on Pedestrians, Bicycles and Transit

Pedestrian access to the project site is provided via sidewalks on Pulgas Avenue, East Bayshore Road, and crosswalks at the nearby intersections. The project proposes to construct a seven-foot-wide sidewalk along the project frontage and will construct a multiuse sidewalk/bike lane north of the project site to connect to the existing sidewalk (see Figure 12). Pedestrians also have access to the Bay Trail east of the project site. Exterior pedestrian walkways above garage level would be provided through the site. Stairs would be provided at the south and north ends of the townhome building and elevators would be provided in the middle of the buildings, which would provide pedestrian access from Pulgas Avenue to all the residential units.

Future residents of the project who want to walk to/from the nearby Bay Trail would need use the new sidewalk along the project side of Pulgas Avenue and the crosswalks across the south leg at the intersection of Pulgas Avenue and Camellia Drive.

Within the immediate project vicinity, striped bike lanes are present on Pulgas Avenue south of Oakes Street. In the northbound direction, the Pulgas Avenue bike lane is provided along the entire segment between East Bayshore Road and Oakes Street. In the southbound direction, the Pulgas Avenue bike lane ends approximately 100 feet north of the project site, and bike route markings (sharrows) continue south to East Bayshore Road. O'Connor Street also has bike lanes between Pulgas Avenue and Clarke Avenue. The project will provide a bike lane along the project frontage on the west side of Pulgas Avenue and a multiuse sidewalk/bike lane north of the project site to connect to the existing bike lane. This measure will encourage residents to bike to nearby destinations and is consistent with the East Palo Alto Bicycle Transportation Plan.

Based on the East Palo Alto Bicycle Transportation Plan, adopted in 2017, Class II bike lanes are planned on Pulgas Avenue between Bay Road and E. Bayshore Road, and on Clarke Avenue south of O'Connor Street. A Class III bike route is planned on East Bayshore Road. The project would implement Class II bike lanes along the project frontage on Pulgas Avenue. These proposed bicycle facilities would improve connectivity between the project site and the surrounding areas.

The study area is served by three SamTrans bus routes. The closest bus stop to the project site is located on Pulgas Avenue at East Bayshore Road approximately 200 feet south of the proposed residential development. Residents may also access SamTrans Route 296 at a bus stop on Clarke Avenue at O'Connor Street approximately 0.5 miles away. Access between this bus stop and the project site is provided via sidewalks on Pulgas Avenue, Oakes Street, Tate Street, Tinsley Street, and Clarke Avenue. The existing public transit services are expected to serve the additional trips generated by the proposed project.

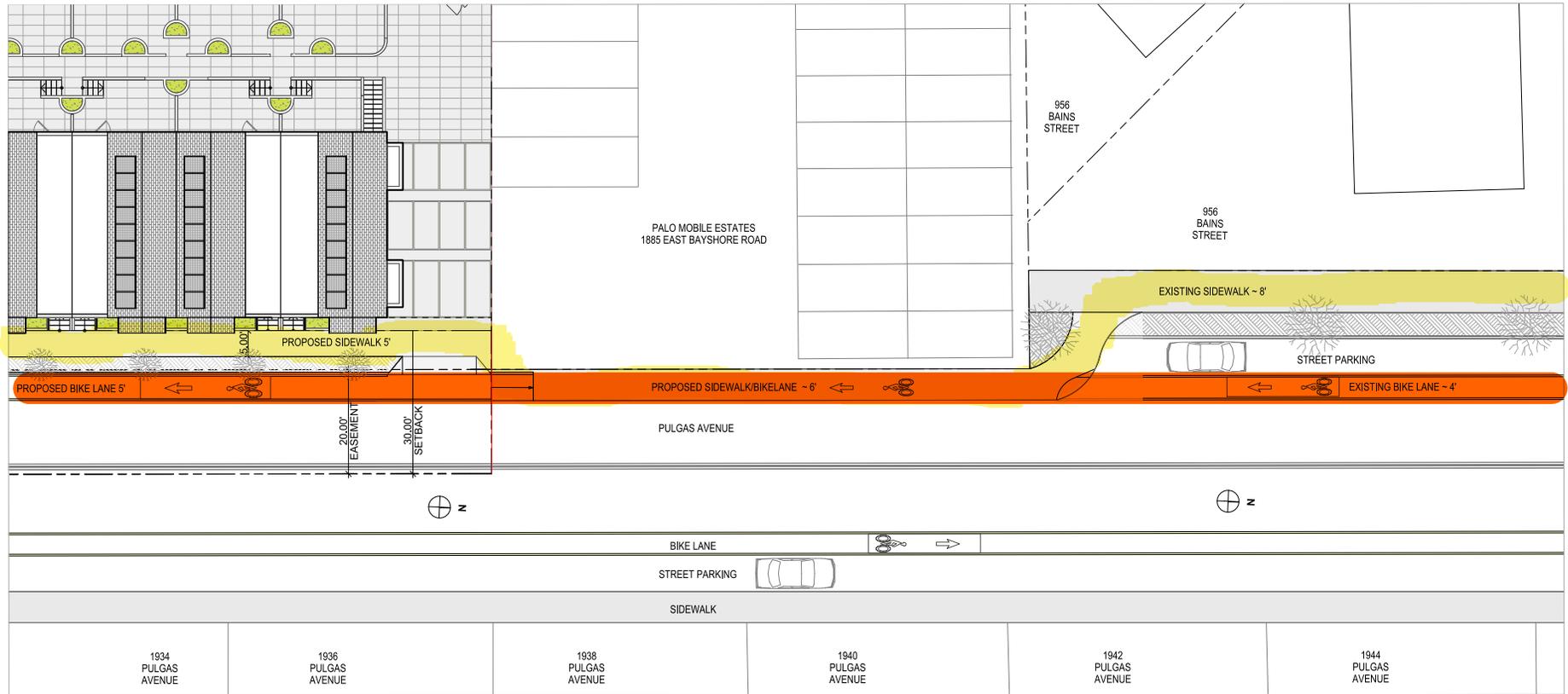


Figure 12
Proposed Sidewalk Connection

Parking

City of East Palo Alto Parking Code Requirements

The required parking supply was determined using the parking rates specified in the East Palo Alto Municipal Code Section 18.30.050 (A). For multiple-unit dwelling developments, the City Code requires 1.0 resident space per studio, 1.5 resident spaces per one-bedroom unit, 1.8 resident spaces per two-bedroom unit, and 2.0 resident spaces per three-bedroom or more unit, plus 0.2 visitor spaces per unit. Based on the proposed plans, the project would include 8 one-bedroom units, 21 three-bedroom units, and 29 four-bedroom units, which would require a total of 124 spaces (112 spaces for residents and 12 spaces for visitors). Based on the proposed garage plan, the project would provide 120 total spaces with 108 residential spaces (which includes 3 ADA spaces) and 12 guest spaces (which includes 1 ADA space), which would not meet the city's standard parking requirement that is typically applied to market-rate residential developments.

Reduced Parking Ratios for Affordable Housing Development

Due to its inclusion of affordable dwelling units, the proposed project would qualify for a density bonus. Based on the East Palo Alto Municipal Code Section 18.36.040 (F), the required parking ratios would be reduced in compliance with Government Code Section 65915(p) as follows:

(p) (1) Except as provided in paragraphs (2) and (3), upon the request of the developer, a city, county, or city and county shall not require a vehicular parking ratio, inclusive of handicapped and guest parking, of a development meeting the criteria of subdivisions (b) and (c), that exceeds the following ratios:

(A) Zero to one bedroom: one onsite parking space.

(B) Two to three bedrooms: one and one-half onsite parking spaces.

(C) Four and more bedrooms: two and one-half parking spaces.

Based on the reduced ratios, the project would be required to provide a total of 112 parking spaces (including spaces for residents and visitors), which equates to 1.93 spaces per unit. The proposed parking supply of 120 spaces, which equates to a ratio of 2.07 spaces per unit, satisfies the reduced parking requirement for affordable housing.

Parking Stall Dimensions

The site plan shows that, with the exception of ADA stalls, all parking stalls on site would measure 8 feet wide by 18 feet long. The City of East Palo Alto Zoning Code (Section 18.30.070.C) states that affordable housing developments granted a density bonus may include up to 50 percent of the required off-street parking spaces as compact spaces. The minimum dimensions for compact spaces are 8 feet wide by 16 feet long. The developer is requesting a waiver to decrease the size of standard stalls below the normal minimum dimensions of 9 feet wide by 18 feet long, to 8 feet wide by 18 feet long.

The accessible ADA stalls would measure 9 feet wide by 18 feet long. Two ADA spaces would share a 6-foot wide access aisle while the other two ADA spaces would each have an access aisle at least 8 feet wide. These stall dimensions would meet ADA standards.

Bicycle Parking

For bicycle parking requirements, the City of East Palo Alto requires facilities to be in compliance with *VTA Bicycle Technical Guidelines*. For general multi-dwelling residential uses, VTA recommends a minimum of 1 long-term bicycle space per unit and 1 short-term bicycle space per 20 units.

Based on the proposed number of units, the project would require 58 long-term bicycle parking spaces and 3 short-term bicycle parking spaces. Based on the proposed plans, the project would include a bike parking area for long-term storage with 58 long-term bicycle parking spaces in the southwest corner of the site and 4 short term bicycle parking spaces along the project frontage on Pulgas Avenue, which would meet the City's standards to be in compliance with VTA Guidelines.

**1933 Pulgas Avenue Residential Development
Transportation Analysis
Technical Appendices**

Appendix A

Traffic Counts

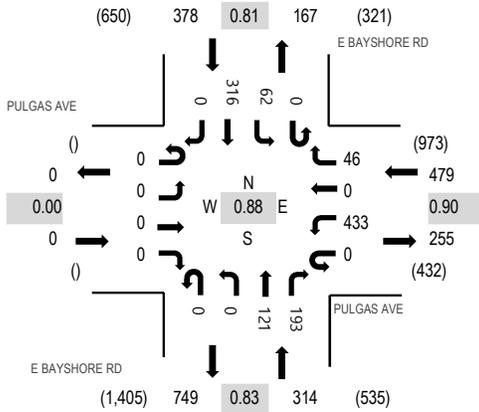
Location: 1 E BAYSHORE RD & PULGAS AVE AM

Date: Tuesday, January 23, 2024

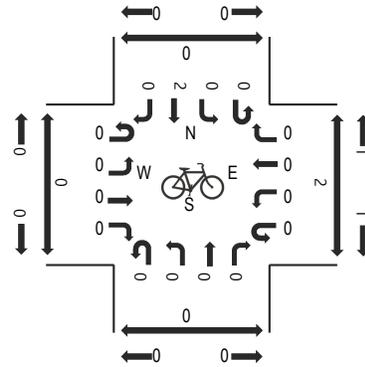
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

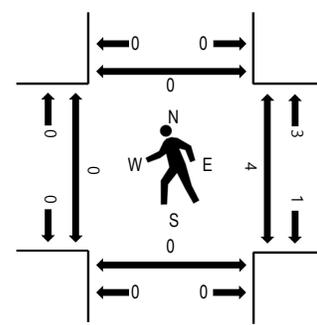
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PULGAS AVE Eastbound				PULGAS AVE Westbound				E BAYSHORE RD Northbound				E BAYSHORE RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	99	0	14	0	0	10	27	0	9	31	0	190	1,068	0	0	0	0
7:15 AM	0	0	0	0	0	134	0	17	0	0	12	28	0	13	46	0	250	1,150	0	0	0	0
7:30 AM	0	0	0	0	0	138	0	12	0	0	30	38	0	17	99	0	334	1,171	0	2	0	0
7:45 AM	0	0	0	0	0	118	0	11	0	0	20	49	0	19	77	0	294	1,137	0	0	0	0
8:00 AM	0	0	0	0	0	82	0	10	0	0	27	51	0	13	89	0	272	1,090	0	1	0	0
8:15 AM	0	0	0	0	0	95	0	13	0	0	44	55	0	13	51	0	271		0	1	0	0
8:30 AM	0	0	0	0	0	118	0	17	0	0	42	39	0	15	69	0	300		0	0	0	0
8:45 AM	0	0	0	0	0	83	0	12	0	0	30	33	0	13	76	0	247		0	2	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	3
Lights	0	0	0	0	0	422	0	44	0	0	117	191	0	58	305	0	1,137
Mediums	0	0	0	0	0	10	0	2	0	0	3	2	0	4	10	0	31
Total	0	0	0	0	0	433	0	46	0	0	121	193	0	62	316	0	1,171

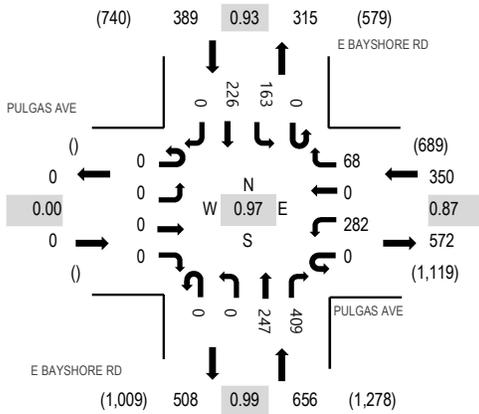
Location: 1 E BAYSHORE RD & PULGAS AVE PM

Date: Tuesday, January 23, 2024

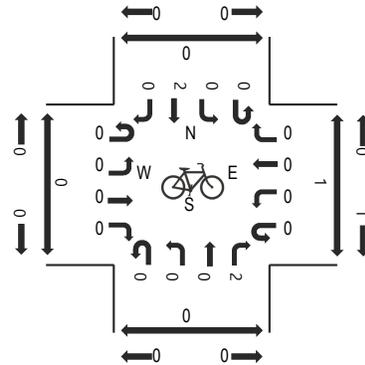
Peak Hour: 04:15 PM - 05:15 PM

Peak 15-Minutes: 04:30 PM - 04:45 PM

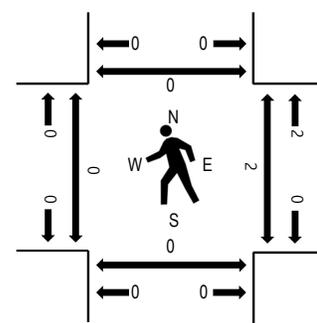
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

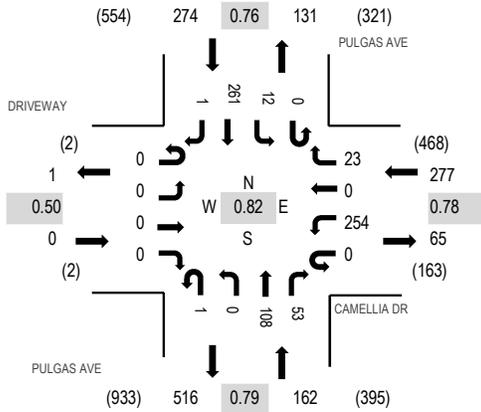
Traffic Counts - Motorized Vehicles

Interval Start Time	PULGAS AVE Eastbound				PULGAS AVE Westbound				E BAYSHORE RD Northbound				E BAYSHORE RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	63	0	16	0	0	50	95	0	34	77	0	335	1,377	0	0	0	0
4:15 PM	0	0	0	0	0	80	0	12	0	0	40	119	0	49	50	0	350	1,395	0	0	0	0
4:30 PM	0	0	0	0	0	67	0	20	0	0	63	94	0	44	70	0	358	1,382	0	2	0	0
4:45 PM	0	0	0	0	0	50	0	16	0	0	82	88	0	40	58	0	334	1,365	0	0	0	0
5:00 PM	0	0	0	0	0	85	0	20	0	0	62	108	0	30	48	0	353	1,330	0	0	0	0
5:15 PM	0	0	0	0	0	76	0	11	0	0	48	116	0	30	56	0	337		0	1	0	0
5:30 PM	0	0	0	0	0	77	0	17	0	0	56	110	0	27	54	0	341		0	0	0	0
5:45 PM	0	0	0	0	0	58	0	21	0	0	45	102	0	33	40	0	299		0	0	0	0

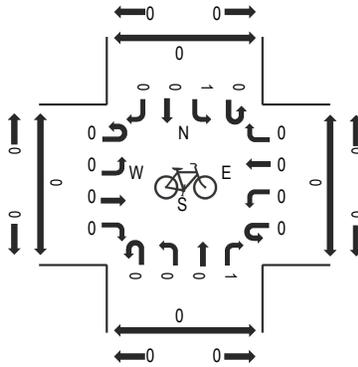
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	281	0	66	0	0	246	406	0	161	226	0	1,386
Mediums	0	0	0	0	0	1	0	2	0	0	1	3	0	2	0	0	9
Total	0	0	0	0	0	282	0	68	0	0	247	409	0	163	226	0	1,395

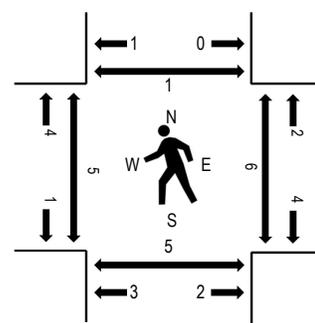
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	DRIVEWAY Eastbound				CAMELLIA DR Westbound				PULGAS AVE Northbound				PULGAS AVE Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	53	0	11	1	0	14	14	0	3	67	0	163	713	2	0	0	0
7:15 AM	0	0	0	0	0	83	0	6	0	0	30	12	0	3	82	1	217	686	1	3	2	1
7:30 AM	0	0	0	0	0	69	0	6	0	0	27	14	0	5	66	0	187	660	0	1	2	0
7:45 AM	0	0	0	0	0	49	0	0	0	0	37	13	0	1	46	0	146	689	2	2	1	0
8:00 AM	0	0	0	0	0	34	0	6	0	0	24	12	0	4	56	0	136	706	0	1	0	0
8:15 AM	0	1	0	0	0	34	0	14	0	0	54	20	0	2	66	0	191		1	1	1	0
8:30 AM	0	0	0	0	0	50	0	7	0	0	43	24	0	12	80	0	216		0	0	0	0
8:45 AM	0	1	0	0	0	41	0	5	0	0	35	21	0	3	56	1	163		0	0	1	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Lights	0	0	0	0	0	253	0	22	1	0	103	49	0	11	254	1	694
Mediums	0	0	0	0	0	1	0	1	0	0	5	4	0	1	6	0	18
Total	0	0	0	0	0	254	0	23	1	0	108	53	0	12	261	1	713



ALL TRAFFIC DATA SERVICES

(303) 216-2439

www.alltrafficdata.net

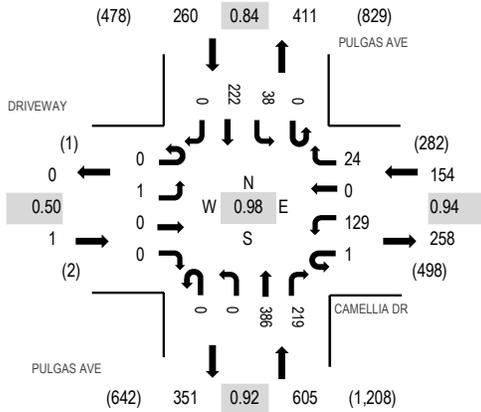
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Date: Tuesday, October 1, 2024

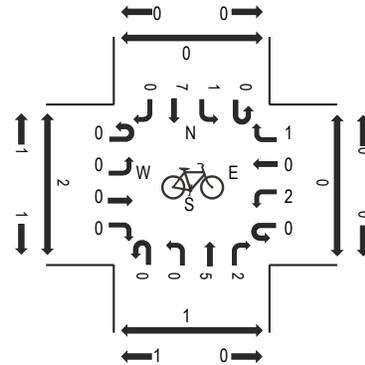
Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 04:30 PM - 04:45 PM

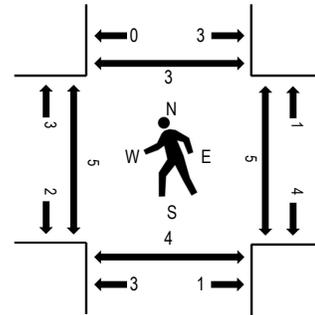
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	DRIVEWAY Eastbound				CAMELLIA DR Westbound				PULGAS AVE Northbound				PULGAS AVE Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	22	0	6	0	1	90	45	0	9	53	0	226	960	0	1	0	0
4:15 PM	0	0	0	0	0	30	0	7	0	0	85	46	0	7	43	0	218	986	1	1	2	0
4:30 PM	0	0	0	0	0	27	0	9	0	0	105	56	0	9	55	0	261	1,020	4	1	3	1
4:45 PM	0	0	0	0	1	30	0	6	0	0	100	49	0	8	61	0	255	1,013	0	0	0	0
5:00 PM	0	0	0	0	0	37	0	3	0	0	85	50	0	13	64	0	252	1,010	0	4	1	2
5:15 PM	0	1	0	0	0	35	0	6	0	0	96	64	0	8	42	0	252		1	0	0	0
5:30 PM	0	1	0	0	0	26	0	6	0	0	116	49	0	8	48	0	254		2	0	2	0
5:45 PM	0	0	0	0	0	24	0	7	0	0	100	71	0	5	45	0	252		3	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	1	0	0	1	129	0	23	0	0	382	217	0	38	218	0	1,009
Mediums	0	0	0	0	0	0	0	1	0	0	4	2	0	0	4	0	11
Total	0	1	0	0	1	129	0	24	0	0	386	219	0	38	222	0	1,020

Appendix B

Volume Summary Tables

City of East Palo Alto
Martin Luther King Park Master Plan LTA

Intersection Number: 1
 Trafix Node Number: 31
 Intersection Name: Pulgas Avenue & East Bayshore Road
 Peak Hour: AM Date of Analysis: 02/24/25
 Count Date: 01/23/24
 Scenario: Residential Future Growth % Per Year for minor Roads:
 (SJ) Growth Factor: 0.000 Future Growth % Per Year for Major Roads:
 (SJ) Number of Months: 0.0 Number of Years to Buildout:

Scenario:	Movements												Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	46	0	433	193	121	0	0	0	0	0	316	62	1171
Proj Trips	3	0	5	2	0	0	0	0	0	0	0	1	11
Existing + Proj	49	0	438	195	121	0	0	0	0	0	316	63	1182
Cumulative No Project Conditions	26	0	471	387	211	0	0	0	0	0	477	26	1598
Cumulative Plus Project Conditions	29	0	476	389	211	0	0	0	0	0	477	27	1609

Intersection Number: 2
 Trafix Node Number: 32
 Intersection Name: Pulgas Avenue & Camellia Drive
 Peak Hour: AM Date of Analysis: 02/24/25
 Count Date: 10/01/24
 Scenario: Residential Future Growth % Per Year for minor Roads:
 (SJ) Growth Factor: 0.000 Future Growth % Per Year for Major Roads:
 (SJ) Number of Months: 0.0 Number of Years to Buildout:

Scenario:	Movements												Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	1	261	12	23	0	254	53	108	1	0	0	0	713
Proj Trips	0	2	0	0	0	5	0	1	2	5	0	1	16
Existing + Proj	1	263	12	23	0	259	53	109	3	5	0	1	729
Cumulative No Project Conditions	1	281	12	23	0	254	53	266	1	0	0	0	891
Cumulative Plus Project Conditions	1	283	12	23	0	259	53	267	3	5	0	1	907

City of East Palo Alto
Martin Luther King Park Master Plan LTA

Intersection Number: 1
 Trafix Node Number: 31
 Intersection Name: Pulgas Avenue & East Bayshore Road
 Peak Hour: PM Date of Analysis: 02/24/25
 Count Date: 01/23/24
 Scenario: Residential Future Growth % Per Year for minor Roads:
 (SJ) Growth Factor: 0.000 Future Growth % Per Year for Major Roads:
 (SJ) Number of Months: 0.0 Number of Years to Buildout:

Scenario:	Movements												Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	68	0	282	409	247	0	0	0	0	0	226	163	1395
Proj Trips	2	0	3	4	0	0	0	0	0	0	0	2	11
Existing + Proj	70	0	285	413	247	0	0	0	0	0	226	165	1406
Cumulative No Project Conditions	62	0	457	567	313	0	0	0	0	0	339	117	1855
Cumulative Plus Project Conditions	64	0	460	571	313	0	0	0	0	0	339	119	1866

Intersection Number: 2
 Trafix Node Number: 32
 Intersection Name: Pulgas Avenue & Camellia Drive
 Peak Hour: PM Date of Analysis: 02/24/25
 Count Date: 10/01/24
 Scenario: Future Growth % Per Year for minor Roads:
 (SJ) Growth Factor: 0.000 Future Growth % Per Year for Major Roads:
 (SJ) Number of Months: 0.0 Number of Years to Buildout:

Scenario:	Movements												Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	0	222	38	24	0	130	219	386	0	0	0	1	1020
Proj Trips	1	2	0	0	0	0	0	2	4	3	0	1	13
Existing + Proj	1	224	38	24	0	130	219	388	4	3	0	2	1033
Cumulative No Project Conditions	0	391	38	24	0	130	219	498	0	0	0	1	1301
Cumulative Plus Project Conditions	1	393	38	24	0	130	219	500	4	3	0	2	1314

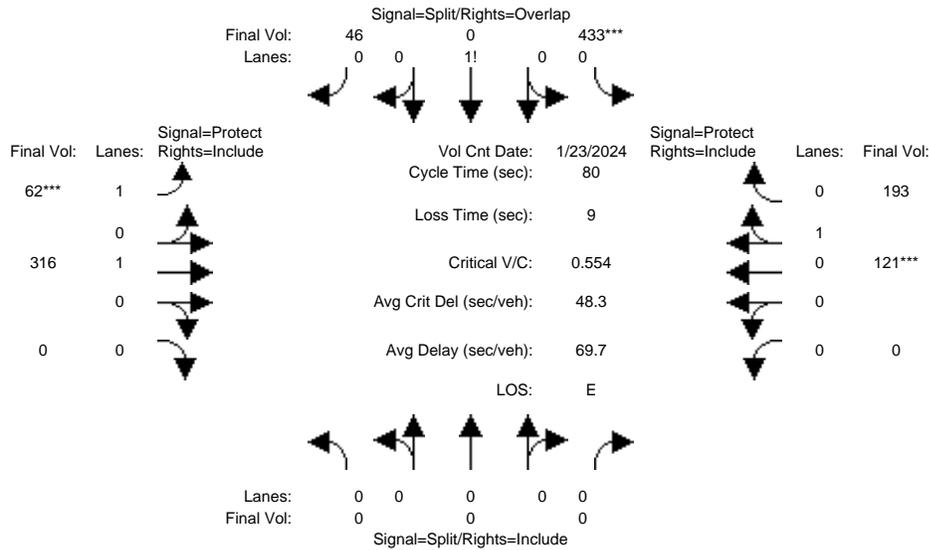
Appendix C

Intersection Level of Service Calculations

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #31: Pulgas Avenue and East Bayshore Road



Street Name:	Pulgas Avenue						East Bayshore Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:	>>	Count	Date:	23 Jan 2024	<<												
Base Vol:	0	0	0	433	0	46	62	316	0	0	121	193					
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Initial Bse:	0	0	0	433	0	46	62	316	0	0	121	193					
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0					
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0					
Initial Fut:	0	0	0	433	0	46	62	316	0	0	121	193					
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Volume:	0	0	0	433	0	46	62	316	0	0	121	193					
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0					
Reduced Vol:	0	0	0	433	0	46	62	316	0	0	121	193					
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
FinalVolume:	0	0	0	433	0	46	62	316	0	0	121	193					

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.93	0.93	0.98	1.00	1.00	0.90	0.90
Lanes:	0.00	0.00	0.00	0.90	0.00	0.10	1.00	1.00	0.00	0.00	0.39	0.61
Final Sat.:	0	0	0	1590	0	169	1769	1862	0	0	658	1049

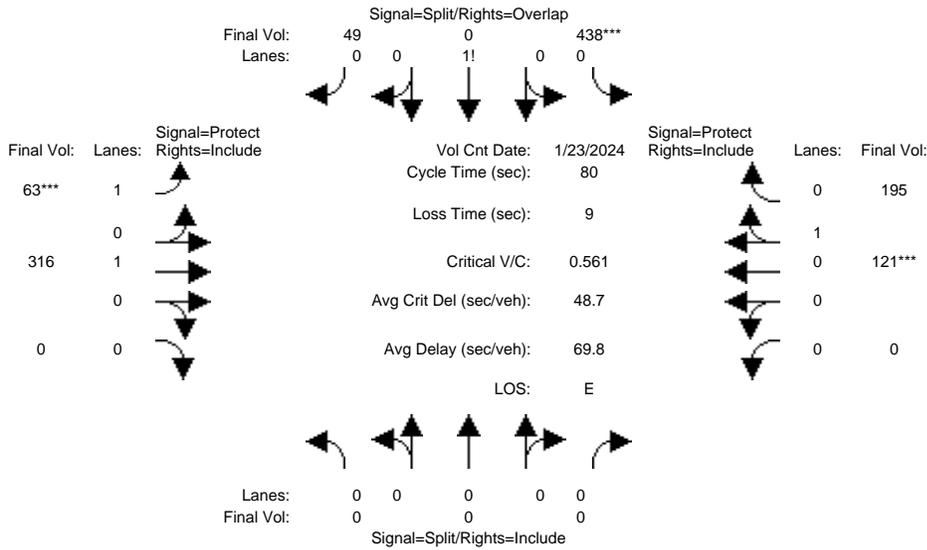
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.27	0.00	0.27	0.04	0.17	0.00	0.00	0.18	0.18
Crit Moves:				****			****			****		
Green/Cycle:	0.00	0.00	0.00	0.37	0.00	0.37	0.09	0.52	0.00	0.00	0.43	0.43
Volume/Cap:	0.00	0.00	0.00	0.74	0.00	0.74	0.40	0.33	0.00	0.00	0.43	0.43
Delay/Veh:	0.0	0.0	0.0	70.8	0.0	26.4	36.2	134	0.0	0.0	16.3	16.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	70.8	0.0	26.4	36.2	134	0.0	0.0	16.3	16.3
LOS by Move:	A	A	A	E	A	C	D	F	A	A	B	B
HCM2kAvgQ:	0	0	0	12	0	12	1	4	0	0	6	6

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex+Proj AM

Intersection #31: Pulgas Avenue and East Bayshore Road



Street Name:	Pulgas Avenue						East Bayshore Road					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:	>>	Count	Date:	23 Jan 2024	<<							
Base Vol:	0	0	0	433	0	46	62	316	0	0	121	193
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	433	0	46	62	316	0	0	121	193
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Proj Trips:	0	0	0	5	0	3	1	0	0	0	0	2
Initial Fut:	0	0	0	438	0	49	63	316	0	0	121	195
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	438	0	49	63	316	0	0	121	195
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	438	0	49	63	316	0	0	121	195
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	438	0	49	63	316	0	0	121	195

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.92	0.93	0.98	1.00	1.00	0.90	0.90
Lanes:	0.00	0.00	0.00	0.90	0.00	0.10	1.00	1.00	0.00	0.00	0.38	0.62
Final Sat.:	0	0	0	1580	0	177	1769	1862	0	0	654	1054

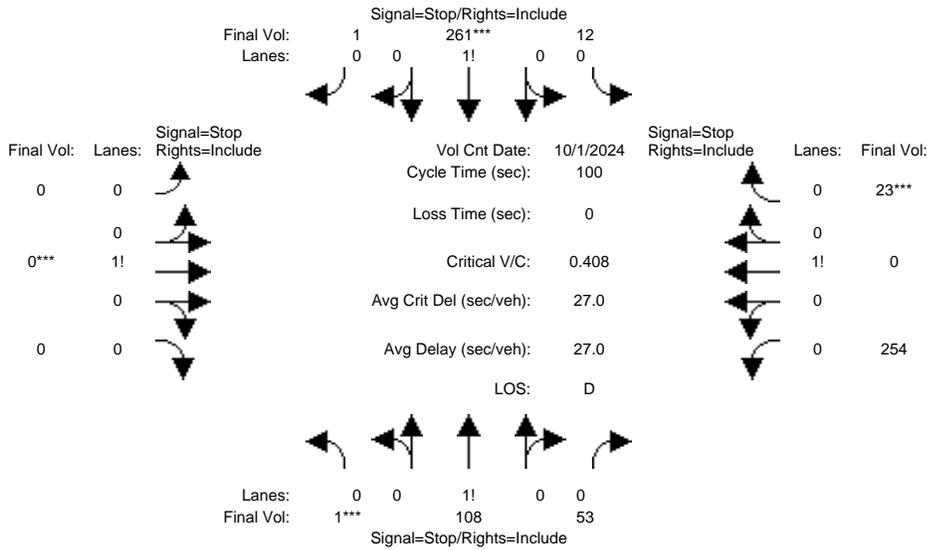
Capacity Analysis Module:													
Vol/Sat:	0.00	0.00	0.00	0.28	0.00	0.28	0.04	0.17	0.00	0.00	0.19	0.19	
Crit Moves:				****				****					
Green/Cycle:	0.00	0.00	0.00	0.37	0.00	0.37	0.09	0.52	0.00	0.00	0.43	0.43	
Volume/Cap:	0.00	0.00	0.00	0.75	0.00	0.75	0.41	0.33	0.00	0.00	0.43	0.43	
Delay/Veh:	0.0	0.0	0.0	71.4	0.0	27.0	36.3	134	0.0	0.0	16.3	16.3	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:	0.0	0.0	0.0	71.4	0.0	27.0	36.3	134	0.0	0.0	16.3	16.3	
LOS by Move:	A	A	A	E	A	C	D	F	A	A	B	B	
HCM2kAvgQ:	0	0	0	12	0	12	1	4	0	0	6	6	

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing AM

Intersection #32: Pulgas Avenue and Camellia Drive



Street Name:	Pulgas Avenue						Camellia Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R

Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
-------------	---	---	---	---	---	---	---	---	---	---	---	---

Volume Module:	>> Count Date: 1 Oct 2024 <<											
Base Vol:	1	108	53	12	261	1	0	0	0	254	0	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	108	53	12	261	1	0	0	0	254	0	23
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	108	53	12	261	1	0	0	0	254	0	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	108	53	12	261	1	0	0	0	254	0	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	108	53	12	261	1	0	0	0	254	0	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	108	53	12	261	1	0	0	0	254	0	23

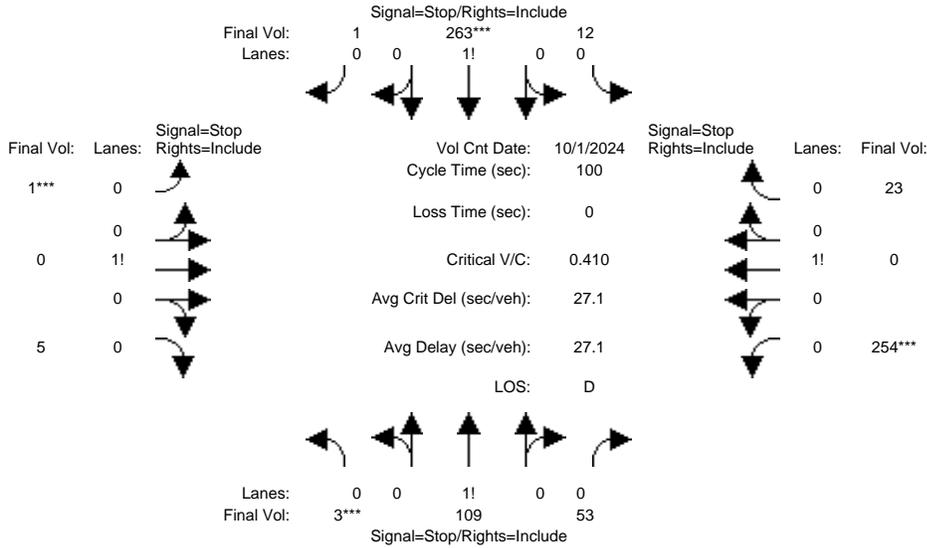
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.66	0.33	0.04	0.95	0.01	0.00	1.00	0.00	0.92	0.00	0.08
Final Sat.:	4	478	235	31	683	3	0	606	0	623	0	56

Capacity Analysis Module:												
Vol/Sat:	0.23	0.23	0.23	0.38	0.38	0.38	xxxx	0.00	xxxx	0.41	xxxx	0.41
Crit Moves:	****				****			****			****	
Delay/Veh:	9.0	9.0	9.0	10.6	10.6	10.6	0.0	0.0	0.0	11.2	0.0	11.2
Delay Adj:	1.00	1.00	1.00	4.00	4.00	4.00	1.00	1.00	1.00	2.00	2.00	2.00
AdjDel/Veh:	9.0	9.0	9.0	42.3	42.3	42.3	0.0	0.0	0.0	22.4	0.0	22.4
LOS by Move:	A	A	A	E	E	E	*	*	*	C	*	C
ApproachDel:		9.0			10.6		xxxxxxx				11.2	
Delay Adj:		1.00			4.00		xxxxxxx				2.00	
ApprAdjDel:		9.0			42.3		xxxxxxx				22.4	
LOS by Appr:		A			E			*			C	
AllWayAvgQ:	0.3	0.3	0.3	0.6	0.6	0.6	0.0	0.0	0.0	0.6	0.6	0.6

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
 Hexagon Transportation Consultants
 City of East Palo Alto
 Level Of Service Computation Report
 2000 HCM 4-Way Stop (Future Volume Alternative)
 Ex+Proj AM

Intersection #32: Pulgas Avenue and Camellia Drive



Street Name:	Pulgas Avenue						Camellia Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R

Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
-------------	---	---	---	---	---	---	---	---	---	---	---	---

Volume Module:	>> Count Date: 1 Oct 2024 <<											
Base Vol:	1	108	53	12	261	1	0	0	0	254	0	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	108	53	12	261	1	0	0	0	254	0	23
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Proj Trips:	2	1	0	0	2	0	1	0	5	0	0	0
Initial Fut:	3	109	53	12	263	1	1	0	5	254	0	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	109	53	12	263	1	1	0	5	254	0	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	109	53	12	263	1	1	0	5	254	0	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	109	53	12	263	1	1	0	5	254	0	23

Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.66	0.32	0.04	0.95	0.01	0.17	0.00	0.83	0.92	0.00	0.08
Final Sat.:	13	470	229	31	681	3	109	0	547	620	0	56

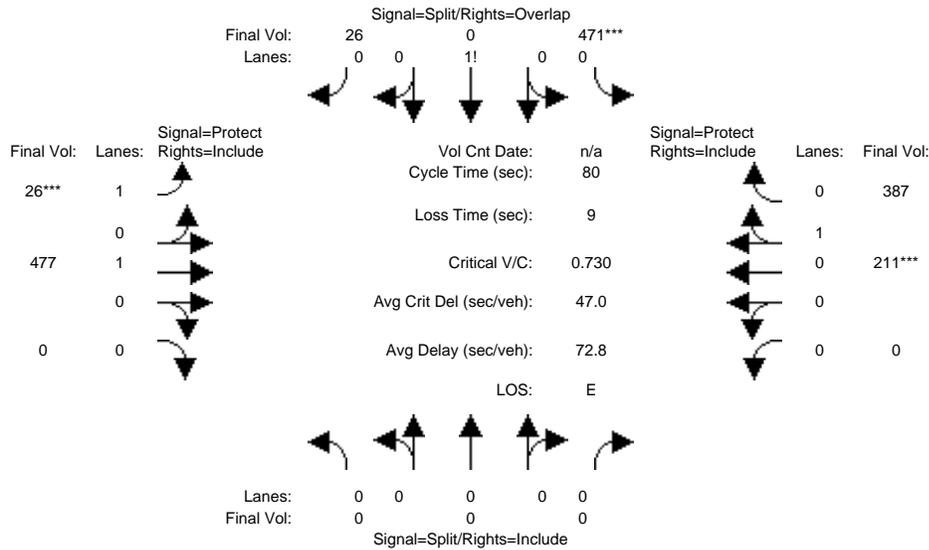
Capacity Analysis Module:												
Vol/Sat:	0.23	0.23	0.23	0.39	0.39	0.39	0.01	xxxx	0.01	0.41	xxxx	0.41
Crit Moves:	****				****		****			****		
Delay/Veh:	9.1	9.1	9.1	10.7	10.7	10.7	7.9	0.0	7.9	11.3	0.0	11.3
Delay Adj:	1.00	1.00	1.00	4.00	4.00	4.00	1.00	1.00	1.00	2.00	2.00	2.00
AdjDel/Veh:	9.1	9.1	9.1	42.7	42.7	42.7	7.9	0.0	7.9	22.6	0.0	22.6
LOS by Move:	A	A	A	E	E	E	A	*	A	C	*	C
ApproachDel:		9.1			10.7			7.9			11.3	
Delay Adj:		1.00			4.00			1.00			2.00	
ApprAdjDel:		9.1			42.7			7.9			22.6	
LOS by Appr:		A			E			A			C	
AllWayAvgQ:	0.3	0.3	0.3	0.6	0.6	0.6	0.0	0.0	0.0	0.6	0.6	0.6

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumul No Proj AM

Intersection #31: Pulgas Avenue and East Bayshore Road



Street Name:	Pulgas Avenue						East Bayshore Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:												
Base Vol:	0	0	0	471	0	26	26	477	0	0	211	387
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	471	0	26	26	477	0	0	211	387
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	471	0	26	26	477	0	0	211	387
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	471	0	26	26	477	0	0	211	387
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	471	0	26	26	477	0	0	211	387
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	471	0	26	26	477	0	0	211	387

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.93	0.93	0.98	1.00	1.00	0.89	0.89
Lanes:	0.00	0.00	0.00	0.95	0.00	0.05	1.00	1.00	0.00	0.00	0.35	0.65
Final Sat.:	0	0	0	1673	0	92	1769	1862	0	0	600	1100

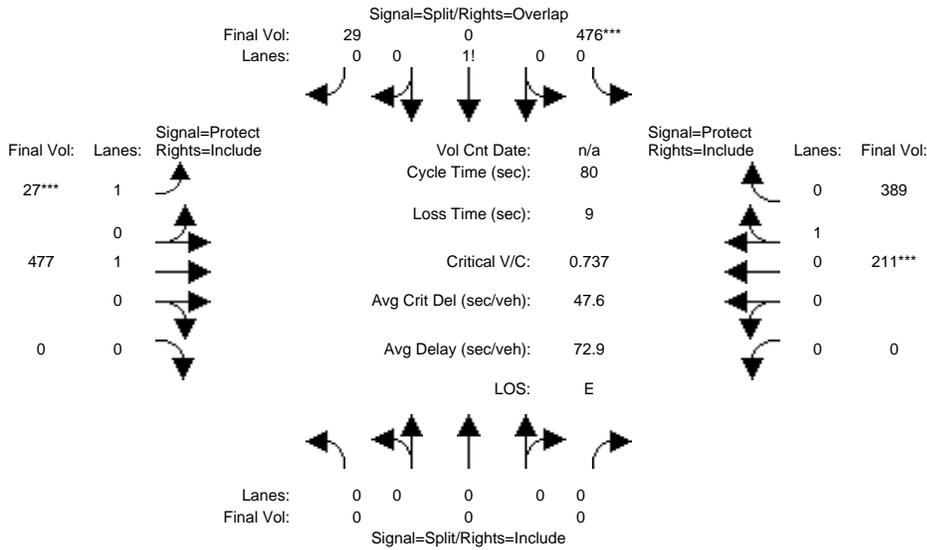
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.28	0.00	0.28	0.01	0.26	0.00	0.00	0.35	0.35
Crit Moves:				****			****			****		
Green/Cycle:	0.00	0.00	0.00	0.37	0.00	0.37	0.09	0.52	0.00	0.00	0.43	0.43
Volume/Cap:	0.00	0.00	0.00	0.76	0.00	0.76	0.17	0.49	0.00	0.00	0.82	0.82
Delay/Veh:	0.0	0.0	0.0	71.7	0.0	27.5	34.3	136	0.0	0.0	27.0	27.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	71.7	0.0	27.5	34.3	136	0.0	0.0	27.0	27.0
LOS by Move:	A	A	A	E	A	C	C	F	A	A	C	C
HCM2kAvgQ:	0	0	0	13	0	13	1	7	0	0	15	15

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumul+Proj AM

Intersection #31: Pulgas Avenue and East Bayshore Road



Street Name:	Pulgas Avenue						East Bayshore Road					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:												
Base Vol:	0	0	0	471	0	26	26	477	0	0	211	387
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	471	0	26	26	477	0	0	211	387
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Proj Trips:	0	0	0	5	0	3	1	0	0	0	0	2
Initial Fut:	0	0	0	476	0	29	27	477	0	0	211	389
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	476	0	29	27	477	0	0	211	389
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	476	0	29	27	477	0	0	211	389
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	476	0	29	27	477	0	0	211	389

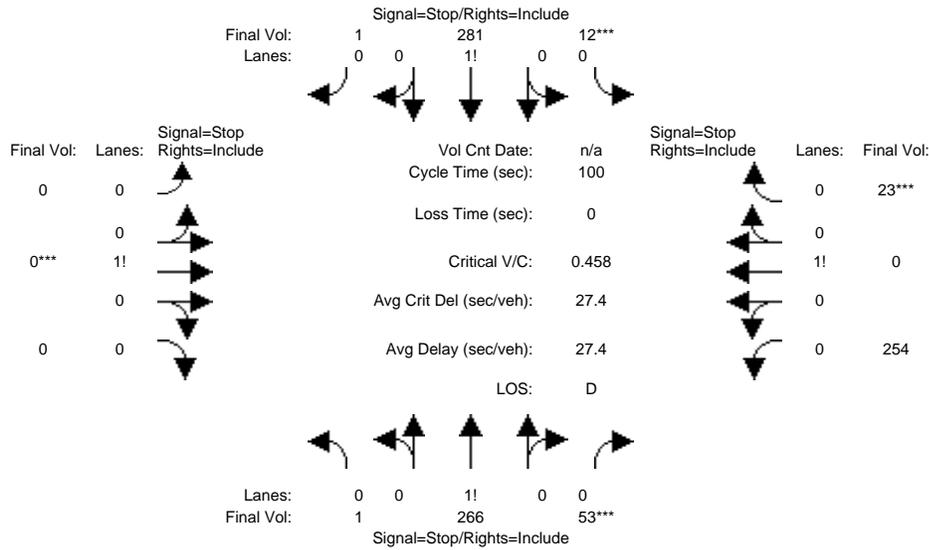
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.93	0.93	0.98	1.00	1.00	0.89	0.89
Lanes:	0.00	0.00	0.00	0.94	0.00	0.06	1.00	1.00	0.00	0.00	0.35	0.65
Final Sat.:	0	0	0	1663	0	101	1769	1862	0	0	598	1102

Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.29	0.00	0.29	0.02	0.26	0.00	0.00	0.35	0.35
Crit Moves:				****			****			****		
Green/Cycle:	0.00	0.00	0.00	0.37	0.00	0.37	0.09	0.52	0.00	0.00	0.43	0.43
Volume/Cap:	0.00	0.00	0.00	0.78	0.00	0.78	0.17	0.49	0.00	0.00	0.82	0.82
Delay/Veh:	0.0	0.0	0.0	72.5	0.0	28.2	34.4	136	0.0	0.0	27.2	27.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	72.5	0.0	28.2	34.4	136	0.0	0.0	27.2	27.2
LOS by Move:	A	A	A	E	A	C	C	F	A	A	C	C
HCM2kAvgQ:	0	0	0	13	0	13	1	7	0	0	15	15

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
 Hexagon Transportation Consultants
 City of East Palo Alto
 Level Of Service Computation Report
 2000 HCM 4-Way Stop (Future Volume Alternative)
 Cumul No Proj AM

Intersection #32: Pulgas Avenue and Camellia Drive

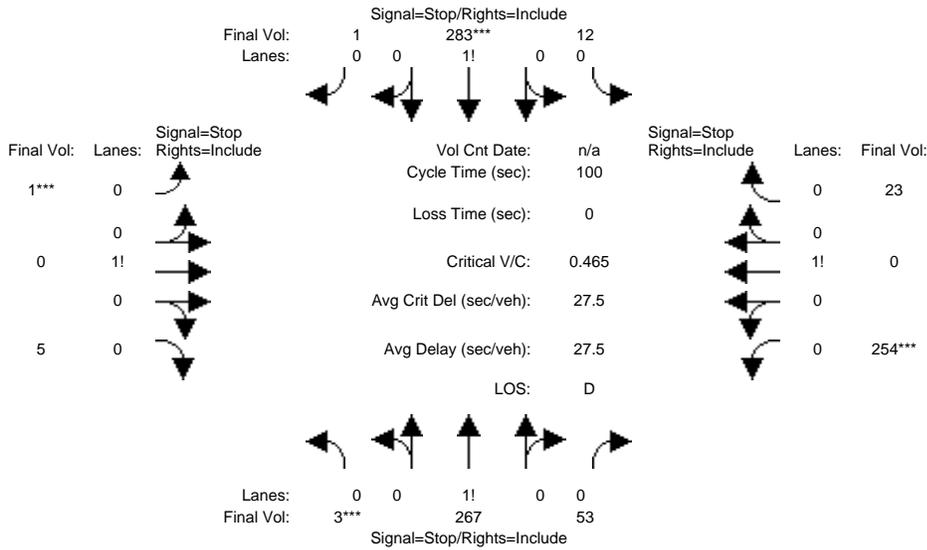


Street Name:	Pulgas Avenue						Camellia Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	1	266	53	12	281	1	0	0	0	254	0	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	266	53	12	281	1	0	0	0	254	0	23
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
0:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	266	53	12	281	1	0	0	0	254	0	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	266	53	12	281	1	0	0	0	254	0	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	266	53	12	281	1	0	0	0	254	0	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	266	53	12	281	1	0	0	0	254	0	23
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.83	0.16	0.04	0.95	0.01	0.00	1.00	0.00	0.92	0.00	0.08
Final Sat.:	2	581	116	28	650	2	0	525	0	569	0	52
Capacity Analysis Module:												
Vol/Sat:	0.46	0.46	0.46	0.43	0.43	0.43	xxxx	0.00	xxxx	0.45	xxxx	0.45
Crit Moves:			****	****				****				****
Delay/Veh:	11.8	11.8	11.8	11.7	11.7	11.7	0.0	0.0	0.0	12.4	0.0	12.4
Delay Adj:	1.00	1.00	1.00	4.00	4.00	4.00	1.00	1.00	1.00	2.00	2.00	2.00
AdjDel/Veh:	11.8	11.8	11.8	46.7	46.7	46.7	0.0	0.0	0.0	24.8	0.0	24.8
LOS by Move:	B	B	B	E	E	E	*	*	*	C	*	C
ApproachDel:		11.8			11.7		xxxxxxx				12.4	
Delay Adj:		1.00			4.00		xxxxxxx				2.00	
ApprAdjDel:		11.8			46.7		xxxxxxx				24.8	
LOS by Appr:		B			E			*			C	
AllWayAvgQ:	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.7	0.7	0.7

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
 Hexagon Transportation Consultants
 City of East Palo Alto
 Level Of Service Computation Report
 2000 HCM 4-Way Stop (Future Volume Alternative)
 Cumul+Proj AM

Intersection #32: Pulgas Avenue and Camellia Drive



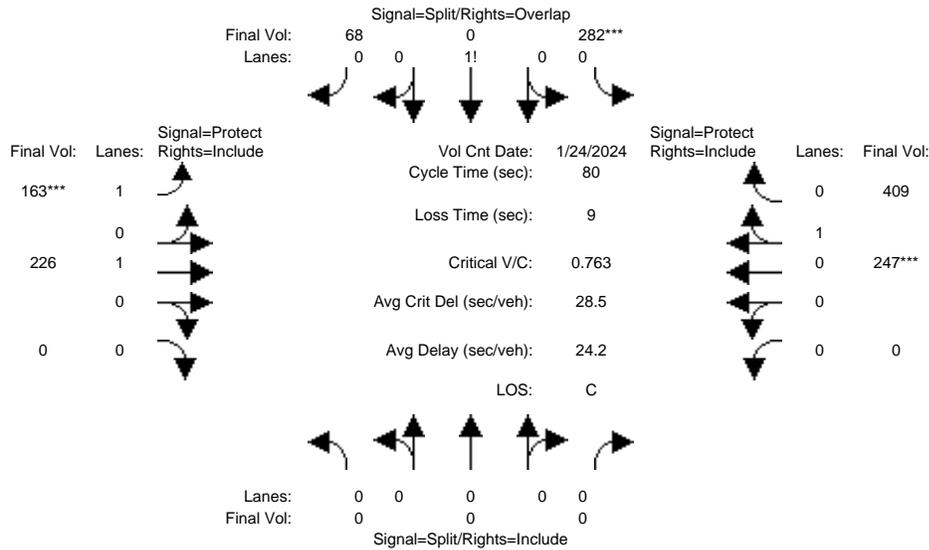
Street Name:	Pulgas Avenue						Camellia Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	1	266	53	12	281	1	0	0	0	254	0	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	266	53	12	281	1	0	0	0	254	0	23
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Proj Trips:	2	1	0	0	2	0	1	0	5	0	0	0
Initial Fut:	3	267	53	12	283	1	1	0	5	254	0	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	267	53	12	283	1	1	0	5	254	0	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	267	53	12	283	1	1	0	5	254	0	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	3	267	53	12	283	1	1	0	5	254	0	23
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.83	0.16	0.04	0.95	0.01	0.17	0.00	0.83	0.92	0.00	0.08
Final Sat.:	6	574	114	27	646	2	94	0	468	565	0	51
Capacity Analysis Module:												
Vol/Sat:	0.47	0.47	0.47	0.44	0.44	0.44	0.01	xxxx	0.01	0.45	xxxx	0.45
Crit Moves:	****				****		****			****		
Delay/Veh:	12.0	12.0	12.0	11.8	11.8	11.8	8.5	0.0	8.5	12.5	0.0	12.5
Delay Adj:	1.00	1.00	1.00	4.00	4.00	4.00	1.00	1.00	1.00	2.00	2.00	2.00
AdjDel/Veh:	12.0	12.0	12.0	47.1	47.1	47.1	8.5	0.0	8.5	25.0	0.0	25.0
LOS by Move:	B	B	B	E	E	E	A	*	A	D	*	D
ApproachDel:		12.0			11.8			8.5			12.5	
Delay Adj:		1.00			4.00			1.00			2.00	
ApprAdjDel:		12.0			47.1			8.5			25.0	
LOS by Appr:		B			E			A			D	
AllWayAvgQ:	0.8	0.8	0.8	0.7	0.7	0.7	0.0	0.0	0.0	0.7	0.7	0.7

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #31: Pulgas Avenue and East Bayshore Road



Street Name: Pulgas Avenue East Bayshore Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module: >> Count Date: 24 Jan 2024 <<

Base Vol:	0	0	0	282	0	68	163	226	0	0	247	409
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	282	0	68	163	226	0	0	247	409
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	282	0	68	163	226	0	0	247	409
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	282	0	68	163	226	0	0	247	409
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	282	0	68	163	226	0	0	247	409
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	282	0	68	163	226	0	0	247	409

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.92	0.93	0.98	1.00	1.00	0.90	0.90
Lanes:	0.00	0.00	0.00	0.81	0.00	0.19	1.00	1.00	0.00	0.00	0.38	0.62
Final Sat.:	0	0	0	1404	0	339	1769	1862	0	0	642	1063

Capacity Analysis Module:

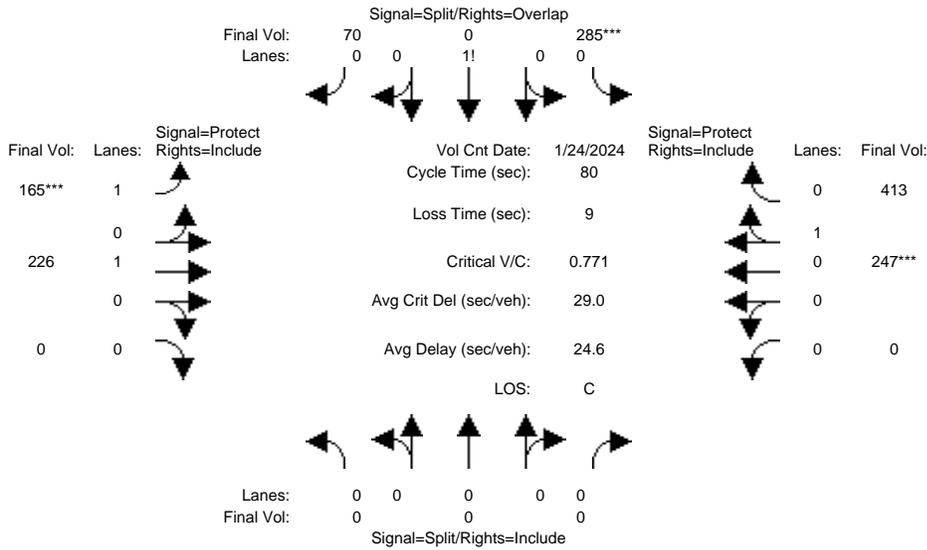
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.20	0.09	0.12	0.00	0.00	0.38	0.38
Crit Moves:				****			****			****		
Green/Cycle:	0.00	0.00	0.00	0.26	0.00	0.38	0.12	0.62	0.00	0.00	0.50	0.50
Volume/Cap:	0.00	0.00	0.00	0.76	0.00	0.52	0.76	0.19	0.00	0.00	0.76	0.76
Delay/Veh:	0.0	0.0	0.0	34.6	0.0	19.8	49.1	6.5	0.0	0.0	20.1	20.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	34.6	0.0	19.8	49.1	6.5	0.0	0.0	20.1	20.1
LOS by Move:	A	A	A	C	A	B	D	A	A	A	C	C
HCM2kAvgQ:	0	0	0	10	0	7	4	2	0	0	15	15

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex+Proj PM

Intersection #31: Pulgas Avenue and East Bayshore Road



Street Name:	Pulgas Avenue						East Bayshore Road					
	North Bound			South Bound			East Bound			West Bound		
Approach:												
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:	>>	Count	Date:	24 Jan 2024	<<							
Base Vol:	0	0	0	282	0	68	163	226	0	0	247	409
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	282	0	68	163	226	0	0	247	409
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Proj Trips:	0	0	0	3	0	2	2	0	0	0	0	4
Initial Fut:	0	0	0	285	0	70	165	226	0	0	247	413
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	285	0	70	165	226	0	0	247	413
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	285	0	70	165	226	0	0	247	413
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	285	0	70	165	226	0	0	247	413

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.92	0.93	0.98	1.00	1.00	0.90	0.90
Lanes:	0.00	0.00	0.00	0.80	0.00	0.20	1.00	1.00	0.00	0.00	0.37	0.63
Final Sat.:	0	0	0	1398	0	343	1769	1862	0	0	638	1066

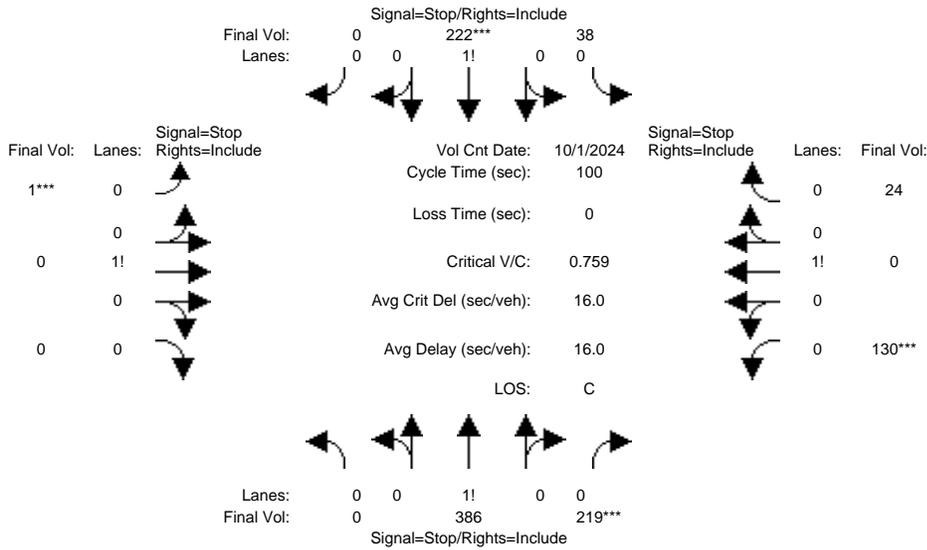
Capacity Analysis Module:													
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.20	0.09	0.12	0.00	0.00	0.39	0.39	
Crit Moves:				****				****					
Green/Cycle:	0.00	0.00	0.00	0.26	0.00	0.39	0.12	0.62	0.00	0.00	0.50	0.50	
Volume/Cap:	0.00	0.00	0.00	0.77	0.00	0.53	0.77	0.19	0.00	0.00	0.77	0.77	
Delay/Veh:	0.0	0.0	0.0	35.0	0.0	19.8	49.8	6.5	0.0	0.0	20.5	20.5	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:	0.0	0.0	0.0	35.0	0.0	19.8	49.8	6.5	0.0	0.0	20.5	20.5	
LOS by Move:	A	A	A	D	A	B	D	A	A	A	C	C	
HCM2kAvgQ:	0	0	0	10	0	7	4	2	0	0	15	15	

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing PM

Intersection #32: Pulgas Avenue and Camellia Drive



Street Name: Pulgas Avenue Camellia Drive
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Volume Module: >> Count Date: 1 Oct 2024 <<

Base Vol:	0	386	219	38	222	0	1	0	0	130	0	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	386	219	38	222	0	1	0	0	130	0	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	386	219	38	222	0	1	0	0	130	0	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	386	219	38	222	0	1	0	0	130	0	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	386	219	38	222	0	1	0	0	130	0	24
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	386	219	38	222	0	1	0	0	130	0	24

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.64	0.36	0.15	0.85	0.00	1.00	0.00	0.00	0.84	0.00	0.16
Final Sat.:	0	509	289	101	588	0	502	0	0	477	0	88

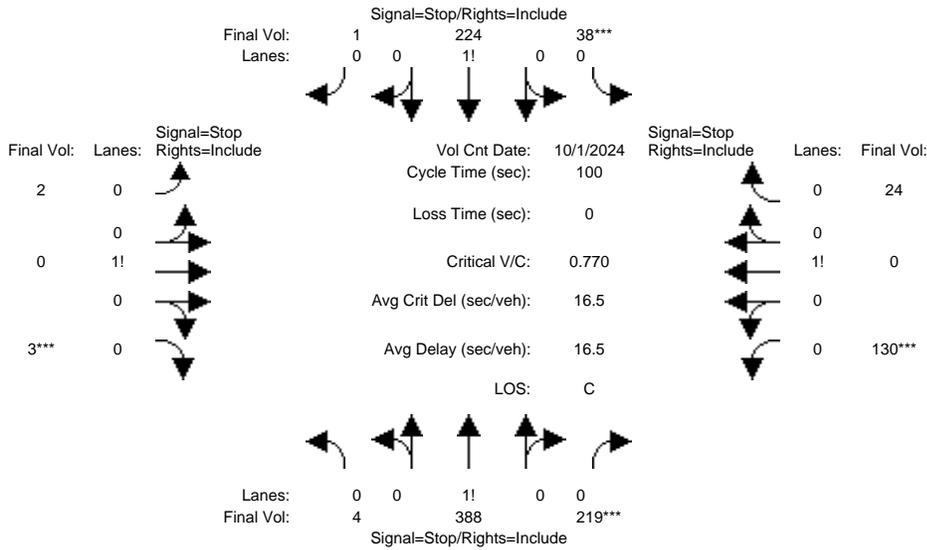
Capacity Analysis Module:

Vol/Sat:	xxxx	0.76	0.76	0.38	0.38	xxxx	0.00	xxxx	xxxx	0.27	xxxx	0.27
Crit Moves:			****		****		****			****		
Delay/Veh:	0.0	19.6	19.6	10.9	10.9	0.0	9.3	0.0	0.0	10.8	0.0	10.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	19.6	19.6	10.9	10.9	0.0	9.3	0.0	0.0	10.8	0.0	10.8
LOS by Move:	*	C	C	B	B	*	A	*	*	B	*	B
ApproachDel:		19.6		10.9			9.3			10.8		
Delay Adj:		1.00		1.00			1.00			1.00		
ApprAdjDel:		19.6		10.9			9.3			10.8		
LOS by Appr:		C		B			A			B		
AllWayAvgQ:	2.7	2.7	2.7	0.5	0.5	0.5	0.0	0.0	0.0	0.3	0.3	0.3

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
 Hexagon Transportation Consultants
 City of East Palo Alto
 Level Of Service Computation Report
 2000 HCM 4-Way Stop (Future Volume Alternative)
 Ex+Proj PM

Intersection #32: Pulgas Avenue and Camellia Drive



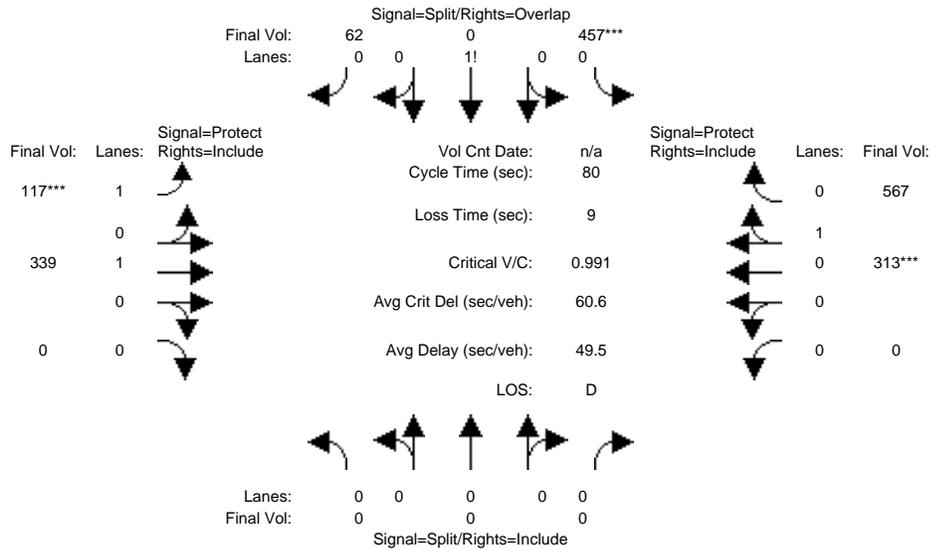
Street Name:	Pulgas Avenue						Camellia Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 1 Oct 2024 <<												
Base Vol:	0	386	219	38	222	0	1	0	0	130	0	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	386	219	38	222	0	1	0	0	130	0	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Proj Trips:	4	2	0	0	2	1	1	0	3	0	0	0
Initial Fut:	4	388	219	38	224	1	2	0	3	130	0	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	388	219	38	224	1	2	0	3	130	0	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	388	219	38	224	1	2	0	3	130	0	24
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	388	219	38	224	1	2	0	3	130	0	24
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.63	0.36	0.14	0.85	0.01	0.40	0.00	0.60	0.84	0.00	0.16
Final Sat.:	5	504	284	99	584	3	215	0	322	475	0	88
Capacity Analysis Module:												
Vol/Sat:	0.77	0.77	0.77	0.38	0.38	0.38	0.01	xxxx	0.01	0.27	xxxx	0.27
Crit Moves:	****			****			****			****		
Delay/Veh:	20.3	20.3	20.3	11.0	11.0	11.0	8.9	0.0	8.9	10.8	0.0	10.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.3	20.3	20.3	11.0	11.0	11.0	8.9	0.0	8.9	10.8	0.0	10.8
LOS by Move:	C	C	C	B	B	B	A	*	A	B	*	B
ApproachDel:	20.3			11.0			8.9			10.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	20.3			11.0			8.9			10.8		
LOS by Appr:	C			B			A			B		
AllWayAvgQ:	2.8	2.8	2.8	0.6	0.6	0.6	0.0	0.0	0.0	0.3	0.3	0.3

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumul No Proj PM

Intersection #31: Pulgas Avenue and East Bayshore Road



Street Name:	Pulgas Avenue						East Bayshore Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	0	0	457	0	62	117	339	0	0	313	567
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	457	0	62	117	339	0	0	313	567
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	457	0	62	117	339	0	0	313	567
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	457	0	62	117	339	0	0	313	567
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	457	0	62	117	339	0	0	313	567
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	457	0	62	117	339	0	0	313	567

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.92	0.93	0.98	1.00	1.00	0.89	0.89
Lanes:	0.00	0.00	0.00	0.88	0.00	0.12	1.00	1.00	0.00	0.00	0.36	0.64
Final Sat.:	0	0	0	1546	0	210	1769	1862	0	0	605	1095

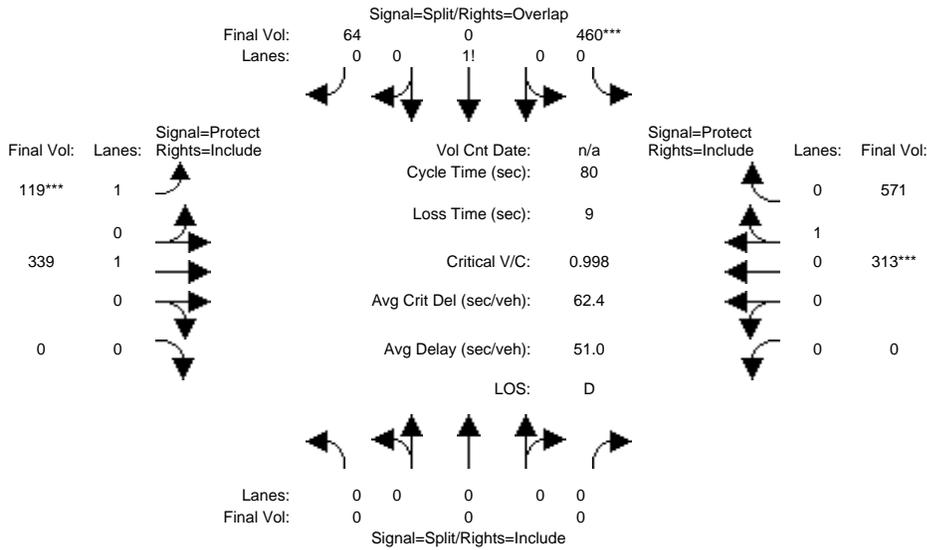
Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.00	0.00	0.30	0.00	0.30	0.07	0.18	0.00	0.00	0.52	0.52
Crit Moves:				****			****			****		
Green/Cycle:	0.00	0.00	0.00	0.29	0.00	0.38	0.09	0.60	0.00	0.00	0.51	0.51
Volume/Cap:	0.00	0.00	0.00	1.02	0.00	0.78	0.76	0.31	0.00	0.00	1.02	1.02
Delay/Veh:	0.0	0.0	0.0	72.5	0.0	27.9	54.7	8.1	0.0	0.0	54.5	54.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	72.5	0.0	27.9	54.7	8.1	0.0	0.0	54.5	54.5
LOS by Move:	A	A	A	E	A	C	D	A	A	A	D	D
HCM2kAvgQ:	0	0	0	20	0	13	3	4	0	0	31	31

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumul+Proj PM

Intersection #31: Pulgas Avenue and East Bayshore Road



Street Name:	Pulgas Avenue						East Bayshore Road					
	North Bound			South Bound			East Bound			West Bound		
Approach:												
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:												
Base Vol:	0	0	0	457	0	62	117	339	0	0	313	567
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	457	0	62	117	339	0	0	313	567
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Proj Trips:	0	0	0	3	0	2	2	0	0	0	0	4
Initial Fut:	0	0	0	460	0	64	119	339	0	0	313	571
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	460	0	64	119	339	0	0	313	571
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	460	0	64	119	339	0	0	313	571
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	460	0	64	119	339	0	0	313	571

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.92	0.93	0.98	1.00	1.00	0.89	0.89
Lanes:	0.00	0.00	0.00	0.88	0.00	0.12	1.00	1.00	0.00	0.00	0.35	0.65
Final Sat.:	0	0	0	1541	0	214	1769	1862	0	0	602	1098

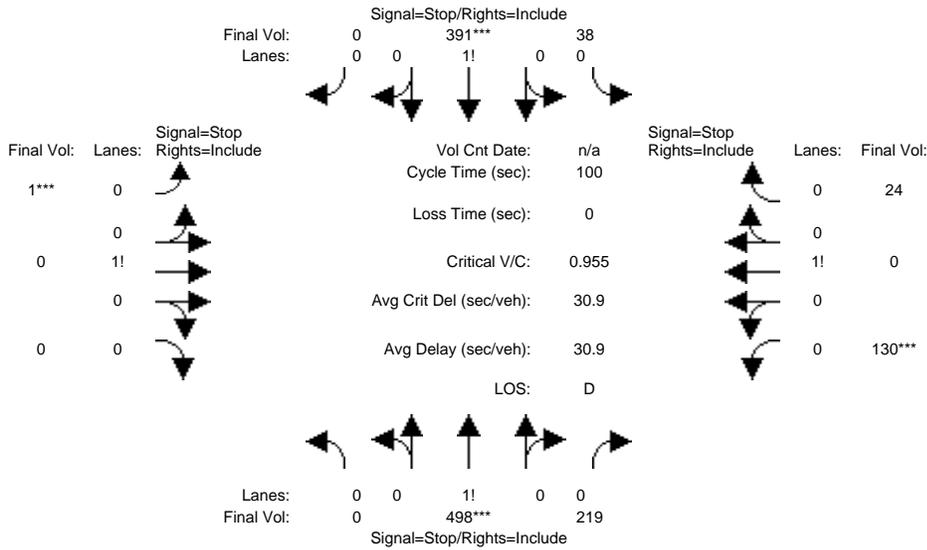
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.30	0.00	0.30	0.07	0.18	0.00	0.00	0.52	0.52
Crit Moves:				****			****			****		
Green/Cycle:	0.00	0.00	0.00	0.29	0.00	0.38	0.09	0.60	0.00	0.00	0.51	0.51
Volume/Cap:	0.00	0.00	0.00	1.02	0.00	0.79	0.77	0.31	0.00	0.00	1.02	1.02
Delay/Veh:	0.0	0.0	0.0	74.1	0.0	28.2	56.3	8.1	0.0	0.0	56.3	56.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	74.1	0.0	28.2	56.3	8.1	0.0	0.0	56.3	56.3
LOS by Move:	A	A	A	E	A	C	E	A	A	A	E	E
HCM2kAvgQ:	0	0	0	21	0	13	3	4	0	0	31	31

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cumul No Proj PM

Intersection #32: Pulgas Avenue and Camellia Drive



Street Name:	Pulgas Avenue						Camellia Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R

Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
-------------	---	---	---	---	---	---	---	---	---	---	---	---

Volume Module:

Base Vol:	0	498	219	38	391	0	1	0	0	130	0	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	498	219	38	391	0	1	0	0	130	0	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
0:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	498	219	38	391	0	1	0	0	130	0	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	498	219	38	391	0	1	0	0	130	0	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	498	219	38	391	0	1	0	0	130	0	24
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	498	219	38	391	0	1	0	0	130	0	24

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.69	0.31	0.09	0.91	0.00	1.00	0.00	0.00	0.84	0.00	0.16
Final Sat.:	0	521	229	60	613	0	461	0	0	452	0	83

Capacity Analysis Module:

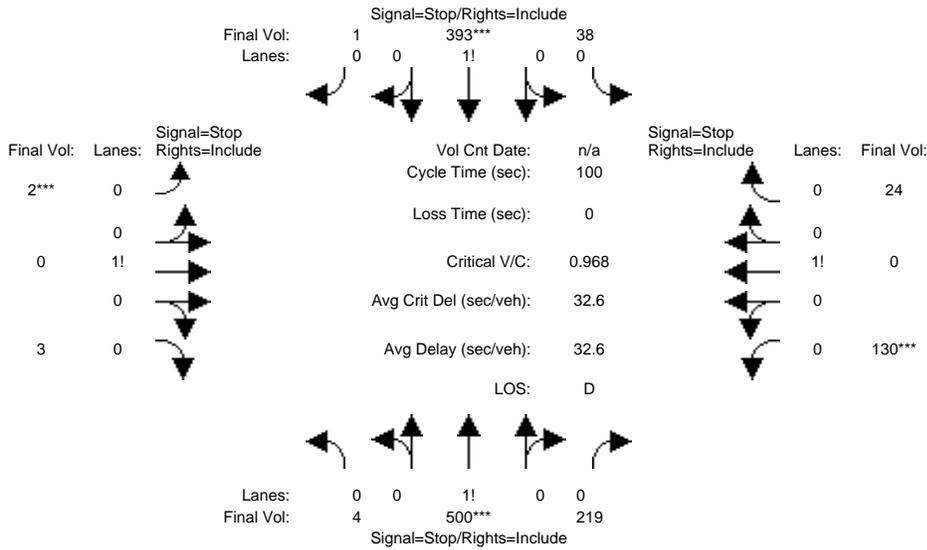
Vol/Sat:	xxxx	0.96	0.96	0.64	0.64	xxxx	0.00	xxxx	xxxx	0.29	xxxx	0.29
Crit Moves:	****			****			****			****		
Delay/Veh:	0.0	43.6	43.6	16.7	16.7	0.0	10.1	0.0	0.0	11.9	0.0	11.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	43.6	43.6	16.7	16.7	0.0	10.1	0.0	0.0	11.9	0.0	11.9
LOS by Move:	*	E	E	C	C	*	B	*	*	B	*	B
ApproachDel:		43.6			16.7			10.1			11.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		43.6			16.7			10.1			11.9	
LOS by Appr:		E			C			B			B	
AllWayAvgQ:	7.5	7.5	7.5	1.6	1.6	1.6	0.0	0.0	0.0	0.4	0.4	0.4

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cumul+Proj PM

Intersection #32: Pulgas Avenue and Camellia Drive



Street Name:	Pulgas Avenue						Camellia Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R

Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
-------------	---	---	---	---	---	---	---	---	---	---	---	---

Volume Module:

Base Vol:	0	498	219	38	391	0	1	0	0	130	0	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	498	219	38	391	0	1	0	0	130	0	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Proj Trips:	4	2	0	0	2	1	1	0	3	0	0	0
Initial Fut:	4	500	219	38	393	1	2	0	3	130	0	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	500	219	38	393	1	2	0	3	130	0	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	500	219	38	393	1	2	0	3	130	0	24
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	500	219	38	393	1	2	0	3	130	0	24

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.69	0.30	0.08	0.91	0.01	0.40	0.00	0.60	0.84	0.00	0.16
Final Sat.:	4	517	226	59	610	2	196	0	294	450	0	83

Capacity Analysis Module:

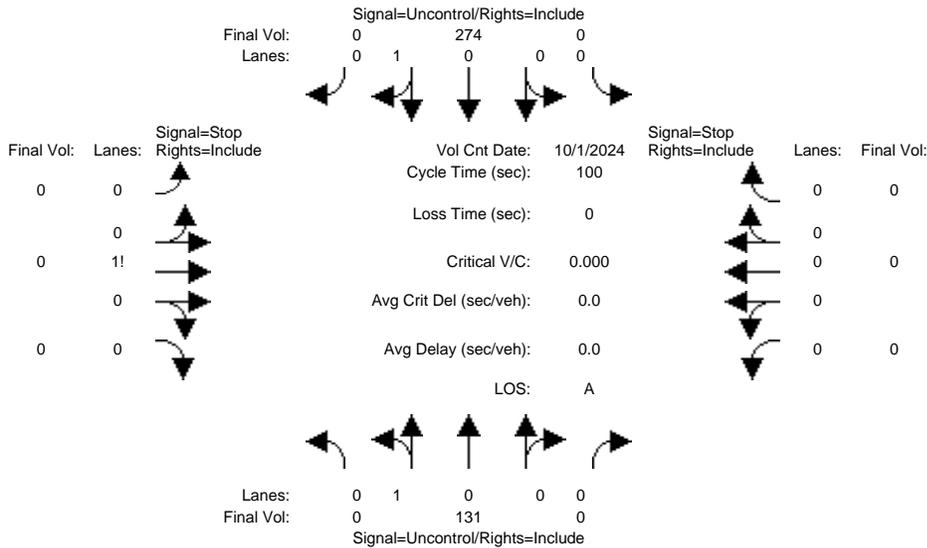
Vol/Sat:	0.97	0.97	0.97	0.64	0.64	0.64	0.01	xxxx	0.01	0.29	xxxx	0.29
Crit Moves:	****			****			****			****		
Delay/Veh:	46.5	46.5	46.5	17.1	17.1	17.1	9.7	0.0	9.7	12.0	0.0	12.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.5	46.5	46.5	17.1	17.1	17.1	9.7	0.0	9.7	12.0	0.0	12.0
LOS by Move:	E	E	E	C	C	C	A	*	A	B	*	B
ApproachDel:	46.5			17.1			9.7			12.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	46.5			17.1			9.7			12.0		
LOS by Appr:	E			C			A			B		
AllWayAvgQ:	8.0	8.0	8.0	1.6	1.6	1.6	0.0	0.0	0.0	0.4	0.4	0.4

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #33: Pulgas Avenue and Proj Dwy



Street Name: Pulgas Avenue Proj Dwy
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Volume Module:	>>	Count	Date:	1 Oct 2024	<<						
Base Vol:	0	131	0	0	274	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	131	0	0	274	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	131	0	0	274	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	131	0	0	274	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	131	0	0	274	0	0	0	0	0	0

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	405	405	274	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	606	538	770	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	606	538	770	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx

Level Of Service Module:

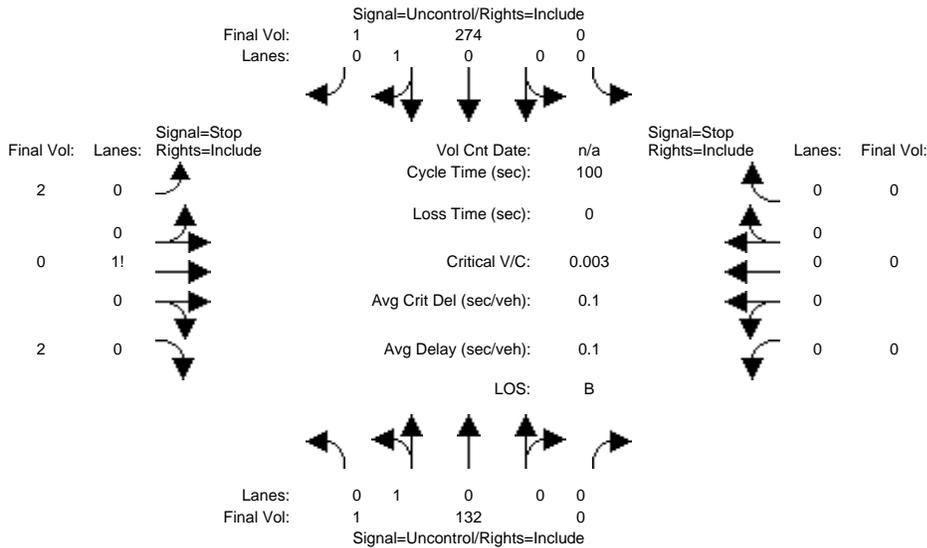
2Way95thQ:	xxxx	xxxx	xxxxx									
Control Del:	xxxxx	xxxx	xxxxx									
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		*

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex+Proj AM

Intersection #33: Pulgas Avenue and Proj Dwy



Street Name: Pulgas Avenue Proj Dwy
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Volume Module:

Base Vol:	0	131	0	0	274	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	131	0	0	274	0	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Proj Trips:	1	1	0	0	0	1	2	0	2	0	0	0
Initial Fut:	1	132	0	0	274	1	2	0	2	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	132	0	0	274	1	2	0	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	132	0	0	274	1	2	0	2	0	0	0

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.4	6.5	6.2	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	4.0	3.3	xxxxxx	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	275	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	409	409	275	xxxx	xxxx	xxxxxx
Potent Cap.:	1300	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	603	535	769	xxxx	xxxx	xxxxxx
Move Cap.:	1300	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	603	535	769	xxxx	xxxx	xxxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx

Level Of Service Module:

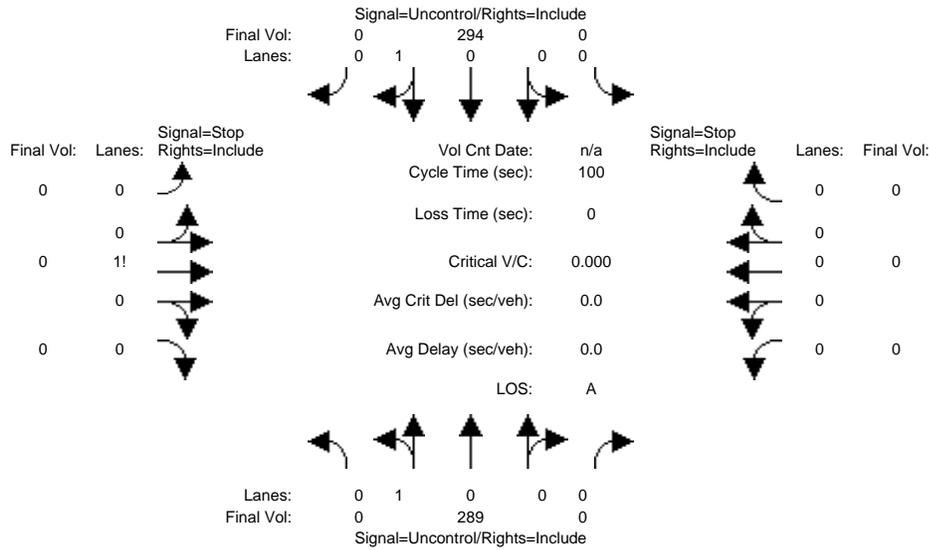
2Way95thQ:	0.0	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	7.8	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	676	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	0.0	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	7.8	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	10.4	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				10.4		xxxxxx		
ApproachLOS:	*			*				B		*		*

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumul No Proj AM

Intersection #33: Pulgas Avenue and Proj Dwy



Street Name: Pulgas Avenue Proj Dwy
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Volume Module:												
Base Vol:	0	289	0	0	294	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	289	0	0	294	0	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	289	0	0	294	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	289	0	0	294	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	289	0	0	294	0	0	0	0	0	0	0

Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx

Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	583	583	294	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	478	427	750	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	478	427	750	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx

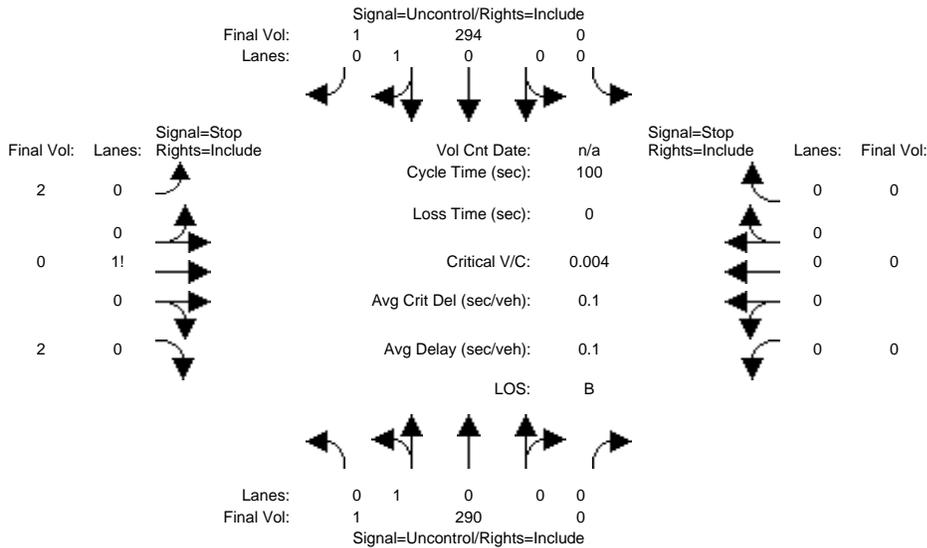
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx									
Control Del:	xxxxx	xxxx	xxxxx									
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		*

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumul+Proj AM

Intersection #33: Pulgas Avenue and Proj Dwy



Street Name: Pulgas Avenue Proj Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Volume Module:

Base Vol:	0	289	0	0	294	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	289	0	0	294	0	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Proj Trips:	1	1	0	0	0	1	2	0	2	0	0	0
Initial Fut:	1	290	0	0	294	1	2	0	2	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	290	0	0	294	1	2	0	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	1	290	0	0	294	1	2	0	2	0	0	0

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.4	6.5	6.2	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	4.0	3.3	xxxxxx	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	295	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	587	587	295	xxxx	xxxx	xxxxxx
Potent Cap.:	1278	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	476	425	750	xxxx	xxxx	xxxxxx
Move Cap.:	1278	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	475	424	750	xxxx	xxxx	xxxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxxxx	xxxx	xxxxxx	0.00	0.00	0.00	xxxx	xxxx	xxxxxx

Level Of Service Module:

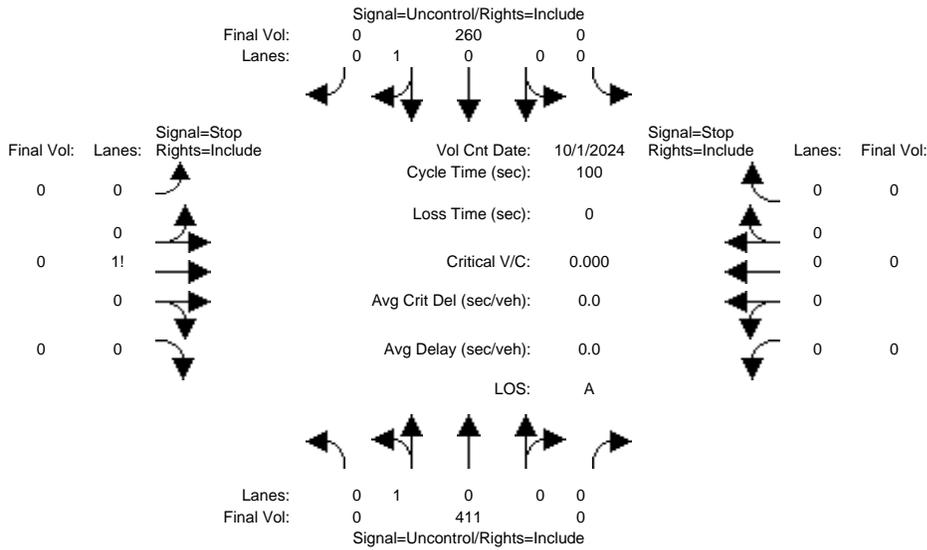
2Way95thQ:	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	7.8	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	582	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	0.0	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	7.8	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	11.2	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxxx							11.2				xxxxxxx
ApproachLOS:	*				*			B				*

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #33: Pulgas Avenue and Proj Dwy



Street Name: Pulgas Avenue Proj Dwy
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Volume Module:	>>	Count	Date:	1 Oct 2024	<<								
Base Vol:	0	411	0	0	260	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	411	0	0	260	0	0	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	411	0	0	260	0	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	411	0	0	260	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	411	0	0	260	0	0	0	0	0	0	0	0

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	671	671	260	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	425	380	784	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	425	380	784	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx

Level Of Service Module:

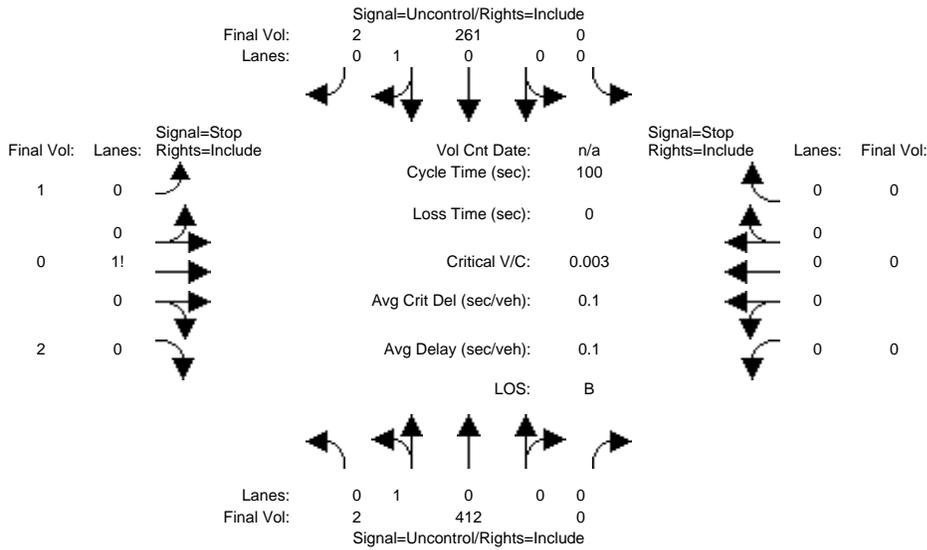
2Way95thQ:	xxxx	xxxx	xxxxx									
Control Del:	xxxxx	xxxx	xxxxx									
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		*

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex+Proj PM

Intersection #33: Pulgas Avenue and Proj Dwy



Street Name: Pulgas Avenue Proj Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Volume Module:												
Base Vol:	0	411	0	0	260	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	411	0	0	260	0	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Proj Trips:	2	1	0	0	1	2	1	0	2	0	0	0
Initial Fut:	2	412	0	0	261	2	1	0	2	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	412	0	0	261	2	1	0	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	412	0	0	261	2	1	0	2	0	0	0

Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx

Capacity Module:												
Cnflct Vol:	263	xxxx	xxxxx	xxxx	xxxx	xxxxx	678	678	262	xxxx	xxxx	xxxxx
Potent Cap.:	1313	xxxx	xxxxx	xxxx	xxxx	xxxxx	421	377	782	xxxx	xxxx	xxxxx
Move Cap.:	1313	xxxx	xxxxx	xxxx	xxxx	xxxxx	420	376	782	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx

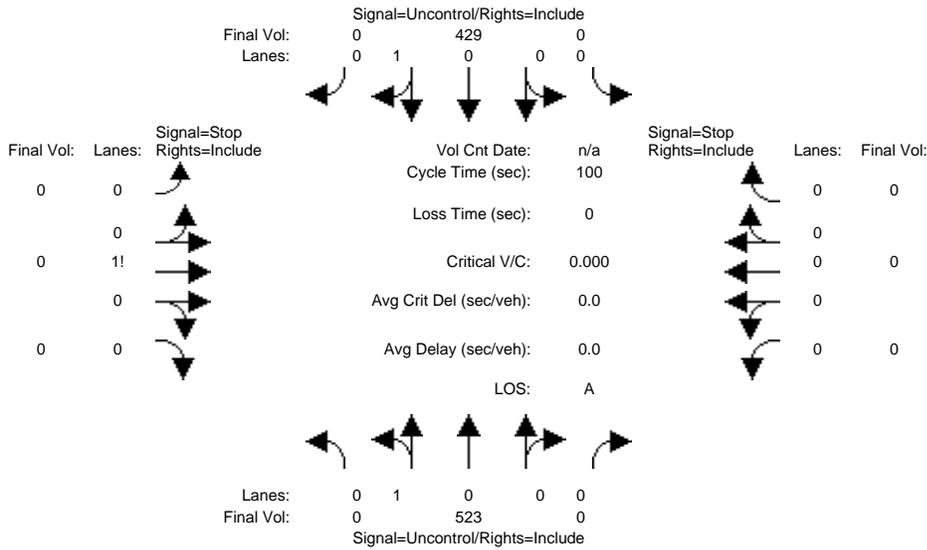
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	607	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				11.0		xxxxxx		
ApproachLOS:	*			*				B		*		*

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumul No Proj PM

Intersection #33: Pulgas Avenue and Proj Dwy



Street Name: Pulgas Avenue Proj Dwy
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Volume Module:

Base Vol:	0	523	0	0	429	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	523	0	0	429	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	523	0	0	429	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	523	0	0	429	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	523	0	0	429	0	0	0	0	0	0

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	952	952	429	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	290	261	630	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	290	261	630	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx

Level Of Service Module:

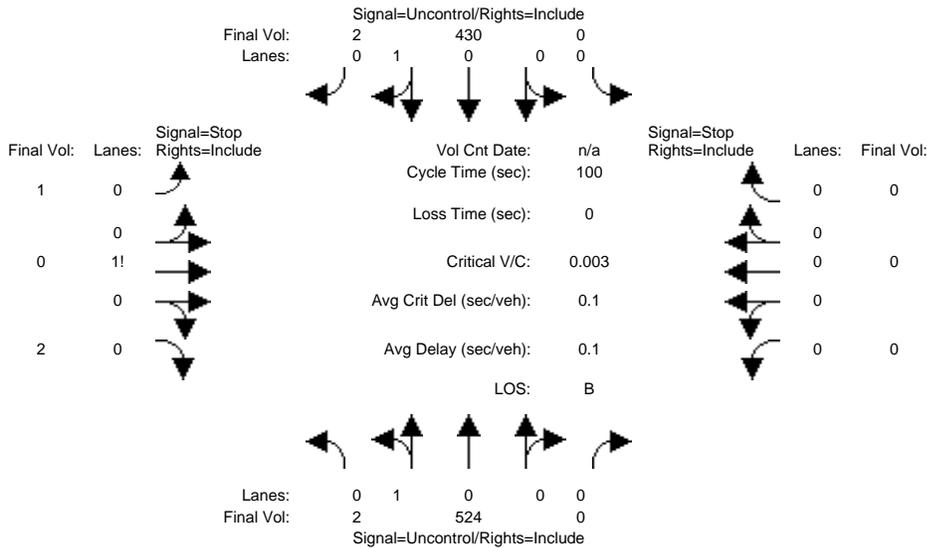
2Way95thQ:	xxxx	xxxx	xxxxx									
Control Del:	xxxxx	xxxx	xxxxx									
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		*

Note: Queue reported is the number of cars per lane.

1933 Pulgas Avenue Residential Development
Hexagon Transportation Consultants
City of East Palo Alto

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumul+Proj PM

Intersection #33: Pulgas Avenue and Proj Dwy



Street Name: Pulgas Avenue Proj Dwy
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Volume Module:

Base Vol:	0	523	0	0	429	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	523	0	0	429	0	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Proj Trips:	2	1	0	0	1	2	1	0	2	0	0	0
Initial Fut:	2	524	0	0	430	2	1	0	2	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	524	0	0	430	2	1	0	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	524	0	0	430	2	1	0	2	0	0	0

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.4	6.5	6.2	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	4.0	3.3	xxxxxx	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	432	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	959	959	431	xxxx	xxxx	xxxxxx
Potent Cap.:	1138	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	288	259	629	xxxx	xxxx	xxxxxx
Move Cap.:	1138	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	287	259	629	xxxx	xxxx	xxxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	8.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	450	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	0.0	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	8.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	13.1	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx							13.1		xxxxxx		
ApproachLOS:	*				*			B		*		

Note: Queue reported is the number of cars per lane.