Appendix E

Transportation Impact Study

San Francisco VA Medical Center Long Range Development Plan Draft EIS

Transportation Impact Study

Prepared for the Department of Veterans Affairs

San Francisco VA Medical Center
Long Range Development Plan Draft EIS
Transportation Impact Study

Prepared for the Department of Veterans Affairs

July 3, 2012

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1.0 Introduction

This chapter provides an overview of the study and describes the existing transportation conditions in the vicinity of the proposed Project.

1.1 Study Context

This analysis has been conducted to assess the potential transportation impacts associated with the implementation of the Long Range Development Plan (LRDP) of the San Francisco Veterans Affairs Medical Center (SFVAMC)—currently located at 4150 Clement Street in San Francisco, California—herein referred to as the "Project." This Transportation Impact Study (TIS) has been prepared in order to support the NEPA document, the Environmental Impact Statement, currently being prepared for the Project. As such, the following transportation topics were addressed:

- Traffic conditions;
- Transit conditions;
- Pedestrian conditions;
- Bicycle conditions;
- Parking conditions;
- Loading conditions; and,
- Construction conditions.

1.2 Project Location

The existing SFVAMC Fort Miley Campus is a 29-acre site located at Fort Miley (within Lincoln Park) in northwestern San Francisco, California. The site is bounded on the north, east, and west sides by National Park Service lands (part of the Golden Gate National Recreation Area) and on the south by Clement Street, with access points at 42nd Avenue / Clement Street and 43rd Avenue / Clement Street. The sites under consideration for Project buildout include the existing Campus (as illustrated in Figure 1) and an undetermined site within the Mission Bay area of San Francisco (the "Mission Bay Campus"). Since no specific location has been identified, it is assumed that the potential new SFVAMC Mission Bay Campus would be located within an approximately 2.5-square-mile area bounded by Interstate 80 on the north, 2nd Street and San Francisco Bay on the east, Cesar Chavez Street on the south, and 7th Street / Brannan Street / Potrero Street on the west.

1.3 Project Description

As part of the SFVAMC LRDP, new patient care, research, hoptel[1], and administration uses (and associated parking facilities) are to be built to upgrade the SFVAMC facilities. The following Project alternatives are under consideration for the Project:

[1] A hoptel is an overnight, shared lodging facility for eligible Veterans receiving healthcare services. This temporary lodging is available to Veterans who need to travel 50 or more miles from their homes to the SFVAMC Fort Miley Campus.

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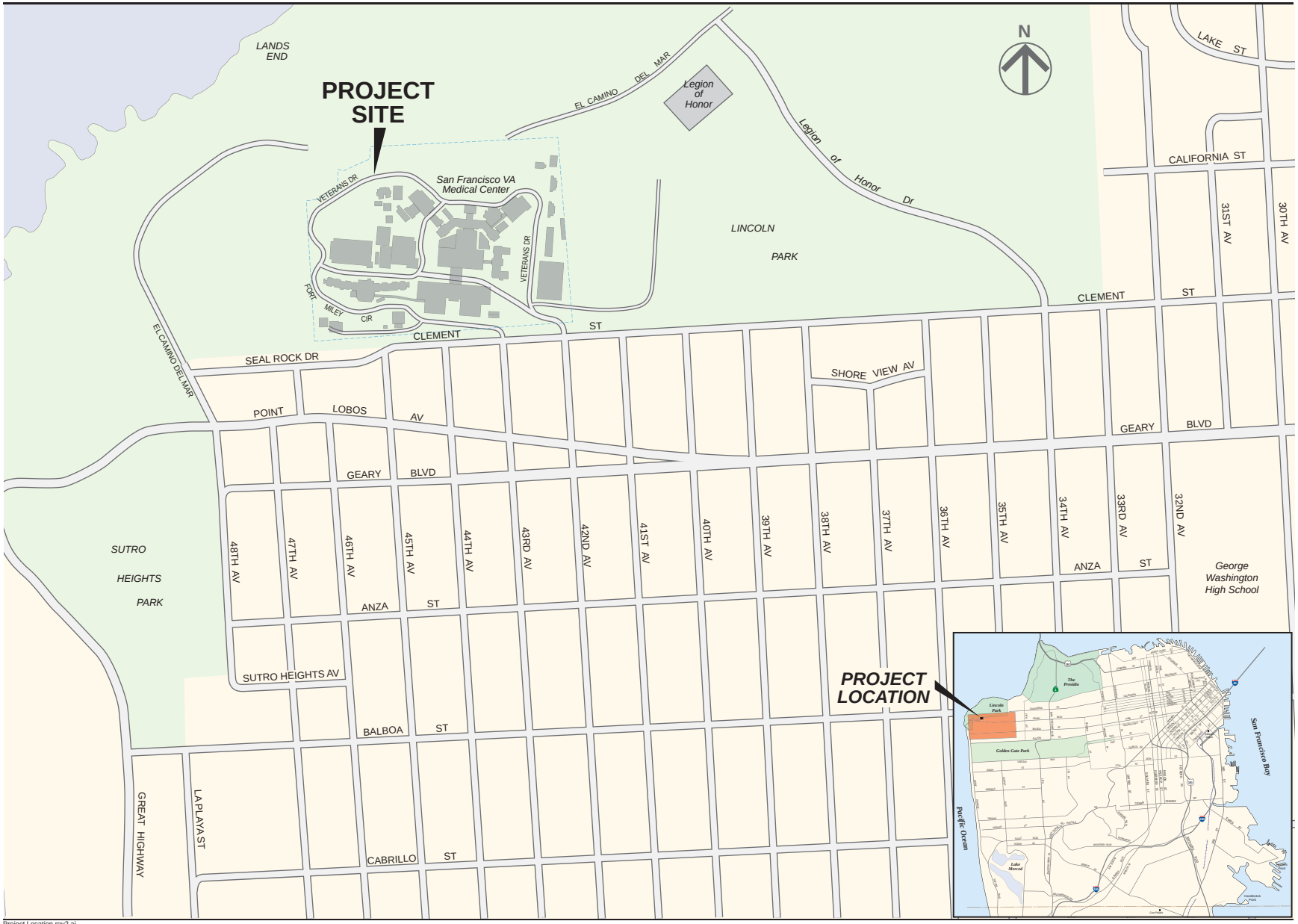

Project Location rev2.ai

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Figure 1

Project Location

- Alternative 1 would include the buildout of the existing SFVAMC Fort Miley Campus. This Alternative proposes 394,000 gross square feet of net-new development at the site, along with seismic upgrades to various existing structures at the site. Build-out would take place across one near-term phase (Phase 1) and one long-term phase (Phase 2).

- Alternative 2 would include a combination of new construction on the existing SFVAMC Fort Miley Campus, with some long-term components in Alternative 1 moved to a potential new Mission Bay Campus (exact location yet to be determined). The near-term components of Alternative 2 would be identical to those under Alternative 1.

- Alternative 3, the No Action Alternative, assumes that the LRDP would not be implemented.

At the SFVAMC Fort Miley Campus, near-term components of Alternative 1 and Alternative 2 are expected to be completed by mid-2015, with the long-term components following afterwards and through to 2023. Under Alternative 2 at the potential new SFVAMC Mission Bay Campus, full build-out is expected in late 2027.

Pedestrian Access: Pedestrian access for visitors would be provided within the Project's confines, connecting with off-site pedestrian facilities as required to ensure adequate pedestrian access to and from the site.

Vehicular Parking and Access: Veterans Drive and Fort Miley Circle would provide access to all parking facilities at the SFVAMC Fort Miley Campus. The existing access points at 42nd Avenue / Clement Street and 43rd Avenue / Clement Street would remain unchanged.

Loading and Access: The Project would provide loading bays for individual building needs within the Project site. Delivery and service vehicles would enter the site via the 42nd Avenue / Clement Avenue intersection and use the internal roadway network to access specific loading facilities.

Bicycle Access: Bicycle access for visitors would be provided within the Project's confines, connecting with off-site bicycle facilities as required to ensure adequate bicycle access to and from the site.

1.4 Study Scope and Approach

The following scenarios were evaluated to identify the potential transportation impacts of the Project:

- Existing Conditions
  Existing conditions in 2011.

- 2015 Near-Term Alternative 1 Conditions
  Conditions in Year 2015 assuming implementation of the near-term actions for Alternative 1 of the Project.

- 2015 Near-Term Alternative 2 Conditions
  Conditions in Year 2015 assuming implementation of the near-term actions for Alternative 2 of the Project. As stated in Section 1.3, both Alternative 1 and Alternative 2 propose the same series of improvements in the near-term timeframe, so this scenario is identical to 2015 Near-Term Alternative 2 Conditions.

- 2015 Near-Term Alternative 3 Conditions
  Conditions in Year 2015 without the Project.

- 2023 Long-Term Alternative 1 Conditions
  Conditions in Year 2023 assuming implementation of the near- and long-term actions for Alternative 1 of the Project.

- 2023 Long-Term Alternative 2 Conditions
  Conditions in Year 2023 assuming implementation of the near- and long-term actions for Alternative 2 of the Project.

- 2023 Long-Term Alternative 3 Conditions
  Conditions in Year 2023 without the Project.

- 2035 Cumulative Alternative 1 Conditions
  Conditions in Year 2035 assuming implementation of the near- and long-term actions for Alternative 1 of the Project.

- 2035 Cumulative Alternative 2 Conditions
  Conditions in Year 2035 assuming implementation of the near- and long-term actions for Alternative 2 of the Project.

- 2035 Cumulative Alternative 3 Conditions
  Conditions in Year 2035 without the Project.

In addition to the above scenarios, three baseline scenarios were also developed—for Year 2015 (2015 Near-Term Conditions), Year 2023 (2023 Long-Term Conditions), and Year 2035 (2035 Cumulative Conditions)—to assist in the determination of Project impacts in the near-term, long-term, and cumulative timeframes.

Intersections: Traffic operations were analyzed at the following five unsignalized study intersections, which represent locations where the Project could potentially impact operations:

1. 34th Avenue / Clement Street;
2. 42nd Avenue / Clement Street;
3. 43rd Avenue / Clement Street;
4. 42nd Avenue / Point Lobos Avenue; and,
5. 43rd Avenue / Point Lobos Avenue.

The location of the five study intersections is illustrated in Figure 2.

At all five intersections, the weekday PM peak hour was analyzed (defined as the peak hour between 4:00 PM and 6:00 PM), as the PM peak period is considered to be the most congested peak period.

Transit: Impacts to transit operations and facilities as a result of Project-generated trips are qualitatively assessed. Transit ridership and capacity for the weekday PM peak hour was assessed for individual Muni lines using data obtained from the San Francisco Municipal Transportation Agency's (SFMTA) Transit Effectiveness Project (TEP).

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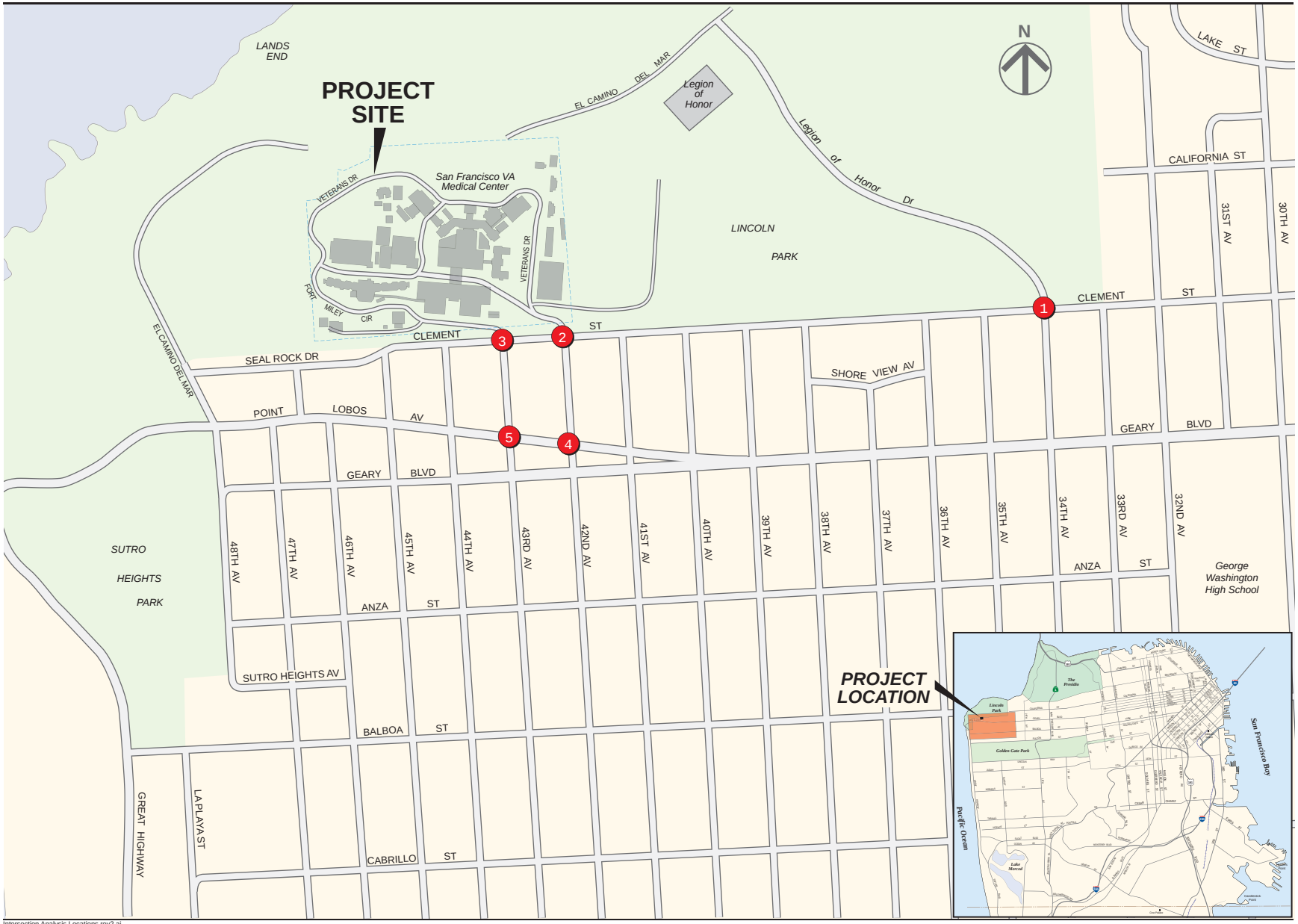

Intersection Analysis Locations rev2.ai

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Figure 2

Intersection Analysis Locations

Pedestrians: Pedestrian conditions throughout the study area were qualitatively assessed, including the number of new pedestrian trips that would be added to the existing pedestrian network. The adequacy of pedestrian connections to nearby transit routes was also determined. Furthermore, potential pedestrian safety issues were identified, including potential conflicts between vehicular traffic and pedestrian circulation. Impacts to pedestrian conditions as a result of Project-generated activities, including Project-generated traffic, were also qualitatively assessed.

Bicycles: Bicycle conditions throughout the study area were evaluated qualitatively as they relate to the Project study area—including safety and right-of-way issues—and existing and potential new bicycle facilities were noted. Impacts to bicycle conditions as a result of Project-generated activities, including Project-generated traffic and driveway movements, were also qualitatively assessed.

Parking: Parking supply and occupancy for on- and off-street public parking facilities in the study area were obtained via field observations. Although not explicitly required because the Project is a federal action and not subject to the San Francisco Planning Code, in so much as an insufficient supply of off-street parking may cause unmet parking demand to spillover into the surrounding neighborhoods, the Project's proposed supply of parking was evaluated against Planning Code requirements and the estimated peak parking demand generated by the Project.

Loading: Existing loading conditions were examined within the site. The current supply of on-street loading spaces was described, and off-street loading activity was documented and assessed. The Project's proposed supply of loading spaces was evaluated against Planning Code requirements.

1.5 Existing Conditions

This section provides a description of the existing transportation conditions in the vicinity of the proposed Project. Included in this chapter are descriptions of the existing roadway, transit, pedestrian, and bikeway networks, and documentation of the existing traffic, transit, pedestrian, bicycle, loading, emergency vehicle access, and parking conditions.

1.5.1 Roadway Network

The City and County of San Francisco identifies several types of roadway networks, including the Congestion Management Program (CMP) network, the Metropolitan Transportation System (MTS) network, Transit Preferential Streets, and the Citywide Pedestrian Network.

Regional Access

Regional access to and from the Project site is provided by State Route 1 (SR 1), United States Highway 101 (U.S. 101), Interstate 80 (I-80), and Interstate 280 (I-280).

East Bay: Regional access to and from the Project site and the East Bay is provided by I-80 and the Bay Bridge, via U.S. 101. Access to I-80 is provided via U.S. 101 on- and off-ramps at the Octavia Boulevard / Market Street intersection, followed by an interchange with I-80.

South Bay: Regional access to and from the South Bay is provided by SR 1—operating in the vicinity of the Project site as a surface street (Park Presidio Boulevard)—and I-280. Access to SR 1 is provided via the Park Presidio Boulevard / Geary Boulevard and Park Presidio Boulevard / Clement Street intersections. Access to I-280 is provided via its interchange with SR 1 (19th Avenue) south of the Project site, near John Daly Boulevard in Daly City.

North Bay: Regional access to and from the Project site and the North Bay is provided by SR 1 (Park Presidio Boulevard in the vicinity of the Project site) and the Golden Gate Bridge. Access to SR 1 is provided via the Park Presidio Boulevard / Geary Boulevard and Park Presidio Boulevard / Clement Street intersections.

Local Access

Clement Street is an east-west roadway running from 45th Avenue to Arguello Boulevard. In the vicinity of the Project site, Clement Street is two-way with one travel lane in each direction. On-street parking is provided on both sides of the street.

Geary Boulevard is a major east-west street that runs between 48th Avenue and Gough Street, where it continues as the one-way couplet of O'Farrell Street (eastbound) and Geary Street (westbound) to Market Street. In the vicinity of the Project site, Geary Boulevard is two-way with two to three travel lanes in each direction. On-street parking is provided on both sides of the street. The San Francisco General Plan identifies Geary Boulevard as a Major Arterial in the Congestion Management Plan (CMP) network through the study area. Geary Boulevard is also classified as a Metropolitan Transportation System (MTS) roadway, a Neighborhood Commercial Street, and a Transit Preferential Street (Transit-Important).

Point Lobos Avenue is a major east-west street running between the Great Highway and 41st Avenue, where Point Lobos Avenue merges with Geary Boulevard. The Great Highway becomes Point Lobos Avenue just north of Balboa Street. On-street parking is provided on both sides of Point Lobos Avenue. The San Francisco General Plan identifies Point Lobos Avenue as a Transit Conflict Street in the CMP network through the study area. Point Lobos Avenue is also classified as an MTS recreational street.

34th Avenue is a north-south street running from El Camino Del Mar within Lincoln Park to Fulton Street, and from Lincoln Way to Sloat Boulevard. In the vicinity of the Project site, 34th Avenue is two-way, with one travel lane in each direction. On-street parking is provided on both sides of the street.

42nd Avenue is a north-south street running from Clement Street to Fulton Street, and from Lincoln Way to Sloat Boulevard. In the vicinity of the Project site, 42nd Avenue is two-way, with one travel lane in each direction, and serves as one of the two main access points to the SFVAMC Fort Miley Campus. On-street parking is provided on both sides of the street.

43rd Avenue is a north-south street running from Clement Street to Fulton Street, and from Lincoln Way to Sloat Boulevard. In the vicinity of the Project site, 43rd Avenue is two-way, with one travel lane in each direction, and serves as one of the two main access points to the SFVAMC Fort Miley Campus. On-street parking is provided on both sides of the street.

Fort Miley Circle is a two-way internal roadway within the SFVAMC Fort Miley Campus. It provides one travel lane in each direction. Fort Miley Circle connects with Veterans Drive and provides access to buildings and parking lots within the Project site.

Veterans Drive is a two-way access and internal roadway within the SFVAMC Fort Miley Campus, with one travel lane in each direction. Veterans Drive provides access to / from the Project site and the access points at the 43rd Avenue / Clement Street and 42nd Avenue / Clement Street intersections. Veterans Drive loops around the Project site, connecting with Fort Miley Circle and providing access to on-site buildings and parking facilities. Parking spaces are provided along Veterans Drive within the Project site.

1.5.2 Traffic Conditions

Traffic counts for each study intersection were collected on Tuesday, February 15, 2011 during the weekday PM peak period (4:00 PM to 6:00 PM), and are included in Appendix A. The intersection analysis uses the 2000 Highway Capacity Manual (HCM) methodology, which is based on Level of Service (LOS) methodology, a qualitative description of the performance of an intersection based on average delay per vehicle.[2] For all-way stop-controlled intersections, the LOS is based on the average delay (in seconds per vehicle) for all approaches.

Intersection Level of Service ranges from LOS A, which indicates free flow or excellent conditions with short delays, to LOS F, which indicates congested or overloaded conditions with extremely long delays. In San Francisco, LOS A through LOS D are considered excellent to satisfactory levels of service, and LOS E and LOS F represent unacceptable levels of service.

Lane geometry for each intersection are presented in Figure 3 and the Existing Conditions traffic volumes are presented in Figure 4. The Existing Conditions intersection Level of Service is summarized in Table 1 and the detailed LOS calculations are provided in Appendix B.

Table 1: Intersection Level of Service – Existing Conditions (Weekday PM Peak Hour)

Intersection	Control Type	Existing Conditions	
		LOS	Delay[1]
1 34th Avenue / Clement Street	All-way Stop	B	11.8
2 42nd Avenue / Clement Street	All-way Stop	B	11.0
3 43rd Avenue / Clement Street	All-way Stop	B	11.7
4 42nd Avenue / Point Lobos Avenue	All-way Stop	B	12.4
5 43rd Avenue / Point Lobos Avenue	All-way Stop	B	14.2

Source: AECOM, 2012.
Notes: [1] Delay presented in seconds per vehicle.

As shown in Table 1, all five study intersections currently operate at acceptable conditions (LOS D or better) during the weekday PM peak hour.

1.5.3 Transit Conditions

The SFVAMC currently contracts with a major transportation service to provide free bus and shuttle service to staff and patients daily. The service operates between the SFVAMC Fort Miley Campus and major transportation hubs in San Francisco from 5:00 AM to 9:00 AM and again from 2:30 PM to 6:30 PM. More than 200 staff and patients utilize this service daily.

Muni service to the SFVAMC Fort Miley Campus is provided primarily by the 38 Geary and 38L Geary Limited, with supplementary peak-period, commute-direction service provided by the 38AX Geary A Express. The key characteristics of each line are summarized in Table 2. Figure 5 illustrates the transit service in the vicinity of the Project.

[2] As part of the HCM methodology, adjustments are typically made to the capacity of each intersection to account for various factors that reduce the ability of the streets to accommodate vehicles (such as the downtown nature of the area, number of pedestrians, vehicle types, lane widths, grades, on-street parking and queues). These adjustments are made to ensure that the LOS analysis results reflect the actual operating conditions observed in the field.

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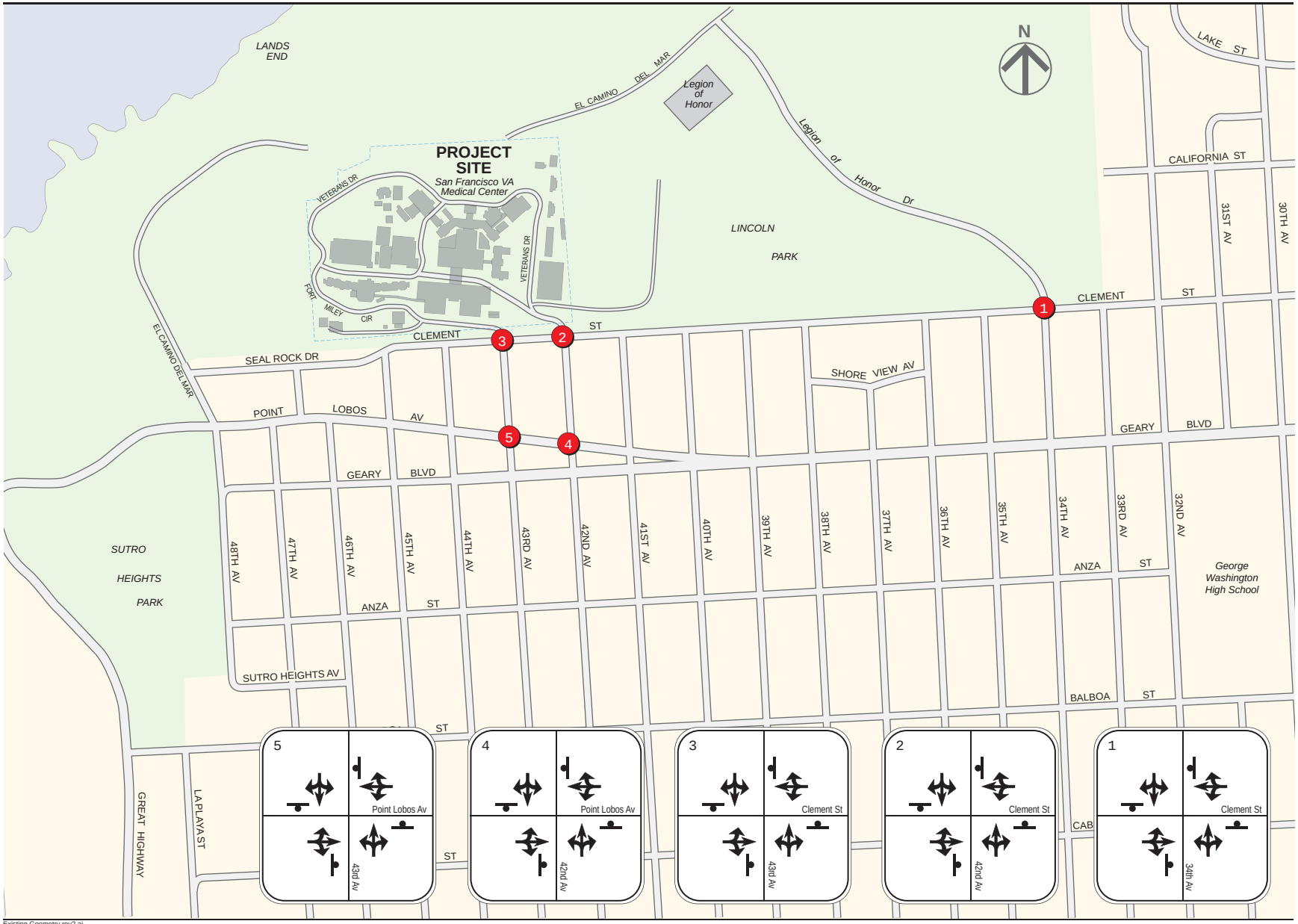

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Figure 3

Intersection Lane Geometry - Existing Conditions

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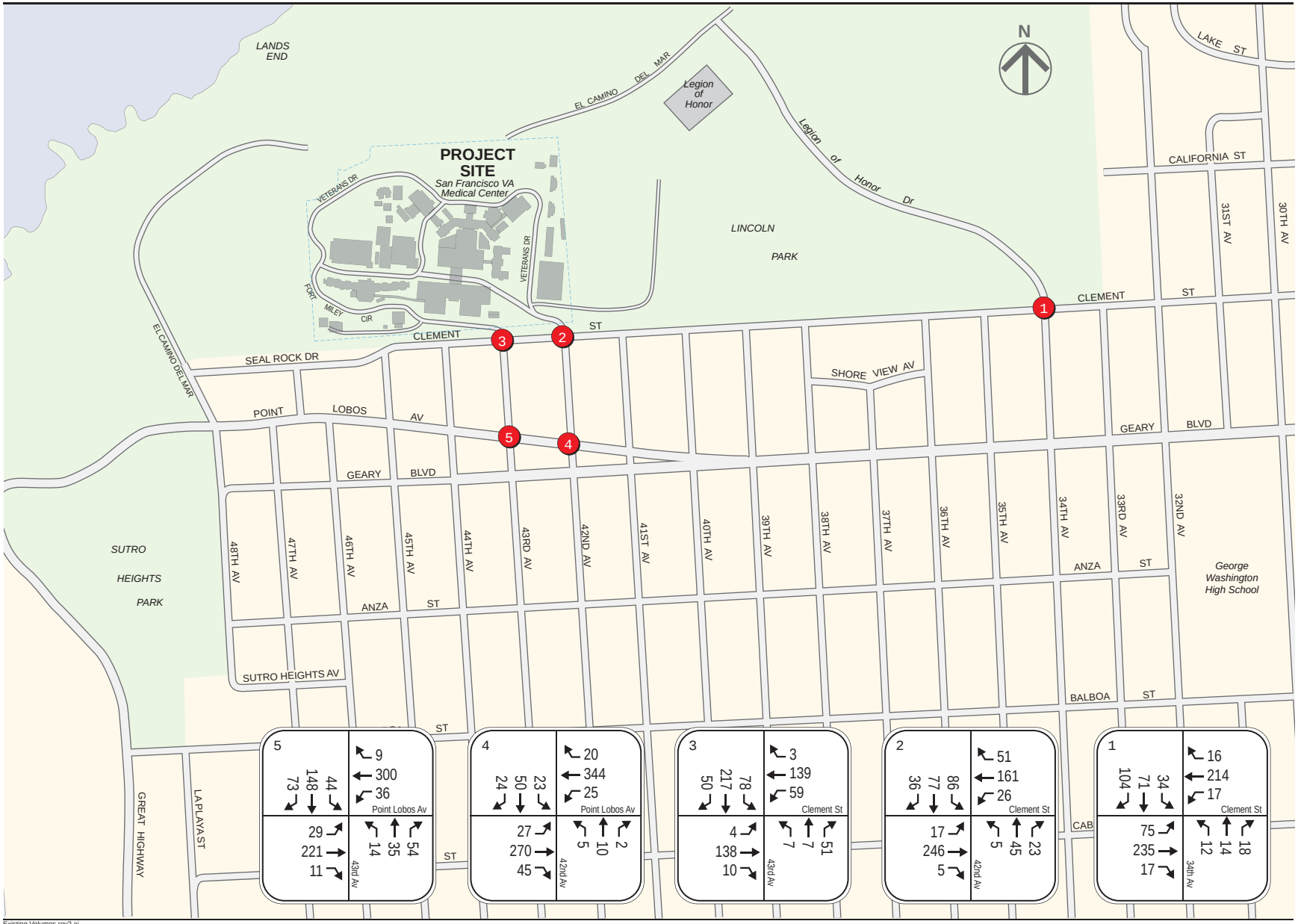

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Figure 4

Intersection Traffic Volumes - Existing Conditions

PM Peak Hour

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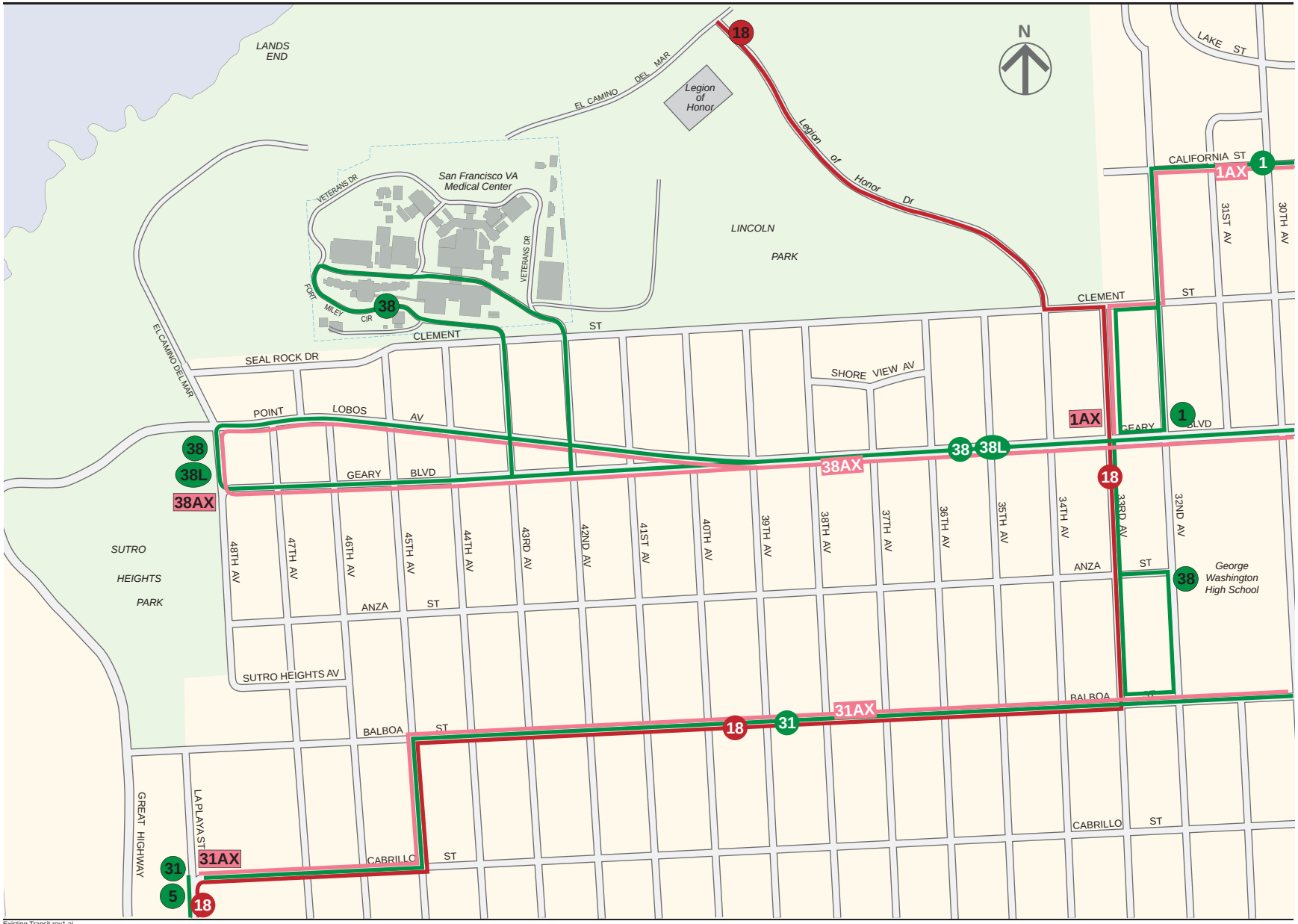

Existing Transit rev1.ai

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To/From Downtown
Crosstown Service
Express Bus

Figure 5

Transit Network - Existing Conditions

Table 2: Muni Service in the Project Vicinity

Line	Weekday PM Peak Hour Headway (minutes)	Nearest Stop to the Project Site
38 Geary	12-15	Fort Miley (Veterans Drive)[1] 42nd Avenue / Geary Boulevard (eastbound) 42nd Avenue / Point Lobos Avenue (westbound)
38L Geary Limited	5-6	42nd Avenue / Geary Boulevard (eastbound) 42nd Avenue / Point Lobos Avenue (westbound)
38AX Geary A Express	10-15	42nd Avenue / Geary Boulevard (eastbound) 42nd Avenue / Point Lobos Avenue (westbound)

Source: SFMTA, 2012.
Notes: [1] Direct service to the SFVAMC Fort Miley Campus varies by time of day.

The nearest major Muni stops to the Project site are at 42nd Avenue / Geary Boulevard (eastbound direction) and 42nd Avenue / Point Lobos Avenue (westbound direction), which are served by all three lines. Between approximately 6:00 AM and 8:00 PM, the 38 Geary provides direct access to the Project site via Veterans Drive—between 6:00 AM and 8:00 AM, all buses serve the SFVAMC Fort Miley Campus, transitioning to every other bus (approximately every 10-15 minutes) after 8:00 AM. 38 Geary buses not serving the Campus during this time period generally terminate instead at 32nd Avenue / Balboa Street near Washington High School, and passengers must transfer to a 38L Geary Limited or Fort Miley-bound 38 Geary east of 33rd Avenue to reach the Project site. It should also be noted that the 38AX is a peak-period, commute-direction service—during the weekday PM peak period, service is only provided in the westbound direction (towards Lands End and 48th Avenue / Point Lobos Avenue).

The availability of transit is based on the capacity utilization of each line, which relates the number of passengers per transit vehicle to the design capacity of the vehicle. The capacity per vehicle includes both seated and standing capacity, where standing capacity is between 30 and 80 percent of the seated capacity, depending on the configuration of the vehicle. Ridership values are obtained at the maximum load point (MLP), the stop along the line with the highest ridership. In accordance with Proposition E, the SFMTA Board has adopted an “85 percent” standard for transit vehicle loads—i.e., all transit vehicles should operate at or below 85 percent capacity utilization. The SFMTA Board has determined that this threshold most accurately reflects actual operations and the likelihood of “pass-ups” (i.e., vehicles not stopping to pick up more passengers). It should be noted that Muni defines trips with respect to downtown San Francisco. Thus, inbound trips are considered to be traveling toward downtown (eastbound with respect to the Project site), and outbound trips are considered traveling away from downtown (westbound with respect to the Project site).

Table 3 presents the weekday PM peak hour capacity utilization for each of the Muni bus routes that directly serve the Project site. The ridership and capacity calculations are included in Appendix E.

As shown in Table 3, all three lines operate below capacity during the weekday PM peak hour, with the majority of ridership traveling outbound from downtown San Francisco. The highest capacity utilization during the weekday PM peak hour is on outbound 38L Geary Limited buses, approaching the 85 percent policy standard leaving the stop at Geary Street / Van Ness Avenue.

It should be noted that ridership and capacity for Muni lines serving the Project site as summarized in Table 3 is based on Muni service at the time of the SFMTA’s first Transit Effectiveness Project (TEP) data collection period between October 2006 and June 2007. All data presented in Table 3 is relative to the time of data collection, and does not consider changes to Muni service since June 2007. In particular, the SFMTA Board declared a fiscal emergency within the definition of CEQA

§21080.32 in April 2009. To address this issue, the SFMTA Board approved an amended 2009-2010 Operating Budget and related actions, and service changes associated with the budget deficit were implemented on December 5, 2009, with an additional series of service changes entering effect on May 8, 2010. Service changes implemented taking effect in December 2009 and May 2010 included minor changes to vehicle type, frequency, or hours of service for some lines. On September 4, 2010, approximately 61 percent of the service eliminated in the May 2010 service changes was restored, focusing primarily on evening and owl service frequencies and the last scheduled trips for evening services. Additional minor changes in service have been implemented since September 2010 to various lines.

Table 3: Muni Ridership and Capacity – Existing Conditions (Weekday PM Peak Hour)

Line	Direction	Existing Conditions			
		Ridership	Capacity	Utilization	Maximum Load Point
38 Geary	Inbound	487	846	57.6%	Geary / Webster
	Outbound	675	1,128	59.8%	Geary / Taylor
38L Geary Limited	Inbound	499	846	59.0%	Geary / Fillmore
	Outbound	683	846	80.7%	Geary / Van Ness
38AX Geary A Express	Outbound	177	252	70.2%	Pine / Montgomery

Source: SFMTA, 2008; AECOM, 2012.

1.5.4 Pedestrian Conditions

Sidewalks and walkways are provided within the Project site, and are continuous with off-site sidewalks along Clement Street. In particular, sidewalks are provided along Fort Miley Circle and Veterans Drive, and between the various buildings on the SFVAMC Fort Mily Campus.

All major streets in the vicinity of the Project have sidewalks and all major intersections have marked crosswalks. Most intersection corners in the vicinity of the Project provide curb ramps, but are not compliant with the Americans with Disabilities Act (ADA), lacking tactile warning devices such as truncated dome tiles. The northeast corner of the 42nd Avenue / Clement Street intersection, which provides pedestrian access to the SFVAMC Fort Miley Campus east parking lot (Lot B), also lacks a curb ramp.

Generally, a low amount of pedestrian activity was observed during the weekday PM peak periods in the vicinity of the Project site. During the weekday PM peak period, the nearby sidewalk and crosswalk conditions were observed to be operating at free-flow conditions with pedestrians moving at normal speeds and with freedom to bypass other pedestrians.

1.5.5 Bicycle Conditions

In the vicinity of the Project, four major Citywide Bicycle Routes are provided, consisting of Class I and Class III bikeways. Class I bicycle facilities are paved off-street paths, Class II bicycle facilities are striped separated bicycle lanes adjacent to the curb lane, and Class III bicycle facilities are signed routes only, where bicyclists share travel lanes with vehicles. The major bicycle routes in the study area are illustrated in Figure 6.

Route 10 is an east-west Class II / III bikeway that runs between El Camino del Mar and The Embarcadero via Clement Street, Lake Street, Clay Street, and Broadway Street. In the vicinity of the Project, Route 10 is a Class III facility along Clement Street and 30th Avenue, overlapping with Route 95.

AECOM

Existing Bikes rev2.ai

SAN FRANCISCO VA MEDICAL CENTER LONG RANGE DEVELOPMENT PLAN DRAFT EIS TRANSPORTATION IMPACT STUDY

Figure 6

Bicycle Network - Existing Conditions

Route 85 is a north-south Class III bikeway that runs between the Legion of Honor and Daly City via 34th Avenue and Lake Merced Boulevard. In the vicinity of the Project, Route 85 runs along 34th Avenue and Legion of Honor Drive, connecting Route 10, Route 95, and Route 395.

Route 95 is a north-south Class II / III bikeway that generally runs along the western edge of San Francisco from the Golden Gate Bridge to Daly City via Lincoln Street (Presidio), Clement Street, the Great Highway, and Skyline Boulevard. In the vicinity of the proposed Project, Route 95 is a Class II facility along Point Lobos Avenue / Great Highway between El Camino del Mar and Cabrillo Street and a Class III facility along Clement Street and Lake Street. Route 95 overlaps with Route 10 along Clement Street and 30th Avenue.

Route 395 is an east-west Class III bikeway that runs along El Camino del Mar between the Legion of Honor and 30th Avenue, connecting Route 85 and Route 95.

Lands End Trail is a recreational trail in the Lands End / Lincoln Park area of the Golden Gate National Recreation Area. Although used primarily for hiking and walking, segments are open to bicycle traffic as unpaved Class I facilities.

During field observations, bicyclists were observed riding along the established bicycle routes in the vicinity of the project site. Bicycle conditions were observed to be operating acceptably, with only minor conflicts observed between right-turning vehicles and bicyclists.

1.5.6 Parking Conditions

In general, on-street parking in the vicinity of the Project consists of unmetered parallel parking. Field observations conducted during the weekday PM peak period indicated that on-street parking is well-utilized throughout the day, although particular occupancy percentages can vary depending on location and peak period. For the weekday PM peak period, occupancies of around 90 percent were observed along Clement Street, 34th Avenue, 42nd Avenue, 43rd Avenue, and Point Lobos Avenue.

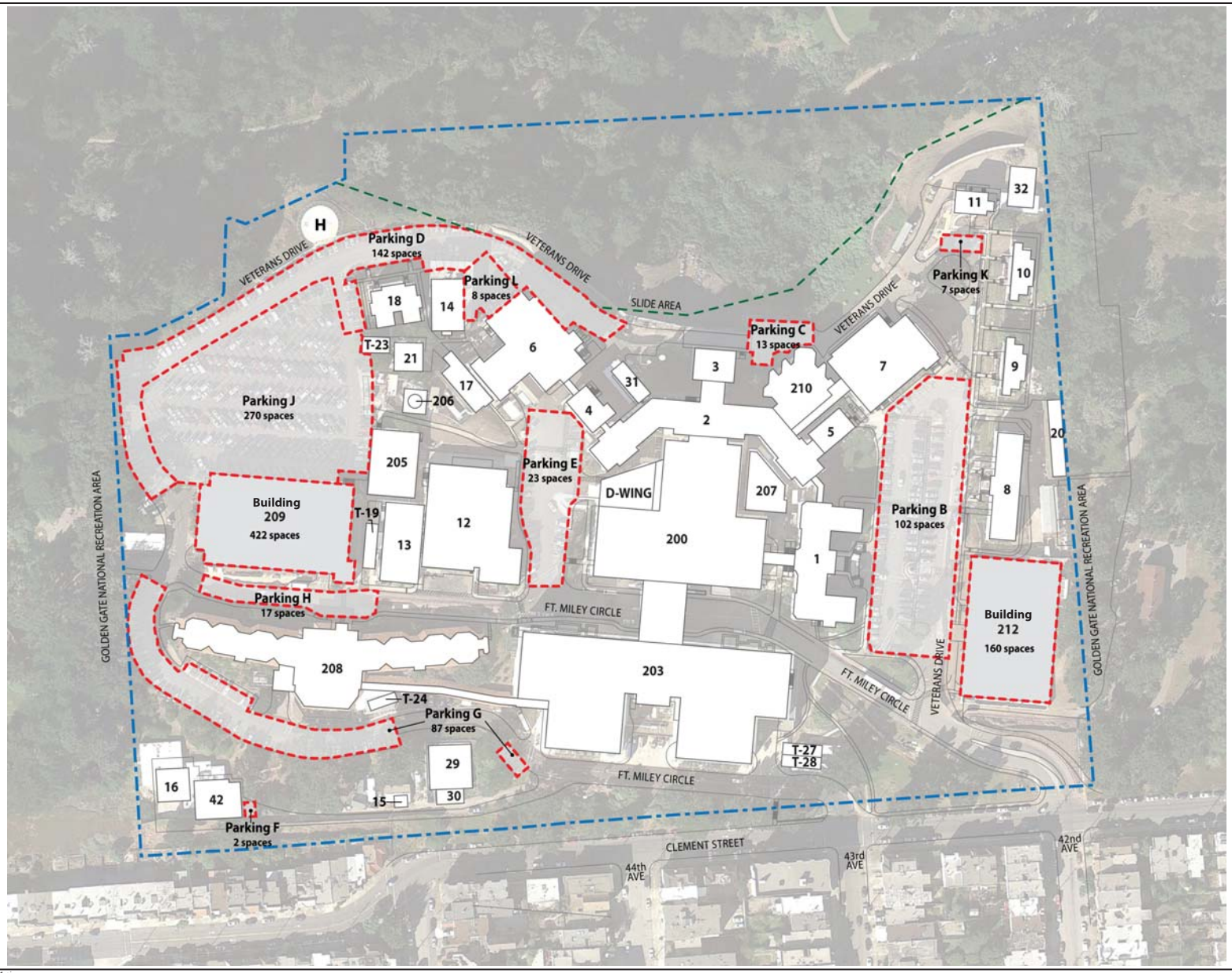
Existing on-site parking facilities are illustrated in Figure 7 and summarized in Table 4, consisting of ten surface lots (Lot B through Lot L) and two structures (Building 209 and Building 212). Patients and visitors currently park in Lot B and Lot H, which can be accessed from both 42nd Avenue and 43rd Avenue. Based on field observations, it was determined that these facilities were generally well-utilized, and occupancies of around 80 percent were observed during the weekday PM peak period.

1.5.7 Loading Conditions

Medical, office, and food supplies are delivered to the SFVAMC Fort Miley Campus on a daily basis. Delivery vehicles can currently access the site via 42nd Avenue / Clement Street, where they can then use Fort Miley Circle and Veterans Drive to directly access individual building delivery bays inside the Campus.

1.5.8 Site Access and Circulation Conditions

Site access is provided from 42nd Avenue and 43rd Avenue, which connect to two internal roadways—Fort Miley Circle and Veterans Drive—that provide access through the entire SFVAMC Fort Miley Campus. Existing traffic patterns indicate that a majority of vehicles enter the Campus from the 42nd Avenue / Clement Street intersection and exit the Campus from the 43rd Avenue / Clement Street intersection.



parking facilities rev1.ai

SAN FRANCISCO VA MEDICAL CENTER LONG RANGE DEVELOPMENT PLAN DRAFT EIS TRANSPORTATION IMPACT STUDY

Figure 7

Existing Parking Facilities

Table 4: Existing Off-Street Parking Supply

Facility	Parking Type	Function / User	Supply
Building 209	Structure	Patient / Employee	422
Building 212	Structure	Patient	160
Lot B	Surface lot	Patient / Visitor	102
Lot C	Surface lot	Employee	13
Lot D	Surface lot	GSA / Employee	142
Lot E	Surface lot	Patient	23
Lot F	Surface lot	Employee	2
Lot F	Surface lot	Employee	87
Lot H	Surface lot	Patient / Visitor	17
Lot J	Surface lot	Employee	270
Lot K	Surface lot	Employee	7
Lot L	Surface lot	Employee	8
Total			1,253

Source: SFVAMC Long Range Development Plan, 2012; AECOM, 2012.

The Ambulatory Care Center (Building 200) is the primary destination of emergency vehicles arriving at the Campus, with access provided via 42nd Avenue and Fort Miley Circle. Overall, the Campus currently provides adequate access for emergency vehicles.

1.6 Regulatory Setting

This section provides a description of the major regulations governing the transportation assessment of the Project.

1.6.1 Federal

National Environmental Policy Act (NEPA) and Transportation Decision-Making
The principles of NEPA as they affect the transportation decision-making process include the following:

1. Assessment of transportation and parking impacts of the project;
2. Analysis of alternatives to the project;
3. Consideration of appropriate impact mitigation;
4. Documentation and disclosure;
5. Interagency coordination; and,
6. Public involvement.

As the Project is a federal action with each of its NEPA alternatives' transportation and parking impacts assessed in this study, Items 1 through 4 above are satisfied by this TIS. Given that this TIS will serve as a technical appendix to the NEPA document currently being prepared for this Project and, thus, will be available for public review, including agency review, along with the NEPA document, Items 5 and 6 above will also be satisfied by this TIS.

Interim Guidance on the Application of Travel and Land Use Forecasting in NEPA, Federal Highway Administration (FHWA)
This technical memorandum issued by FHWA seeks to improve the quality of project-level forecasting in the context of the NEPA process. The guidance shares key considerations, collective lessons learned, and best practices regarding how to apply forecasting in NEPA. As the Project is a federal action subject to NEPA, this FHWA travel forecast guidance applies to this TIS.

Traffic Analysis Toolbox Volume VI: Definition, Interpretation, and Calculation of Traffic Analysis Tools Measures of Effectiveness (2007), FHWA
FHWA Traffic Analysis Toolbox Volume VI presents how to correctly interpret findings and present recommendations that are easy to comprehend by decision-makers and the public. Computing one or more traffic performance measures of effectiveness (MOEs) helps quantify the effect of a project on the transportation network. Commonly-used MOEs include travel time, speed, delay, queue, stops, density, and travel-time variance. The LOS and volume-to capacity ratios contained in the 2000 Highway Capacity Manual (HCM), published by the Transportation Research Board (TRB), are frequently used when communicating the quality of transportation facility performance to decision-makers.

1.6.2 State

As a federal Project, no State transportation plans, policies, or guidance apply.

1.6.3 Local

As a federal Project, no local transportation plans, policies, or guidance apply. However, in so much as the Project may have transportation-related impacts on the surrounding neighborhoods, the following City and County of San Francisco plans and guidance were utilized to assess the Project.

San Francisco Bicycle Plan (2009), San Francisco Municipal Transportation Agency (SFMTA)
The San Francisco Bicycle Plan identifies existing and planned bicycle facilities in the vicinity of the Project.

Transportation Impact Analysis Guidelines for Environmental Review (2002), San Francisco Planning Department
The San Francisco Transportation Impact Analysis Guidelines describes the methodology for trip generation, trip distribution and assignment, mode split, transit impact analysis, parking analysis, and loading analysis for projects in the City and County of San Francisco.

2.0 Transportation Impact Analysis

This chapter evaluates the transportation impacts of the Project and proposes mitigation measures where needed to mitigate any significant impacts.

2.1 Project Travel Demand Methodology

Travel demand refers to the new vehicle, transit, pedestrian, and other trips that would be generated by a proposed Project, while parking and loading demand refers to the demand for parking spaces and loading facilities generated by the Project. The travel demand, parking demand, and loading demand estimates are based on information contained in the San Francisco Planning Department's Transportation Impact Analysis Guidelines for Environmental Review (SF Guidelines), the 2000 U.S. Census Journey-to-Work data, and the Institute of Transportation Engineers' (ITE) Trip Generation (8th Edition). Although not explicitly required because the Project is a federal action and not subject to local transportation policies and guidance, in so much as the Project and many of its employees, patients, and visitors are located within San Francisco and the Greater Bay Area, the SF Guidelines were consulted to provide trip distribution and mode split information specific to the Project area. Appendix C presents the travel demand calculations and Appendix D presents the parking and loading demand calculations for the Project.

Details of the methodology used for Project travel demand (trip generation, mode split, average vehicle occupancy, and trip distribution), parking demand, and freight / service vehicle loading demand are provided below.

2.1.1 Trip Generation

The person-trip generation for the Project includes trips made by patients, visitors, and employees of the proposed hospital, office, and research uses. For the purposes of this analysis, trip generation rates are based on data contained in ITE's Trip Generation, since the SF Guidelines does not contain rates for uses comparable to those proposed by the Project. However, it should be noted that mode split, inbound / outbound splits, and work / non-work splits are all taken from the SF Guidelines, which provides data specific to San Francisco and the Project study area for these travel characteristics.

ITE trip generation rates are developed through the aggregation of trip surveys conducted for various land uses in suburban areas throughout the United States. Specifically, sites represented in the ITE samples are generally highly automobile-dependent and automobile-oriented, with the majority of trips taken by automobiles. Therefore, the ITE rates generally consider only vehicle-trips, ignoring trips made by transit or bike or on-foot.

The SF Guidelines examines trips made by all modes of travel, in keeping with the multi-modal nature of travel behavior in a dense, urban environment like San Francisco. As a result, the ITE trip generation rates have been adjusted using an average vehicle occupancy (AVO) to determine the total person-trip generation for a given land use. Since the ITE samples include sites at various locations throughout the country, the national average vehicle occupancy rate was used to derive the equivalent person-trip generation rate. Table 5 presents the trip generation rates used for the analysis of the proposed Project.

2.1.2 Mode Split

The Project-generated person-trips are assigned to travel modes in order to determine the number of auto, transit, and "other" trips, where "other" includes walk, bicycle, motorcycle, taxi, and additional modes. Mode split information for the Project is based on data contained in the SF Guidelines. Although the Project is a federal action and not subject to local transportation policies and guidance, the SF Guidelines provide detailed mode split data specific to San Francisco and were, therefore, consulted in estimating the Project's travel demand by mode.

Table 5: Person-Trip Generation Rates

Land Use (ITE Land Use Code)	ITE Trip Generation Rate		Equivalent Person-Trip Generation Rate[1]	
	Weekday Daily	Weekday PM Peak Hour	Weekday Daily	Weekday PM Peak Hour
Hospital (610)	16.50 trips per 1,000 GSF	1.14 trips per 1,000 GSF	17.82 trips per 1,000 GSF	1.23 trips per 1,000 GSF
Office (710)	11.01 trips per 1,000 GSF	1.49 trips per 1,000 GSF	11.89 trips per 1,000 GSF	1.61 trips per 1,000 GSF
Research and Development Center (760)	8.11 trips per 1,000 GSF	1.07 trips per 1,000 GSF	8.76 trips per 1,000 GSF	1.16 trips per 1,000 GSF
Motel (320)[2]	5.63 trips per room	0.47 trips per room	6.08 trips per room	0.51 trips per room
Medical-Dental Office Building (720)	36.13 trips per 1,000 GSF	3.46 trips per 1,000 GSF	39.02 trips per 1,000 GSF	3.74 trips per 1,000 GSF

Source: SF Guidelines, 2002; Trip Generation (8th Edition), 2010; 2000 U.S. Census.
Notes: (1) ITE trip generation rates are adjusted using the national AVO of 1.08 passengers per vehicle, per 2000 U.S. Census data.
(2) The proposed hoptel use was analyzed as a motel use (ITE Land Use 320).

2.1.3 Trip Distribution / Assignment

The trips generated by the Project are distributed to the four quadrants of San Francisco (Superdistricts 1, 2, 3, and 4), the East Bay, the North Bay, the South Bay / Peninsula, and outside the region, based on the origin / destination of each trip and land use-based trip distribution data contained in the SF Guidelines. Although the Project is a federal action and not subject to local transportation policies and guidance, the SF Guidelines provide detailed trip distribution data specific to San Francisco and the Greater Bay Area and were, therefore, consulted in estimating the Project's trip distribution.

For this analysis, it is assumed that the trip distribution for the Project's hospital and research uses are similar to the trip distribution for office uses. Table 6 presents the trip distribution percentages used in the analysis of the proposed Project.

Table 6: Trip Distribution Patterns

Trip Origin / Destination	Trip Type	
	Work	Non-Work
San Francisco		
Superdistrict 1	8.4%	13.0%
Superdistrict 2	35.2%	27.0%
Superdistrict 3	15.8%	14.0%
Superdistrict 4	15.1%	9.0%
East Bay	7.1%	11.0%
North Bay	7.0%	4.0%
South Bay	10.6%	8.0%
Out of Region	0.8%	14.0%
Total	100.0%	100.0%

Source: SF Guidelines, 2002.

2.1.4 Parking Demand

Similar to the trip generation calculations, the proposed Project's parking demand is calculated using rates provided from ITE's Parking Generation (3rd Edition). ITE parking generation rates are based on parking surveys conducted for various land uses in suburban areas throughout the United States.

2.1.5 Loading Demand

The proposed Project's loading demand is calculated using information contained in the SF Guidelines, which provides daily, average-hour, and peak-hour loading demand for various land uses. Although the Project is a federal action and not subject to local transportation policies and guidance, the SF Guidelines provide detailed loading demand data specific to San Francisco and were, therefore, consulted in estimating the Project's loading demand.

2.2 Project Travel Demand

2.2.1 Trip Generation

Table 7 and Table 8 summarize the estimated total person-trips generated by the Project under both the near-term (Phase 1) and long-term (Phase 2) timeframes for Alternative 1 and Alternative 2, respectively. Only actions that result in active trip-generating uses were considered; accessory uses such as parking are not trip generators or attractors in and of themselves, and are, therefore, excluded from the travel demand calculations. As discussed in Section 1.3, near-term actions are expected to be completed by Year 2015, while long-term actions are expected to be completed by Year 2023 (SFVAMC Fort Miley Campus) and Year 2027 (SFVAMC Mission Bay Campus).

As both Alternative 1 and Alternative 2 propose the same near-term actions, both alternatives would generate the same person-trips in the near-term timeframe. Alternative 2 would generate substantially more total person-trips in the long-term timeframe, but the majority of these trips would be concentrated at the potential new SFVAMC Mission Bay Campus. As a result, Alternative 1 would generate substantially more person-trips at the existing SFVAMC Fort Miley Campus.

2.2.2 Mode Split

Table 9 and Table 10 summarize trip generation by mode for Alternative 1 and Alternative 2, respectively.

2.2.3 Parking Demand

Table 11 and Table 12 summarize the weekday parking demand for Alternative 1 and Alternative 2, respectively.

Table 7: Person-Trip Generation – Alternative 1

Phase / Proposed Action	Corresponding ITE Land Use	Net-New SF	Person-Trips	
			Daily	PM Peak
Near-Term (Phase 1)				
1.1 Building 41 Research	R&D Center (760)	12,500	109	14
1.3 Building 22 Hoptel Addition	Motel (320)[1]	8,700	49	4
1.4 Patient Welcome Center	Office Building (710)	13,450	160	22
1.5 Building 24 Mental Health Clinic Expansion	Hospital (610)	13,300	237	16
Total		47,950	555	57
Long-Term (Phase 2)				
2.1 Operating Room Expansion (D-Wing)	Hospital (610)	5,300	94	7
2.2 IT Support Space Expansion (Building 207)	Office Building (710)	7,000	83	11
2.3 Building 24 (Mental Health Research)	R&D Center (760)	15,000	131	17
2.4 Building 40 Research	R&D Center (760)	42,400	371	49
2.5 Ambulatory Care Center	Medical-Dental Office Bldg. (720)	120,000	4,682	448
Subtotal		189,700	5,363	533
Total (Phase 1 and Phase 2)		237,650	5,918	589

Source: SFVAMC Long Range Development Plan, 2012; AECOM, 2012.
Notes: [1] The proposed hoptel use was analyzed as a motel use (ITE Land Use 320).

Table 8: Person-Trip Generation – Alternative 2

Phase / Proposed Action	Corresponding ITE Land Use	Net-New SF	Person-Trips	
			Daily	PM Peak
Near-Term (Phase 1)				
1.1 Building 41 Research	R&D Center (760)	12,500	109	14
1.3 Building 22 Hoptel Addition	Motel (320)[1]	8.700	49	4
1.4 Patient Welcome Center	Office Building (710)	13,450	160	22
1.5 Building 24 Mental Health Clinic Expansion	Hospital (610)	13,300	237	16
Total		47,950	555	57
Long-Term (Phase 2)				
SFVAMC Fort Miley Campus				
2.1 Operating Room Expansion (D-Wing)	Hospital (610)	5,300	94	7
2.2 IT Support Space Expansion (Building 207)	Office Building (710)	7,000	83	11
2.3 Building 24 (Mental Health Research)	R&D Center (760)	15,000	131	17
2.4 Building 40 Research	R&D Center (760)	42,400	371	49
Subtotal		69,700	680	84
SFVAMC Mission Bay Campus				
2.5 Ambulatory Care Center	Medical-Dental Office Bldg. (720)	150,000	5,853	561
2.7 Research Building	R&D Center (760)	200,000	1,752	231
Subtotal		350,000	7,605	792
Subtotal (Phase 2)		419,700	8,285	876
Total (Phase 1 and Phase 2)		467,650	8,840	932

Source: SFVAMC Long Range Development Plan, 2012; AECOM, 2012.
Notes: [1] The proposed hoptel use was analyzed as a motel use (ITE Land Use 320).

Table 9: Trip Generation by Mode – Alternative 1

Direction	Person-Trips					Vehicle-Trips
	Auto	Transit	Walk	Other[1]	Total	
Near-Term (Phase 1)						
Inbound	7	3	2	1	13	4
Outbound	23	13	6	2	43	16
Total	30	16	8	2	57	20
Long-Term (Phase 2)[2]						
Inbound	134	64	36	14	247	76
Outbound	184	94	48	16	342	115
Total	318	158	83	30	589	191

Source: AECOM, 2012.
Notes: (1) "Other" mode includes bicycles, motorcycles, and taxis.
(2) Assumes full build-out of the alternative (i.e., includes trips generated by near-term actions).

Table 10: Trip Generation by Mode – Alternative 2

Direction	Person-Trips					Vehicle-Trips
	Auto	Transit	Walk	Other[1]	Total	
Near-Term (Phase 1)						
Inbound	7	3	2	1	13	4
Outbound	23	13	6	2	43	16
Total	30	16	8	2	57	20
Long-Term (Phase 2)[2]						
SFVAMC Fort Miley Campus						
Inbound	13	6	3	1	23	7
Outbound	62	36	15	4	118	46
Subtotal	75	42	19	5	141	52
SFVAMC Mission Bay Campus						
Inbound	162	78	43	17	300	92
Outbound	264	138	68	22	492	171
Subtotal	426	216	111	39	792	263
Total	501	258	129	44	932	315

Source: AECOM, 2012.
Notes: (1) "Other" mode includes bicycles, motorcycles, and taxis.
(2) Assumes full build-out of the alternative (i.e., includes trips generated by near-term actions).

Table 11: Parking Demand – Alternative 1

Scenario	Hospital[1]	Office[2]	R&D[2]	Motel[3][4]	Medical-Dental Office[5]	Total
Near-Term (Phase 1)	59	32	30	7	0	128
Long-Term (Phase 2)[6]	82	49	168	7	424	730

Source: AECOM, 2012.

Notes:
(1) ITE Land Use Code 630 (Clinic)
Peak Period Equation: T = 4.43(X), where X=1,000 GSF
(2) ITE Land Use Code 700 (Office)
Peak Period Equation: T = 2.4(X), where X=1,000 GSF
(3) The proposed hoptel use was analyzed as a motel use (ITE Land Use 320).
(4) ITE Land Use Code 320 (Motel)
Peak Period Equation: T = 0.9(X), where X=rooms
(5) ITE Land Use Code 730 (Medical-Dental Office Building)
Peak Period Equation: T = 3.53(X), where X=1,000 GSF
(6) Assumes full build-out of the alternative (i.e., includes parking demand generated by near-term actions).

Table 12: Parking Demand – Alternative 2

Scenario		Hospital[1]	Office[2]	R&D[2]	Motel[3][4]	Medical-Dental Office[4]	Total
Near-Term (Phase 1)		59	32	30	7	0	128
Long-Term (Phase 2)	SFVAMC Fort Miley Campus[6]	82	49	168	7	0	306
	SFVAMC Mission Bay Campus	0	0	480	0	530	1,010
	Total	82	49	648	7	530	1,316

Source: AECOM, 2012.

Notes:
(1) ITE Land Use Code 630 (Clinic)
Peak Period Equation: T = 4.43(X), where X=1,000 GSF
(2) ITE Land Use Code 700 (Office)
Peak Period Equation: T = 2.4(X), where X=1,000 GSF
(3) The proposed hoptel use was analyzed as a motel use (ITE Land Use 320).
(4) ITE Land Use Code 320 (Motel)
Peak Period Equation: T = 0.9(X), where X=rooms
(5) ITE Land Use Code 730 (Medical-Dental Office Building)
Peak Period Equation: T = 3.53(X), where X=1,000 GSF
(6) Assumes full build-out of the alternative (i.e., includes parking demand generated by near-term actions).

2.3 Criteria for Determining Significance of Effects

Although the Project is a federal action and not subject to local transportation policies and guidance, in so much as the Project may have transportation-related impacts on the surrounding neighborhoods, the following significance criteria used by the City and County of San Francisco Planning Department for the determination of transportation impacts associated with a proposed project were utilized:

- The operational impact on unsignalized intersections is considered significant when project-related traffic causes the intersection level of service to deteriorate from LOS D or better to LOS E or LOS F, or from LOS E to LOS F, and the conditions of the Manual on Uniform Traffic Control Devices (MUTCD) peak hour signal warrant are met. In addition, the project would have a significant adverse impact if it would cause major traffic hazards or contribute considerably to cumulative traffic increases that would cause deterioration in levels of service to unacceptable levels.

- The project would have a significant effect if it would cause a substantial increase in transit demand that could not be accommodated by adjacent transit capacity, resulting in unacceptable levels of transit service; or cause a substantial increase in delays or operating costs such that significant adverse impacts in transit service levels could result.

- The project would have a significant effect if it would result in substantial overcrowding on public sidewalks, create potentially hazardous conditions for pedestrians, or otherwise interfere with pedestrian accessibility to the site and adjoining areas.

- The project would have a significant effect if it would create potentially hazardous conditions for bicyclists or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas.

- A project would have a significant effect if it would result in a loading demand during the peak hour of loading activities that could not be accommodated within proposed on-site loading facilities or within convenient on-street loading zones, and create potentially hazardous conditions or significant delays affecting traffic, transit, bicycles, or pedestrians.

- The project would have a significant effect if it would result in inadequate emergency access.

- Construction-related impacts generally would not be considered significant due to their temporary and limited duration.

3.0 Near-Term Effects

The analysis of near-term effects evaluates conditions in Year 2015, including planned and proposed future development growth and transportation network changes in the study area, as well as background growth in travel demand in the City and region.

3.1 Methods and Assumptions

3.1.1 Background Growth

Background growth in travel demand within the Project vicinity consists of both general growth in the City and region, as well as growth from specific foreseeable developments. The general growth utilized for the analysis was determined to be 0.5 percent per year for all study intersections. The application of this level of growth is consistent with previous studies conducted in the vicinity of the Project, including the Presidio Trust Management Master Plan EIS. The 0.5 percent growth rate assumed is considered conservative, as development in the vicinity of the Project is near build-out conditions.

Muni ridership projections for future-year scenarios were based primarily on growth factors obtained from the transit ridership assignment output from the SFCTA Travel Demand Model ("SF Model"). The model output provides detailed line-by-line boardings and alightings for each Muni line, known as "quickboards". These growth factors were then applied to actual existing transit ridership (as obtained from the TEP ridership counts) to develop future-year ridership projections. Any improvements proposed by the TEP to Muni service in the vicinity of the Project were also incorporated into the capacity analysis.

3.1.2 Transportation Network Modifications

Also included in the analysis of near-term effects are changes to the transportation network, including those associated with the 2009 San Francisco Bicycle Plan and the TEP. Although the Project is a federal action and not subject to local transportation plans, in so much as bicyclists going to and from the site will likely utilize the nearby bikeway network, the San Francisco Bicycle Plan was consulted in the assessment of the Project.

The 2009 San Francisco Bicycle Plan outlines a package of near-term bikeway improvements, including the following improvements in the vicinity of the Project:

- Great Highway and Point Lobos Avenue bike lanes (Route 95) between El Camino Del Mar and Cabrillo Street;
- Minor improvements along Clement Street (Route 10 / 95) between 30th Avenue and 34th Avenue and between 43rd Avenue and 48th Avenue;
- Minor improvements along Legion of Honor Drive (Route 85) between Clement Street and El Camino del Mar;
- Minor improvements along 30th Avenue (Route 95) between Clement Street and El Camino del Mar; and
- Minor improvements along El Camino del Mar (Route 395) between Legion of Honor Drive and Sea Cliff Avenue.

Minor improvements include minor changes to pavement marking / signage, traffic signal timing plans, and parking configurations.

SFMTA's TEP would institute a series of changes to Muni's service to streamline operations, including changes to frequencies, service hours, route alignments, and vehicle capacities. Specifically, in the vicinity of the Project site, the TEP proposes to increase frequency on the 38L Geary Limited.

3.2 2015 Near-Term Alternative 1 Conditions

3.2.1 Traffic Impacts

Growth in traffic as a result of planned development both within and outside of the study area was used to develop 2015 Near-Term Alternative 1 Conditions traffic volumes. The resulting traffic volumes and LOS at the study intersections are illustrated in Figure 8 and summarized in Table 13.

Table 13: Intersection Level of Service – 2015 Near-Term Alternative 1 Conditions (Weekday PM Peak Hour)

Intersection		Control Type	2015 Near-Term Conditions		2015 Near-Term Alternative 1 Conditions	
			LOS	Delay[1]	LOS	Delay[1]
1	34th Avenue / Clement Street	All-way Stop	B	12.0	B	12.7
2	42nd Avenue / Clement Street	All-way Stop	B	11.2	B	12.0
3	43rd Avenue / Clement Street	All-way Stop	B	11.9	B	13.2
4	42nd Avenue / Point Lobos Avenue	All-way Stop	B	12.7	B	13.4
5	43rd Avenue / Point Lobos Avenue	All-way Stop	B	14.7	C	15.3

Source: AECOM, 2012.
Notes: [1] Delay presented in seconds per vehicle.

As shown in Table 13, under 2015 Near-Term Alternative 1 Conditions, all five study intersections are projected to operate at acceptable conditions (LOS D or better) during the weekday PM peak hour. As such, the Project would not result in significant impacts to any study intersections.

3.2.2 Transit Impacts

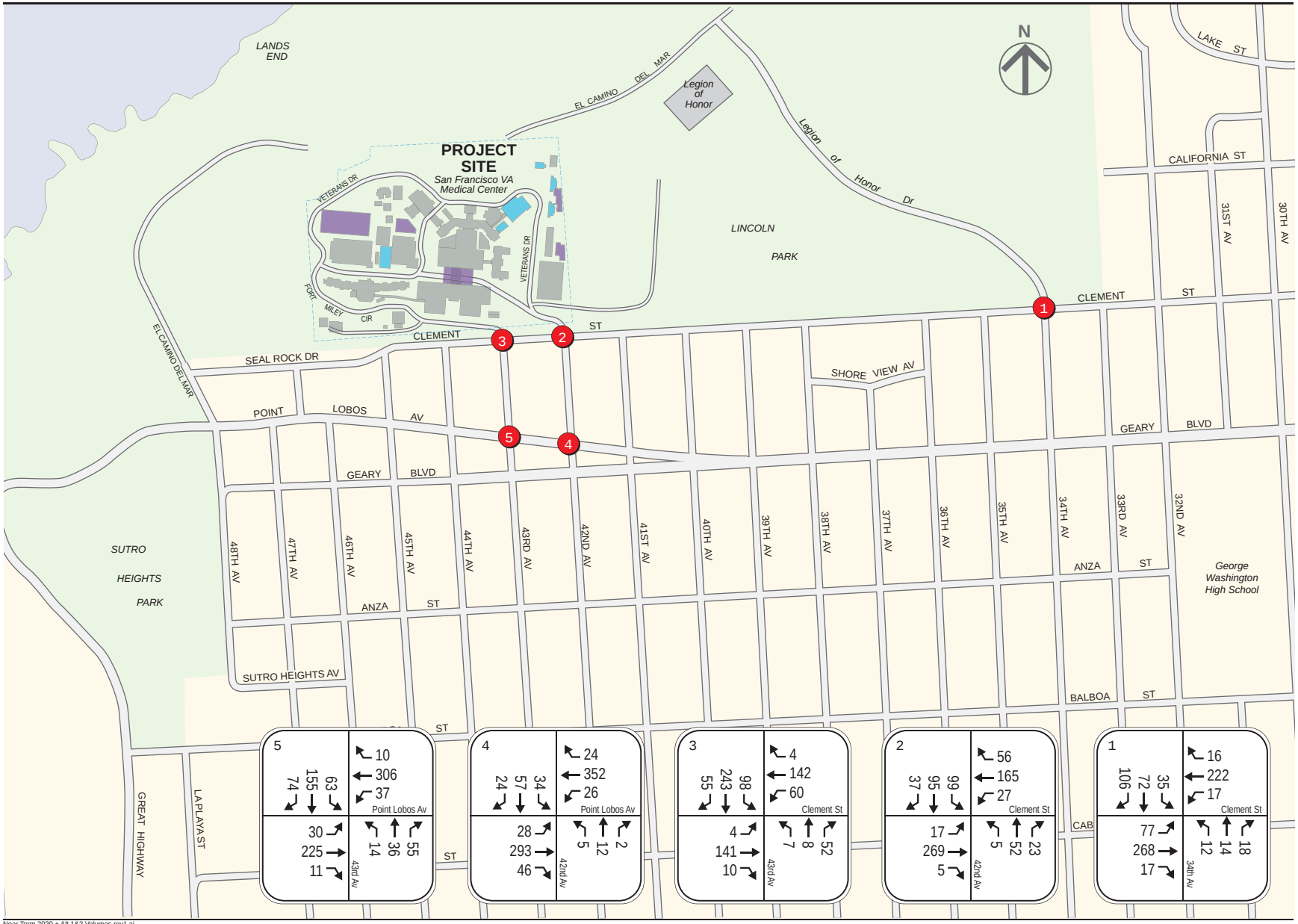
Under Alternative 1, the Fort Miley Circle loop currently used by 38 Geary buses would no longer be connected. Instead of exiting on 43rd Avenue as they currently do, Muni buses would instead use the new drop-off circle for the Patient Welcome Center to loop back, exiting on 42nd Avenue. A new transit center is proposed on the south side of the new drop-off circle.

As shown in Table 9, Alternative 1 would generate approximately 16 transit trips (3 inbound to the Project and 13 outbound from the Project) during the weekday PM peak hour. Transit trips to and from the Project would use the nearby Muni bus lines for local trips, as well as for regional trips (via transfers).

Muni ridership and capacity under 2015 Near-Term Conditions are summarized in Table 14. As Muni defines trips with respect to downtown San Francisco, the Project's 3 inbound transit trips would generally use Muni service heading in the outbound direction from Downtown, while the Project's 13 outbound transit trips would generally use Muni service heading in the inbound direction to Downtown.

Based on the ridership totals presented, sufficient capacity would be available for Project transit users in the "inbound" direction for both the 38 Geary and 38L Geary Limited lines. Specifically, the 38 Geary can accommodate as many as 177 additional riders before reaching its capacity utilization threshold, while the 38L Geary Limited can accommodate as many as 403 additional riders before reaching its capacity utilization threshold. Thus, the Project's 13 transit trips away from the Project site could be easily accommodated on Muni service in the vicinity of the Project.

AECOM



Near Term 2020 + Alt 1&2 Volumes rev1.ai

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Figure 8

Intersection Traffic Volumes - 2015 Near-Term Alternatives 1 and 2 Conditions

PM Peak Hour

Table 14: Muni Ridership and Capacity – 2015 Near-Term Conditions (Weekday PM Peak Hour)

Line	Direction	Existing Conditions			2015 Near-Term Conditions		
		Ridership	Capacity	Utilization	Ridership	Capacity	Utilization
38	Inbound	487	846	57.6%	542	846	64.1%
	Outbound	675	1,128	59.8%	761	1,128	67.5%
38L	Inbound	499	846	59.0%	556	1,128	49.3%
	Outbound	683	846	80.7%	770	1,128	68.3%
38AX	Outbound	177	252	70.2%	200	252	79.2%

Source: SFMTA, 2008; AECOM, 2012.

Although the 38AX Geary A Express would approach the 85 percent capacity utilization threshold, it would still be able to accommodate an additional 14 riders, which still exceeds the estimated 3 transit trips to the Project site during the weekday PM peak hour. Given that there would be substantial capacity available on parallel services (38 and 38L), the Project is not expected to result in a significant impact to transit capacity.

3.2.3 Pedestrian Impacts

Pedestrian trips generated by the Project would include walk trips to and from the Project site, plus walk trips to and from transit lines. Overall, the Project would add a maximum of approximately 24 pedestrian trips (including about 8 walk trips and a maximum of 16 transit trips) to the adjacent sidewalks during the weekday PM peak hour.

The new pedestrian trips generated by the proposed Project could be accommodated on the nearby pedestrian facilities without any impacts to pedestrian safety or operations. The Project would not conflict with existing pedestrian facilities or propose design features hazardous to pedestrian operations. As such, the Project would not result in significant impacts to pedestrian conditions.

All pedestrian traffic entering and exiting the site would utilize the crosswalks at 42nd Avenue / Clement Street and 43rd Avenue / Clement Street, but given the relatively low volume of pedestrians in the vicinity of the Project, few conflicts between Project-related traffic and pedestrians are expected to occur.

3.2.4 Bicycle Impacts

A portion of the 2 “other” trips presented in Table 9 would likely be bicycle trips. With the current bicycle and vehicular traffic volumes on the adjacent streets, bicycle travel generally occurs without major impedances or safety problems. The Project’s expected increase in bicycle trips within the area would not be substantial enough to affect overall bicycle circulation in the area or the operations of adjacent bicycle facilities. Thus, no significant bicycle impacts are expected as a result of the Project. The addition of Project-generated vehicular traffic would also not result in any significant impacts to bicycle conditions in the vicinity of the Project.

3.2.5 Parking Impacts

Typically, the assessment of parking impacts compares the proposed parking supply against the supply required by the San Francisco Planning Code and the anticipated peak parking demands. Although not explicitly required because the Project is a federal action and not subject to the San Francisco Planning Code, in so much as an insufficient supply of off-street parking may cause unmet parking demand to spillover into the surrounding neighborhoods, the Planning Code was consulted in the assessment of the Project.

Planning Code Requirements: Parking requirements for the proposed Project per the San Francisco Planning Code are as follows:

- Office use: One space for each 1,000 square feet of occupied floor area, where the occupied floor area exceeds 5,000 square feet;
- Clinic use: One space for each 300 square feet of occupied floor area, where the occupied floor area exceeds 5,000 square feet; and,
- Motel use (for the proposed hoptel use): One space for each guest unit, plus one for the manager's dwelling unit, if any.

It is assumed that the Project's research and development uses will be classified as office uses under the Planning Code.

Based on the above requirements, the Project would be required to provide 78 new parking spaces in the near-term timeframe (44 spaces for the hospital uses, 13 spaces for the office uses, 13 spaces for the research and development uses, and 8 spaces for the hoptel uses).

Supply: In the near-term timeframe, the Project proposes to eliminate 214 existing parking space and construct a new 477-sapce parking structure (Building 211), resulting in a net addition of 263 spaces. Therefore, the Project's proposed parking supply would exceed the Planning Code requirements for the Project.

Demand: As shown in Table 11, the Project would generate a parking demand for approximately 128 new spaces during the peak parking demand period in the near-term timeframe. As such, the proposed net addition of 263 spaces would exceed the estimated peak parking demand.

3.2.6 Loading Impacts

Minimal impacts to truck access are expected due to the Project. Minor modifications to truck routes within the SFVAMC Fort Miley Campus are expected due to the conversion of a segment of Fort Miley Circle into a pedestrian promenade.

Although the Project is a federal action and not subject to the San Francisco Planning Code, in so much as an insufficient supply of off-street loading spaces may cause unmet loading demand to spillover into the surrounding neighborhoods, the Planning Code was consulted in the assessment of the Project. The San Francisco Planning Code requirements for off-street loading spaces for office, hospital, hoptel, medical-dental office, and research and development uses is as follows:

- For less than 100,000 square feet of gross floor area, 0 spaces are required;
- For 100,001-200,000 square feet of gross floor area, 1 space is required;
- For 200,001-500,000 square feet of gross floor area, 2 spaces is required; and,
- For more than 500,000 square feet of gross floor area, 3 spaces plus 1 space for each additional 400,000 square feet is required.

As each of the buildings proposed under the near-term timeframe would consist of less than 100,000 gross square feet of development (the 155,000-square-foot Emergency Operations Center / Building 211 Parking Garage, of which only 2,000 square feet is part of the Emergency Operations Center, would not be required to provide off-street loading spaces), a conservative approach to the calculation of Planning Code loading requirements has been taken. Instead of calculating requirements for each individual building, the total development across all proposed buildings has been aggregated together. Since the total gross floor area for the Project's proposed actions in the near-term timeframe is only 58,300

square feet, the Project is not required to provide any loading spaces under the near-term timeframe according to the Planning Code.

3.2.7 Site Access and Circulation Impacts

Under the Project, the 42nd Avenue entrance would be designated primarily for Veteran and visitor access. Patients and visitors would enter the Project via 42nd Avenue and be directed to parking facilities on the east side of the site (Building 212 and Lot B). The 43rd Avenue entrance would be designated for staff and service / delivery vehicles. Employees would enter the Project via 43rd Avenue and be directed to parking facilities on the west side of the site (Lots I and J).

Muni buses and SFVAMC shuttles would enter the Campus via the 42nd Avenue entrance and use the Patient Welcome Center drop-off circle, looping back to exit on 42nd Avenue. Taxis would also access the Campus via the 42nd Avenue entrance, with two on-site taxi stands (one at the drop-off circle and another outside the Community Living Center). Taxis stopping at the latter taxi stand would exit via 43rd Avenue, while all other taxis would loop around at the drop-off circle and exit via 42nd Avenue.

Emergency vehicles would be directed to enter the Campus via the 43rd Avenue entrance, using Fort Miley Circle to access the Ambulatory Care Center. Overall, the Project would provide adequate access for emergency vehicles.

3.2.8 Construction Traffic Impacts

It is anticipated that construction activities for Phase 1 (near-term timeframe) will take approximately 32 months to complete. Construction would generally occur Monday through Friday from 7:00 AM to 3:30 PM, which is within City-designated construction hours.[3] On occasion, construction may also take place beyond 7:00 PM for major concrete pours or drywalling, and on Saturdays on an as-needed basis, in compliance with the San Francisco Noise Ordinance and permit conditions. Construction is not anticipated to occur on Sundays or major legal holidays.

Construction activity can generally be expected to occur in five construction stages (demolition, excavation and below grade concrete, above-grade structure, paving, and painting) for each subphase. The paving and painting construction stages would occur concurrently with the above-grade structure stage. Details regarding each construction stage are included in Appendix F.

Construction associated with the near-term actions of the Project are expected to generate a maximum of 170 one-way vehicle-trips per day, including both construction truck traffic (38 one-way vehicle-trips) and private vehicles owned by construction workers (132 one-way vehicle-trips). The impact of construction truck traffic would be a temporary reduction in capacity along local streets due to the slower movement and larger turning radii of trucks, which may affect traffic operations. It is anticipated that construction-related trucks would access the site via Geary Boulevard and 19th Avenue.

Construction workers who drive to the site would also generate temporary demand for parking and would likely park within the Project in unrestricted on-street parking spaces, within Project off-street parking facilities, or on-site as the Project parking garage and parking lots are completed. SFVAMC would follow the SFMTA Regulations for Working in San Francisco Streets ("The Blue Book")[4] and would likely be required to provide reimbursement to SFMTA for installation and removal of temporary striping and signage changes along City streets required during Project construction.

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[3] Monday through Saturday between 7:00 AM and 8:00 PM
[4] The SFMTA Blue Book (7th Edition) is available online through SFMTA (www.sfmta.com)

Construction staging would occur primarily within the confines of the Project site. With engineers' approval, the concrete pump location can be moved inside the footprint of the structure once the building has reached the ground level. Temporary closures of sidewalk and on-street parking facilities may be required within the Project site and along Clement Street. As such, pedestrians would be required to use the other internal sidewalks within the site and motorists would be required to use other available on-street and off-street parking spaces in the area.

It is anticipated that no regular travel lanes or Muni bus stops would need to be closed or relocated during the construction period. Specifically, as the majority of construction activity will be focused within the Project site (including the entrances), Clement Street would be relatively unaffected by Project construction. Any temporary sidewalk or traffic lane closures along Clement Street would be coordinated with the City in order to minimize the impacts on traffic. However, since the Project would alter the Fort Miley service of Muni's 38 Geary line to have buses exit on 42nd Avenue, relocation of the existing Muni stop on the site may be required during construction of the Patient Welcome Center drop-off circle. Prior to construction, the Project contractor would contact Muni's Street Operations and Special Events Office to coordinate construction activities and minimize any impacts to transit operations. In general, lane and sidewalk closures are subject to review and approval by the City's Transportation Advisory Staff Committee (TASC), which consists of representatives of City departments including the San Francisco Municipal Transportation Agency (SFMTA), the Department of Public Works (DPW), the Fire Department, the Planning Department, the Police Department, and the Department of Public Health and commissions including the Port Commission and Taxi Commission.

Project-related construction activity, including both construction truck traffic and additional vehicular traffic from construction workers, would not substantially affect vehicular, pedestrian, and bicycle circulation. Parking demand generated by construction workers' personal vehicles is expected to be accommodated by existing parking facilities within the SFVAMC Fort Miley Campus. However, should parking on-site be unavailable, parking demand generated by construction workers could be accommodated through the on-street parking supply in the vicinity of the Campus. Overall, the Project's construction-related transportation impacts would be temporary in nature and would be less than significant.

3.3 2015 Near-Term Alternative 2 Conditions

3.3.1 Traffic Impacts

As both Alternative 1 and Alternative 2 propose the same series of near-term actions, the resulting traffic volumes and study intersection LOS under 2015 Near-Term Alternative 2 Conditions would be identical to 2015 Near-Term Alternative 1 Conditions, as illustrated in Figure 8 and summarized in Table 13. Any traffic impacts under Alternative 2 would be similar to Alternative 1, as summarized in Section 3.2.1.

3.3.2 Transit Impacts

Transit trips generated by Alternative 2 would be identical to Alternative 1, as summarized in Table 10. Muni ridership and capacity under 2015 Near-Term Conditions are summarized in Table 14. Transit impacts under Alternative 2 would be similar to Alternative 1, as summarized in Section 3.2.2. Like Alternative 1, Alternative 2 would remove the connection between both ends of Fort Miley Circle, requiring Muni buses to use the new Patient Welcome Center drop-off circle to turn back and exit on 42nd Avenue.

3.3.3 Pedestrian Impacts

Pedestrian trips generated by the Project would be similar to Alternative 1, as summarized in Section 3.2.3.

3.3.4 Bicycle Impacts

Bicycle trips generated by the Project would be similar to Alternative 1, as summarized in Section 3.2.4.

3.3.5 Parking Impacts

The Planning Code parking requirements, proposed parking supply, and estimated parking demand would be similar to Alternative 1, as discussed in Section 3.2.5.

3.3.6 Loading Impacts

The Planning Code loading requirements would be similar to Alternative 1, as discussed in Section 3.2.6.

3.3.7 Site Access and Circulation Impacts

Site access and circulation would be similar to Alternative 1, as discussed in Section 3.2.7.

3.3.8 Construction Traffic Impacts

Construction activities and level of intensity would be similar to Alternative 1, as discussed in Section 3.2.8.

3.4 2015 Near-Term Alternative 3 Conditions

3.4.1 Traffic Impacts

Growth in traffic as a result of planned development both within and outside of the study area was used to develop 2015 Near-Term Alternative 3 Conditions traffic volumes. The resulting traffic volumes and LOS at the study intersections are illustrated in Figure 9 and summarized in Table 15.

Table 15: Intersection Level of Service – 2015 Near-Term Alternative 3 Conditions (Weekday PM Peak Hour)

Intersection		Control Type	2015 Near-Term Conditions		2015 Near-Term Alternative 3 Conditions	
			LOS	Delay[(1)]	LOS	Delay[(1)]
1	34th Avenue / Clement Street	All-way Stop	B	12.0	B	12.7
2	42nd Avenue / Clement Street	All-way Stop	B	11.2	B	12.0
3	43rd Avenue / Clement Street	All-way Stop	B	11.9	B	13.2
4	42nd Avenue / Point Lobos Avenue	All-way Stop	B	12.7	B	13.4
5	43rd Avenue / Point Lobos Avenue	All-way Stop	B	14.7	C	15.3

Source: AECOM, 2012.
Notes: (1) Delay presented in seconds per vehicle.

As shown in Table 15, under 2015 Near-Term Alternative 3 Conditions, all five study intersections are projected to operate at acceptable conditions (LOS D or better) during the weekday PM peak hour. Since Alternative 3 corresponds to the No Action Alternative, the Project would not generate any trips and would, therefore, not result in any significant impacts to any study intersections.

AECOM

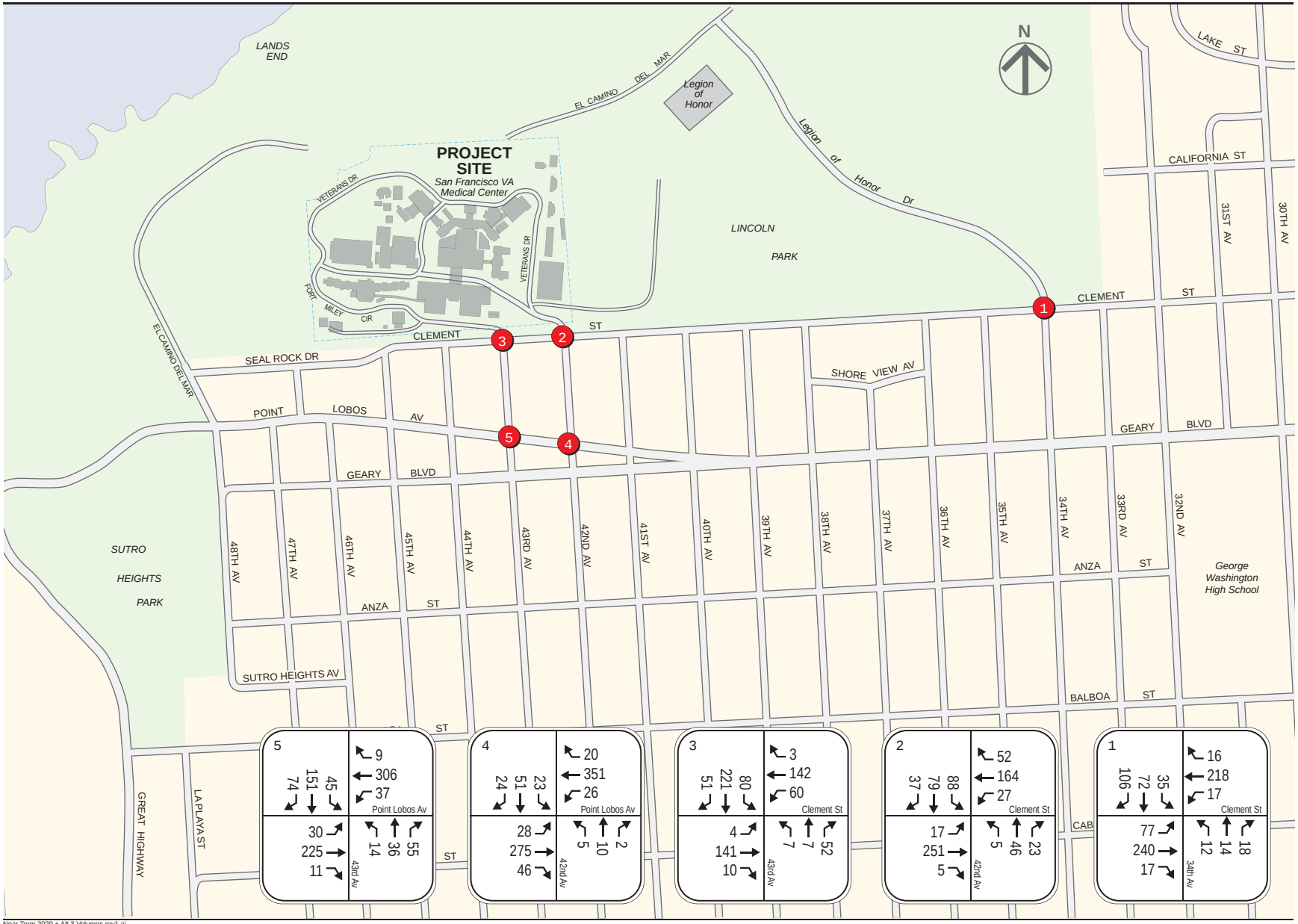

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Figure 9

Intersection Traffic Volumes - 2015 Near-Term Alternative 3 Conditions

PM Peak Hour

3.4.2 Other Impacts

Since Alternative 3 corresponds to the No Action Alternative, the Project would not generate any trips and would, therefore, not result in any transit, pedestrian, bicycle, parking, loading, site access and circulation, or construction impacts.

3.5 2015 Near-Term Conclusions

Neither Alternative 1 nor Alternative 2 is expected to result in transportation impacts that would require mitigation.

4.0 Long-Term Effects

The analysis of long-term effects evaluates conditions in Year 2023, including planned and proposed future development growth, transportation network changes in the study area, and background growth in travel demand in the City and region.

4.1 Methods and Assumptions

4.1.1 Background Growth

Similar to the near-term analysis, the long-term analysis assumes a 0.5 percent per year growth rate for background traffic for all study intersections. Muni ridership growth is calculated using the same methodology discussed in Section 3.1.1.

4.1.2 Transportation Network Modifications

The long-term analysis assumes the same changes to the transportation network assumed under the near-term analysis, discussed in Section 3.1.2.

4.2 2023 Long-Term Alternative 1 Conditions

4.2.1 Traffic Impacts

Growth in traffic as a result of planned development both within and outside of the study area was used to develop 2023 Long-Term Alternative 1 Conditions traffic volumes. The resulting traffic volumes and LOS at the study intersections are illustrated in Figure 10 and summarized in Table 16.

Table 16: Intersection Level of Service – 2023 Long-Term Alternative 1 Conditions (Weekday PM Peak Hour)

Intersection		Control Type	2023 Long-Term Conditions		2023 Long-Term Alternative 1 Conditions	
			LOS	Delay[(1)]	LOS	Delay[(1)]
1	34th Avenue / Clement Street	All-way Stop	B	12.6	C	19.1
2	42nd Avenue / Clement Street	All-way Stop	B	11.6	C	22.3
3	43rd Avenue / Clement Street	All-way Stop	B	12.5	D	27.7
4	42nd Avenue / Point Lobos Avenue	All-way Stop	B	13.4	C	22.5
5	43rd Avenue / Point Lobos Avenue	All-way Stop	C	15.8	C	21.3

Source: AECOM, 2012.
Notes: (1) Delay presented in seconds per vehicle.

As shown in Table 16, under 2023 Long-Term Alternative 1 Conditions, all five study intersections are projected to operate at acceptable conditions (LOS D or better) during the weekday PM peak hour. As such, the Project would not result in significant impacts to any study intersections.

4.2.2 Transit Impacts

As shown in Table 9, Alternative 1 would generate approximately 158 transit trips (64 inbound to the Project and 94 outbound from the Project) during the weekday PM peak hour. Transit trips to and from the Project would use the nearby Muni bus lines for local trips, as well as for regional trips (via transfers).

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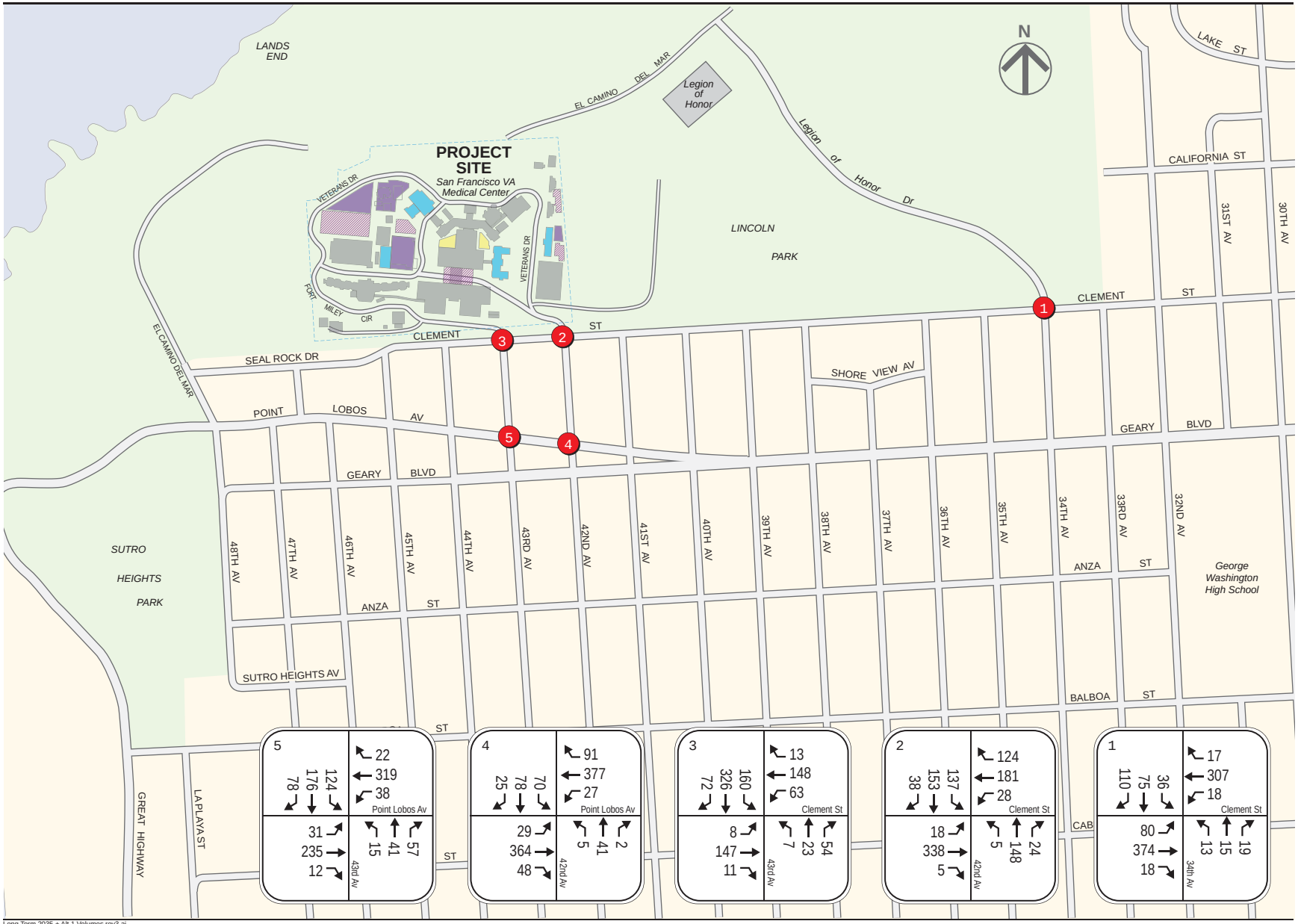

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Figure 10

Intersection Traffic Volumes - 2023 Long-Term Alternative 1 Conditions

PM Peak Hour

Muni ridership and capacity under 2023 Long-Term Conditions are summarized in Table 17. As Muni defines trips with respect to downtown San Francisco, the Project's 64 inbound transit trips would generally use Muni service heading in the outbound direction from Downtown, while the Project's 94 outbound transit trips would generally use Muni service heading in the inbound direction to Downtown.

Table 17: Muni Ridership and Capacity – 2023 Long-Term Conditions (Weekday PM Peak Hour)

Line	Direction	Existing Conditions			2015 Near-Term Conditions		
		Ridership	Capacity	Utilization	Ridership	Capacity	Utilization
38	Inbound	487	846	57.6%	606	846	71.6%
	Outbound	675	1,128	59.8%	859	1,128	76.2%
38L	Inbound	499	846	59.0%	621	1,128	55.0%
	Outbound	683	846	80.7%	869	1,128	77.1%
38AX	Outbound	177	252	70.2%	225	252	89.4%

Source: SFMTA, 2008; AECOM, 2012.
Notes: Bold denotes exceedance of capacity utilization policy standard (85% utilization).

Based on the ridership totals presented, sufficient capacity would be available for Project transit users in the "inbound" direction for both the 38 Geary and 38L Geary Limited lines. Specifically, the 38 Geary can accommodate as many as 113 additional riders before reaching its capacity utilization threshold, while the 38L Geary Limited can accommodate as many as 338 additional riders before reaching its capacity utilization threshold. Thus, the Project's 94 transit trips away from the Project site could be easily accommodated on Muni service in the vicinity of the Project.

Although the 38AX Geary A Express would exceed the 85 percent capacity utilization threshold, there would be substantial capacity available on parallel services (38 and 38L) to handle the 64 new transit trips heading to the Project site. As a result, the Project is not expected to result in a significant impact to transit capacity.

4.2.3 Pedestrian Impacts

The Project would add a maximum of approximately 241 pedestrian trips (including about 83 walk trips and a maximum of 158 transit trips) to the adjacent sidewalks during the weekday PM peak hour. These new pedestrian trips could be accommodated on the nearby pedestrian facilities without any impacts to pedestrian safety or operations. The Project would not conflict with existing pedestrian facilities or propose design features hazardous to pedestrian operations. As such, the Project would not result in significant impacts to pedestrian conditions.

All pedestrian traffic entering and exiting the site would utilize the crosswalks at 42nd Avenue / Clement Street and 43rd Avenue / Clement Street, but given the relatively low volume of pedestrians in the vicinity of the Project, few conflicts between Project-related traffic and pedestrians are expected to occur.

4.2.4 Bicycle Impacts

A portion of the 30 "other" trips presented in Table 9 would likely be bicycle trips. With the current bicycle and vehicular traffic volumes on the adjacent streets, bicycle travel generally occurs without major impedances or safety problems. The Project's expected increase in bicycle trips within the area would not be substantial enough to affect overall bicycle circulation in the area or the operations of adjacent bicycle facilities. The Project would not conflict with existing or planned bicycle facilities or propose design features hazardous to bicycle operations. As such, the Project would not result in significant impacts to bicycle conditions.

4.2.5 Parking Impacts

Based on the Planning Code requirements discussed in Section 3.2.5, the Project would be required to provide 560 new parking spaces in the long-term timeframe (462 spaces for the hospital uses, 20 spaces for the office uses, 70 spaces for the research and development uses, and 8 spaces for the hoptel uses).

Supply: The Project would not construct any additional parking facilities in the long-term timeframe beyond the net addition of 263 spaces proposed in the near-time timeframe. Therefore, the Project's proposed parking supply would not meet the Planning Code requirements for the Project.

Demand: As shown in Table 11, the Project would generate a parking demand for approximately 730 new spaces during the peak parking demand period in the long-term timeframe (including parking demand generated by near-term actions). As such, the proposed net addition of 263 spaces would not meet the estimated peak parking demand.

It should be noted that parking is generally not considered part of the permanent physical environment, with supply and demand highly variable and dependent on many different factors. The absence of a ready supply of parking spaces, combined with available alternatives to auto travel (e.g., transit services, taxis, bicycles, or travel by foot) and a relatively dense pattern of urban development, induces many drivers to seek and find alternative parking facilities, shift to other modes of travel, or change their overall travel habits. Any such resulting shifts to transit service in particular would be in keeping San Francisco's "Transit First" policy.

4.2.6 Loading Impacts

Minimal impacts to truck access are expected due to the Project. Minor modifications to truck routes within the SFVAMC Fort Miley Campus are expected due to the conversion of a segment of Fort Miley Circle into a pedestrian promenade. Similar to the near-term timeframe, most of the buildings proposed in the long-term timeframe would consist of less than 100,000 gross square feet of development. As a result, a conservative approach to the calculation of Planning Code loading requirements has been taken, aggregating the total development across all proposed buildings.

Since the total gross floor area for the Project in the long-term timeframe is 305,600 square feet, the Project would be required to provide two loading spaces in the long-term timeframe according to the Planning Code.

4.2.7 Site Access and Circulation Impacts

As there would be no major changes to access points or the internal roadway network beyond those already discussed for the near-term timeframe, site access and circulation would be similar to the near-time timeframe, as discussed in Section 3.2.7. Overall, no impacts to site access and circulation or emergency vehicle access are expected.

4.2.8 Construction Traffic Impacts

Any construction impacts for Phase 2 (long-term timeframe) would generally be similar to the effects discussed for Phase 1 (near-term timeframe) in Section 3.2.8. Construction activities associated with the long-term actions of the Project are expected to take 23 months for Subphases 2.1, 2.2, and 2.3 and another 22 months for Subphases 2.3, 2.4, and 2.5. Construction is expected to generate a maximum of 156 one-way vehicle-trips per day, including both construction truck traffic (32 one-way vehicle-trips) and private vehicles owned by construction workers (124 one-way vehicle-trips).

Overall, Project construction-related transportation impacts would be temporary in nature and would be less than significant, as discussed in Section 3.2.8.

4.3 2023 Long-Term Alternative 2 Conditions

As discussed in Section 1.3, build-out of the SFVAMC Fort Miley Campus is expected to be completed by 2023, while build-out of the potential new Mission Bay Campus is expected to be completed by 2027. For simplification, however, the potential new Mission Bay Campus is discussed here qualitatively under 2023 Long-Term Alternative 2 Conditions. As a specific location for the potential new Campus has yet to be determined, a detailed quantitative analysis of transportation impacts at the yet-to-be-determined Mission Bay Campus has not been conducted—further analysis to quantify transportation impacts at the potential new Campus would be required once a specific location has been identified.

4.3.1 Traffic Impacts

Growth in traffic as a result of planned development both within and outside of the study area was used to develop 2023 Long-Term Alternative 2 Conditions traffic volumes. The resulting traffic volumes and LOS at the study intersections are illustrated in Figure 11 are summarized in Table 18.

Table 18: Intersection Level of Service – 2023 Long-Term Alternative 2 Conditions (Weekday PM Peak Hour)

Intersection		Control Type	2023 Long-Term Conditions		2023 Long-Term Alternative 2 Conditions	
			LOS	Delay[(1)]	LOS	Delay[(1)]
1	34th Avenue / Clement Street	All-way Stop	B	12.6	B	13.0
2	42nd Avenue / Clement Street	All-way Stop	B	11.6	B	12.1
3	43rd Avenue / Clement Street	All-way Stop	B	12.5	B	13.4
4	42nd Avenue / Point Lobos Avenue	All-way Stop	B	13.4	B	13.8
5	43rd Avenue / Point Lobos Avenue	All-way Stop	C	15.8	C	16.3

Source: AECOM, 2012.
Notes: (1) Delay presented in seconds per vehicle.

As shown in Table 18, under 2023 Long-Term Alternative 2 Conditions, all five study intersections are projected to operate at acceptable conditions (LOS D or better) during the weekday PM peak hour. As such, the Project would not result in significant impacts to any study intersections.

The exact location of the potential new SFVAMC Mission Bay Campus proposed under Alternative 2, which would feature a 150,000-square-foot ambulatory care center and 200,000-square-foot research building, is as yet undetermined. As shown in Table 10, the potential new Campus would generate approximately 263 vehicle-trips during the weekday PM peak hour. These trips may potentially result in significant impacts at nearby intersections, but further analysis would be required once a specific location for the potential new Campus has been determined.

4.3.2 Transit Impacts

As shown in Table 10, the SFVAMC Fort Miley Campus under Alternative 2 would generate approximately 42 new transit trips (6 inbound to the Project and 36 outbound from the Project) during the weekday PM peak hour, substantially lower than under Alternative 1.

Muni ridership under 2023 Long-Term Conditions is summarized in Table 17. As discussed in Section 4.2.2, no impacts to transit capacity are expected under Alternative 1. As Alternative 2 would generate far fewer new transit trips in either direction than Alternative 1, no impacts to transit capacity are expected under Alternative 2.

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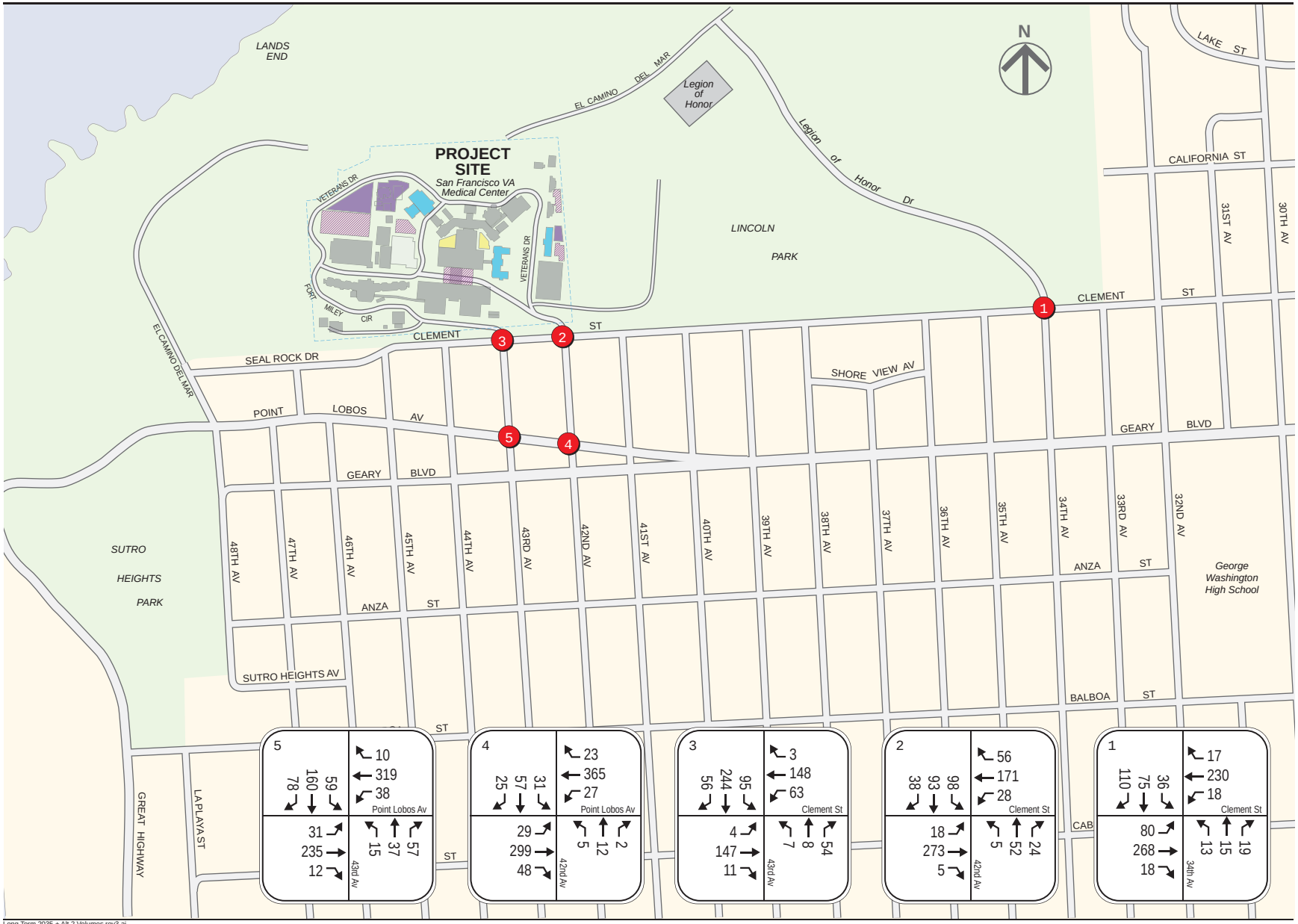

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Figure 11

Intersection Traffic Volumes - 2023 Long-Term Alternative 2 Conditions

PM Peak Hour

As shown in Table 10, the potential new SFVAMC Mission Bay Campus would generate approximately 216 transit trips during the weekday PM peak hour. These trips may potentially result in significant impacts to transit capacity, but further analysis would be required once a specific location for the potential new Campus has been determined.

4.3.3 Pedestrian Impacts

The Project would add a maximum of approximately 61 pedestrian trips (including about 19 walk trips and a maximum of 42 transit trips) to the adjacent sidewalks at the SFVAMC Fort Miley Campus during the weekday PM peak hour.

The potential new SFVAMC Mission Bay Campus would add a maximum of approximately 327 pedestrian trips (including about 111 walk trips and a maximum of approximately 216 transit trips) to the adjacent sidewalks during the weekday PM peak hour. These trips may potentially result in significant impacts to pedestrian facilities. The vehicular traffic generated by the potential new Campus may also increase the potential for conflict between vehicles and pedestrians. Further analysis of pedestrian impacts would be required once a specific location for the potential new Campus has been determined.

4.3.4 Bicycle Impacts

A portion of the 5 “other” trips at the SFVAMC Fort Miley Campus presented in Table 10 would likely be bicycle trips. With the current bicycle and vehicular traffic volumes on the adjacent streets, bicycle travel generally occurs without major impedances or safety problems. The Project’s expected increase in bicycle trips within the area would not be substantial enough to affect overall bicycle circulation in the area or the operations of adjacent bicycle facilities. Thus, no significant bicycle impacts are expected as a result of the Project. Also, the addition of Project-generated vehicular traffic would also not result in any significant impacts to bicycle conditions in the vicinity of the Project.

The potential new SFVAMC Mission Bay Campus would generate as many as 39 bicycle trips. These trips may potentially result in significant impacts to bicycle facilities. The vehicular traffic generated by the potential new Campus may also increase the potential for conflict between vehicles and bicycles. Further analysis of bicycle impacts would be required once a specific location for the potential new Campus has been determined.

4.3.5 Parking Impacts

Based on the Planning Code requirements discussed in Section 3.2.5, the Project would be required to provide 160 new parking spaces at the SFVAMC Fort Miley Campus (62 spaces for the hospital uses, 20 spaces for the office uses, 70 spaces for the research and development uses, and 8 spaces for the hoptel uses) and 700 parking spaces at the potential new SFVAMC Mission Bay Campus (500 spaces for the hospital uses and 200 spaces for the research and development uses).

Supply: The Project would not construct any additional parking facilities at the SFVAMC Fort Miley Campus beyond the net addition of 263 spaces proposed in the near-time timeframe. Therefore, the Project’s proposed parking supply would meet Planning Code requirements for the Campus in the long-term timeframe.

The Project would construct 875 new spaces at the potential new SFVAMC Mission Bay Campus, which would meet Planning Code requirements.

Demand: As shown in Table 12, the Project would generate a parking demand of approximately 306 new spaces at the SFVAMC Fort Miley Campus (including parking demand generated by near-term actions) and 1,010 spaces at the potential new SFVAMC Mission Bay Campus during the peak parking demand period in the long-term timeframe. As such, the

proposed net addition of 263 spaces at the SFVAMC Fort Miley Campus and 875 spaces at the potential new SFVAMC Mission Bay Campus would not meet the peak parking demand for the respective campuses.

As discussed in Section 4.2.5, parking is generally not considered part of the permanent physical environment, with supply and demand highly variable and dependent on many different factors. The absence of a ready supply of parking spaces, combined with available alternatives to auto travel (e.g., transit services, taxis, bicycles, or travel by foot) and a relatively dense pattern of urban development, induces many drivers to seek and find alternative parking facilities, shift to other modes of travel, or change their overall travel habits. Any such resulting shifts to transit service in particular would be in keeping San Francisco's "Transit First" policy.

4.3.6 Loading Impacts

Minimal impacts to truck access are expected due to the Project. Minor modifications to truck routes within the SFVAMC Fort Miley Campus are expected due to the conversion of a segment of Fort Miley Circle into a pedestrian promenade. Similar to the near-term timeframe, most of the buildings proposed in the long-term timeframe would consist of less than 100,000 gross square feet of development. As a result, a conservative approach to the calculation of Planning Code loading requirements has been taken, aggregating the total development across all proposed buildings. Since the total gross floor area for the Project at the Campus in the long-term timeframe is 185,600 square feet, the Project would be required to provide one loading space at Campus in the long-term timeframe according to the Planning Code.

The potential new Mission Bay Campus would consist of 350,000 gross square feet (the proposed 120,000-square-foot Clinical Parking Garage and 150,000-square-foot Research Parking Garage would not be required to provide off-street loading spaces), and would be required to provide two loading spaces according to the Planning Code.

4.3.7 Site Access and Circulation Impacts

As there would be no major changes to access points or the internal roadway network beyond those already discussed for the near-term timeframe, site access and circulation would be similar to the near-time timeframe, as discussed in Section 3.3.7. Overall, no impacts to site access and circulation or emergency vehicle access are expected. Further analysis of site access and circulation at the potential new SFVAMC Mission Bay Campus would be required once a specific location for the potential new Campus has been determined.

4.3.8 Construction Traffic Impacts

Construction activities at the SFVAMC Fort Miley Campus under Alternative 2 are expected to be similar to, but slightly lower in intensity than, those discussed for Alternative 1 in Section 4.2.8. In particular, construction activities associated with the long-term actions of the Project are expected to generate a maximum of 136 one-way vehicle-trips per day, including both construction truck traffic (28 one-way vehicle-trips) and private vehicles owned by construction workers (108 one-way vehicle-trips). Overall, the Project's construction-related transportation impacts would be temporary in nature and would be less than significant, as discussed in Section 3.2.8.

With regard to the potential new SFVAMC Mission Bay Campus, a construction plan would need to be developed specific to the site location and facilities plan, once they have been determined. In general, such a plan would be developed in such a way to ensure that Project-related construction activity would only result in impacts to the surrounding area that would be temporary in nature.

4.4 2023 Long-Term Alternative 3 Conditions

4.4.1 Traffic Impacts

Growth in traffic as a result of planned development both within and outside of the study area was used to develop 2023 Long-Term Alternative 3 Conditions traffic volumes. The resulting traffic volumes and LOS at the study intersections are illustrated in Figure 12 and summarized in Table 19.

As shown in Table 19, under 2023 Long-Term Alternative 3 Conditions, all five study intersections are projected to operate at acceptable conditions (LOS D or better) under the weekday PM peak hours. Since Alternative 3 corresponds to the No Action Alternative, the Project would not generate any trips and as such, would not result in any traffic impacts.

Table 19: Intersection Level of Service – 2023 Long-Term Alternative 3 Conditions (Weekday PM Peak Hour)

Intersection		Existing Conditions		2015 Near-Term Conditions		2023 Long-Term Alternative 3 Conditions	
		LOS	Delay[(1)]	LOS	Delay[(1)]	LOS	Delay[(1)]
1	34th Avenue / Clement Street	B	12.0	B	12.4	B	12.6
2	42nd Avenue / Clement Street	B	11.2	B	12.0	B	11.6
3	43rd Avenue / Clement Street	B	11.9	B	13.2	B	12.5
4	42nd Avenue / Point Lobos Avenue	B	12.7	B	13.4	B	13.4
5	43rd Avenue / Point Lobos Avenue	B	14.7	C	15.3	C	15.8

Source: AECOM, 2012.
Notes: (1) Delay presented in seconds per vehicle.

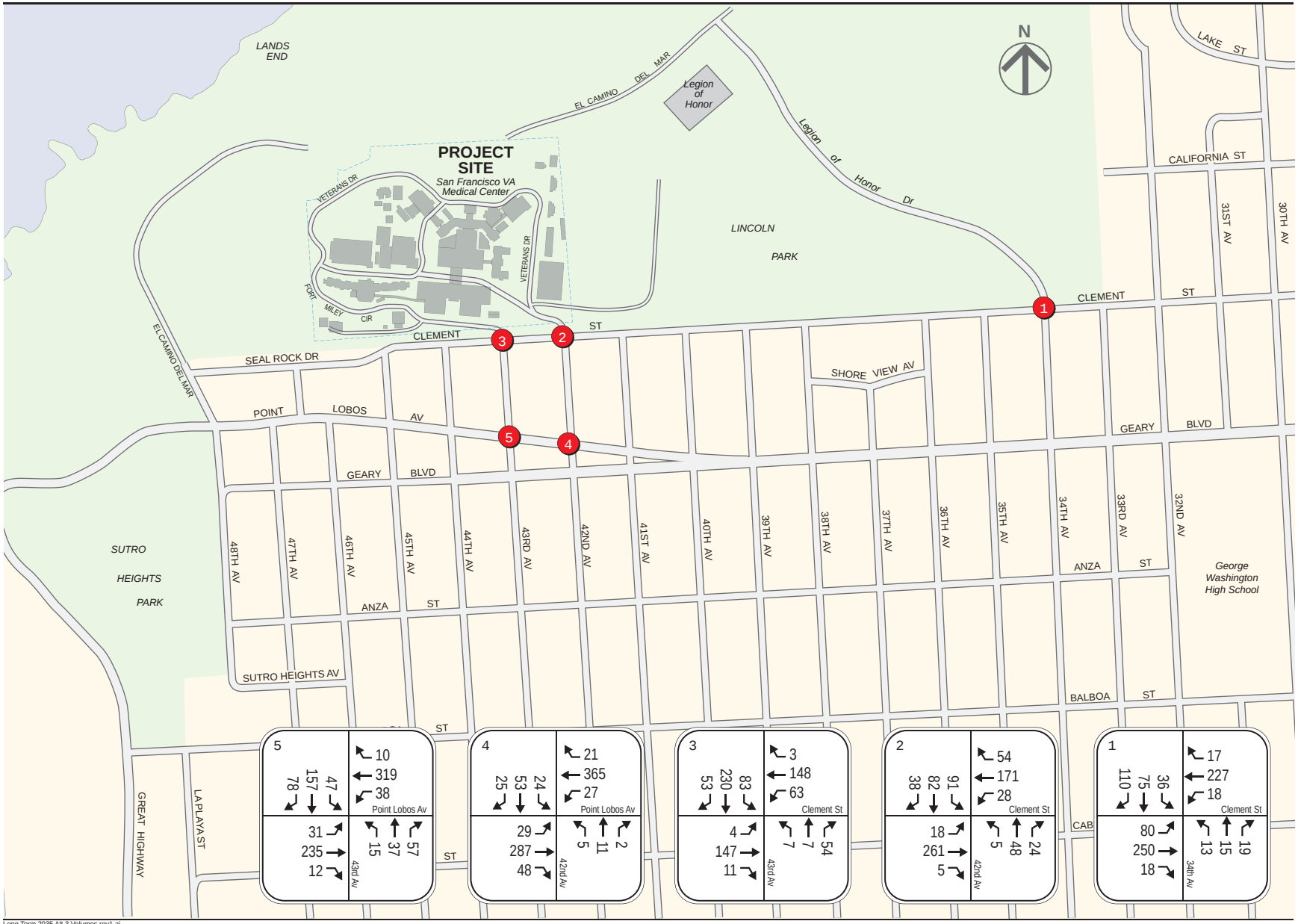
4.4.2 Other Impacts

Since Alternative 3 corresponds to the No Action Alternative, the Project would not generate any trips and would, therefore, not result in any transit, pedestrian, bicycle, parking, loading, site access and circulation, or construction impacts.

4.5 2023 Long-Term Conclusion

Neither Alternative 1 nor Alternative 2 is expected to result in transportation impacts that would require mitigation.

AECOM



Long Term 2035 Alt 3 Volumes rev1.ai

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Figure 12

Intersection Traffic Volumes - 2023 Long-Term Alternative 3 Conditions

PM Peak Hour

5.0 Cumulative Effects

The analysis of cumulative effects evaluates conditions in Year 2035, including planned and proposed future development growth, transportation network changes in the study area, and background growth in travel demand in the City and region.

5.1 Methods and Assumptions

5.1.1 Background Growth

Similar to the near- and long-term analyses, the long-term analysis assumes a 0.5 percent per year growth rate for background traffic for all study intersections. Muni ridership growth is calculated using the same methodology discussed in Section 3.1.1.

5.1.2 Transportation Network Modifications

The cumulative analysis assumes the same changes to the transportation network assumed under the near- and long-term analyses, discussed in Section 3.1.2.

5.2 2035 Cumulative Alternative 1 Conditions

5.2.1 Traffic Impacts

Growth in traffic as a result of planned development both within and outside of the study area was used to develop 2035 Cumulative Alternative 1 Conditions traffic volumes. The resulting traffic volumes and LOS at the study intersections are illustrated in Figure 13 and summarized in Table 20.

Table 20: Intersection Level of Service – 2035 Cumulative Alternative 1 Conditions (Weekday PM Peak Hour)

Intersection		Control Type	2035 Cumulative Conditions		2035 Cumulative Alternative 1 Conditions	
			LOS	Delay[1]	LOS	Delay[1]
1	34th Avenue / Clement Street	All-way Stop	B	13.6	C	22.3
2	42nd Avenue / Clement Street	All-way Stop	B	12.3	D	26.7
3	43rd Avenue / Clement Street	All-way Stop	B	13.5	D	34.6
4	42nd Avenue / Point Lobos Avenue	All-way Stop	B	14.6	D	27.1
5	43rd Avenue / Point Lobos Avenue	All-way Stop	C	18.1	D	26.1

Source: AECOM, 2012.
Notes: (1) Delay presented in seconds per vehicle.

As shown in Table 20, under 2035 Cumulative Alternative 1 Conditions, all five study intersections are projected to operate at acceptable conditions (LOS D or better) during the weekday PM peak hour. As such, the Project would not result in significant impacts to any study intersections.

5.2.2 Transit Impacts

As shown in Table 9, Alternative 1 would generate approximately 158 transit trips (64 inbound to the Project and 94 outbound from the Project) during the weekday PM peak hour. Transit trips to and from the Project would use the nearby Muni bus lines for local trips, as well as for regional trips (via transfers).

AECOM

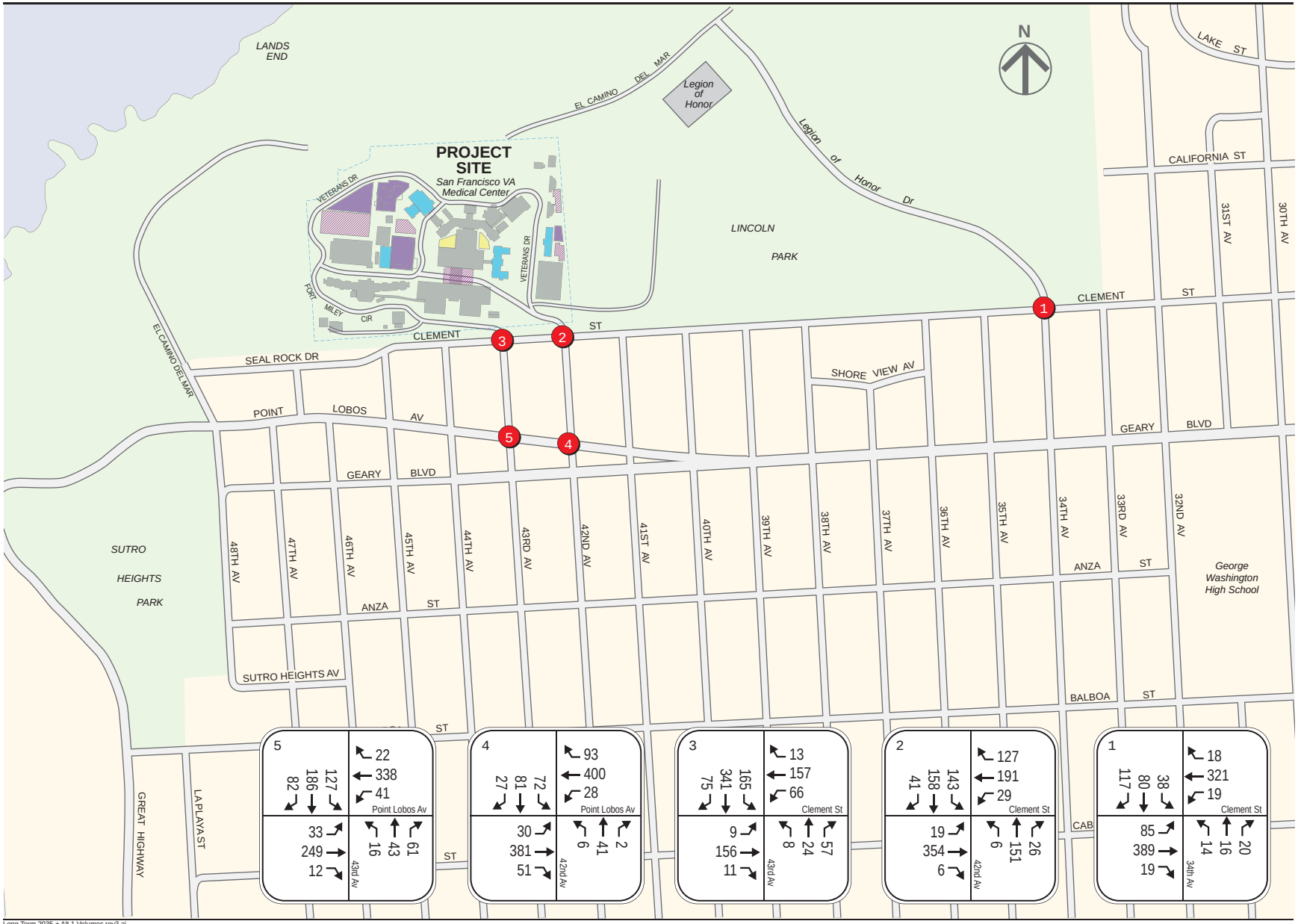

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Figure 13

Intersection Traffic Volumes - 2035 Cumulative Alternative 1 Conditions

PM Peak Hour

Muni ridership and capacity under 2035 Cumulative Conditions are summarized in Table 21. As Muni defines trips with respect to downtown San Francisco, the Project's 64 inbound transit trips would generally use Muni service heading in the outbound direction from Downtown, while the Project's 94 outbound transit trips would generally use Muni service heading in the inbound direction to Downtown.

Table 21: Muni Ridership and Capacity – 2035 Cumulative Conditions (Weekday PM Peak Hour)

Line	Direction	Existing Conditions			2035 Cumulative Conditions		
		Ridership	Capacity	Utilization	Ridership	Capacity	Utilization
38	Inbound	487	846	57.6%	701	846	82.8%
	Outbound	675	1,128	59.8%	1,006	1,128	89.2%
38L	Inbound	499	846	59.0%	718	1,128	63.6%
	Outbound	683	846	80.7%	1,018	1,128	90.3%
38AX	Outbound	177	252	70.2%	264	252	104.7%

Source: SFMTA, 2008; AECOM, 2012.
Notes: Bold denotes exceedance of capacity utilization policy standard (85% utilization).

Based on the ridership totals presented, sufficient capacity would be available for Project transit users in the "inbound" direction for both the 38 Geary and 38L Geary Limited lines. Specifically, the 38 Geary can accommodate as many as 18 additional riders before reaching its capacity utilization threshold, while the 38L Geary Limited can accommodate as many as 241 additional riders before reaching its capacity utilization threshold. Thus, the Project's 94 transit trips away from the Project site could be easily accommodated on Muni service in the vicinity of the Project.

Although the 38, 38L, and 38AX lines would all operate above the 85 percent capacity utilization threshold in the outbound direction, the Project would only generate 64 total trips in this direction during the weekday PM peak hour. In particular, as the 38, 38L, and 38AX would offer a combined 28 buses per hour, the Project would be adding less slightly over two additional riders per bus, on average, representing less than three percent of the total ridership passing through the maximum load points on these lines in the outbound direction. Given this level of additional transit ridership, the Project is not expected to result in a significant impact to transit capacity.

5.2.3 Pedestrian Impacts

Growth in pedestrian traffic between Year 2023 and Year 2035 is expected to be minimal, and pedestrian conditions are expected to be similar to 2023 Long-Term Alternative 1 Conditions, as discussed in Section 4.2.3.

5.2.4 Bicycle Impacts

Growth in bicycle traffic between Year 2023 and Year 2035 is expected to be minimal, and bicycle conditions are expected to be similar to 2023 Long-Term Alternative 1 Conditions, as discussed in Section 4.2.4.

5.2.5 Parking Impacts

Parking conditions are expected to be similar to 2023 Long-Term Alternative 1 Conditions, as discussed in Section 4.2.5.

5.2.6 Loading Impacts

Loading conditions are expected to be similar to 2023 Long-Term Alternative 1 Conditions, as discussed in Section 4.2.6.

5.2.7 Site Access and Circulation Impacts

Site access and circulation are expected to be similar to 2023 Long-Term Alternative 1 Conditions, as discussed in Section 4.2.7.

5.2.8 Construction Traffic Impacts

At this time, there are no foreseeable construction activities on or in the immediate vicinity of the SFVAMC Fort Miley Campus in the cumulative timeframe. As a result, no construction-related transportation impacts are expected.

5.3 2035 Cumulative Alternative 2 Conditions

5.3.1 Traffic Impacts

Growth in traffic as a result of planned development both within and outside of the study area was used to develop 2035 Cumulative Alternative 2 Conditions traffic volumes. The resulting traffic volumes and LOS at the study intersections are illustrated in Figure 14 are summarized in Table 22.

Table 22: Intersection Level of Service – 2035 Cumulative Alternative 2 Conditions (Weekday PM Peak Hour)

Intersection		Control Type	2035 Cumulative Conditions		2035 Cumulative Alternative 2 Conditions	
			LOS	Delay[(1)]	LOS	Delay[(1)]
1	34th Avenue / Clement Street	All-way Stop	B	13.6	B	14.2
2	42nd Avenue / Clement Street	All-way Stop	B	12.3	B	13.0
3	43rd Avenue / Clement Street	All-way Stop	B	13.5	B	14.6
4	42nd Avenue / Point Lobos Avenue	All-way Stop	B	14.6	C	15.2
5	43rd Avenue / Point Lobos Avenue	All-way Stop	C	18.1	C	18.8

Source: AECOM, 2012.
Notes: (1) Delay presented in seconds per vehicle.

As shown in Table 22, under 2035 Long-Term Alternative 2 Conditions, all five study intersections are projected to operate at acceptable conditions (LOS D or better) during the weekday PM peak hour. As such, the Project would not result in significant impacts to any study intersections.

As discussed in Section 4.3.1, further analysis of traffic impacts at the potential new SFVAMC Mission Bay Campus would be required once a specific location for the potential new Campus has been determined.

5.3.2 Transit Impacts

As shown in Table 10, the SFVAMC Fort Miley Campus under Alternative 2 would generate approximately 42 new transit trips (6 inbound to the Project and 36 outbound from the Project) during the weekday PM peak hour, substantially lower than under Alternative 1.

Muni ridership under 2023 Long-Term Conditions is summarized in Table 21. As discussed in Section 5.2.2, no impacts to transit capacity are expected under Alternative 1. As Alternative 2 would generate far fewer new transit trips in either direction than Alternative 1, no impacts to transit capacity are expected under Alternative 2.

AECOM

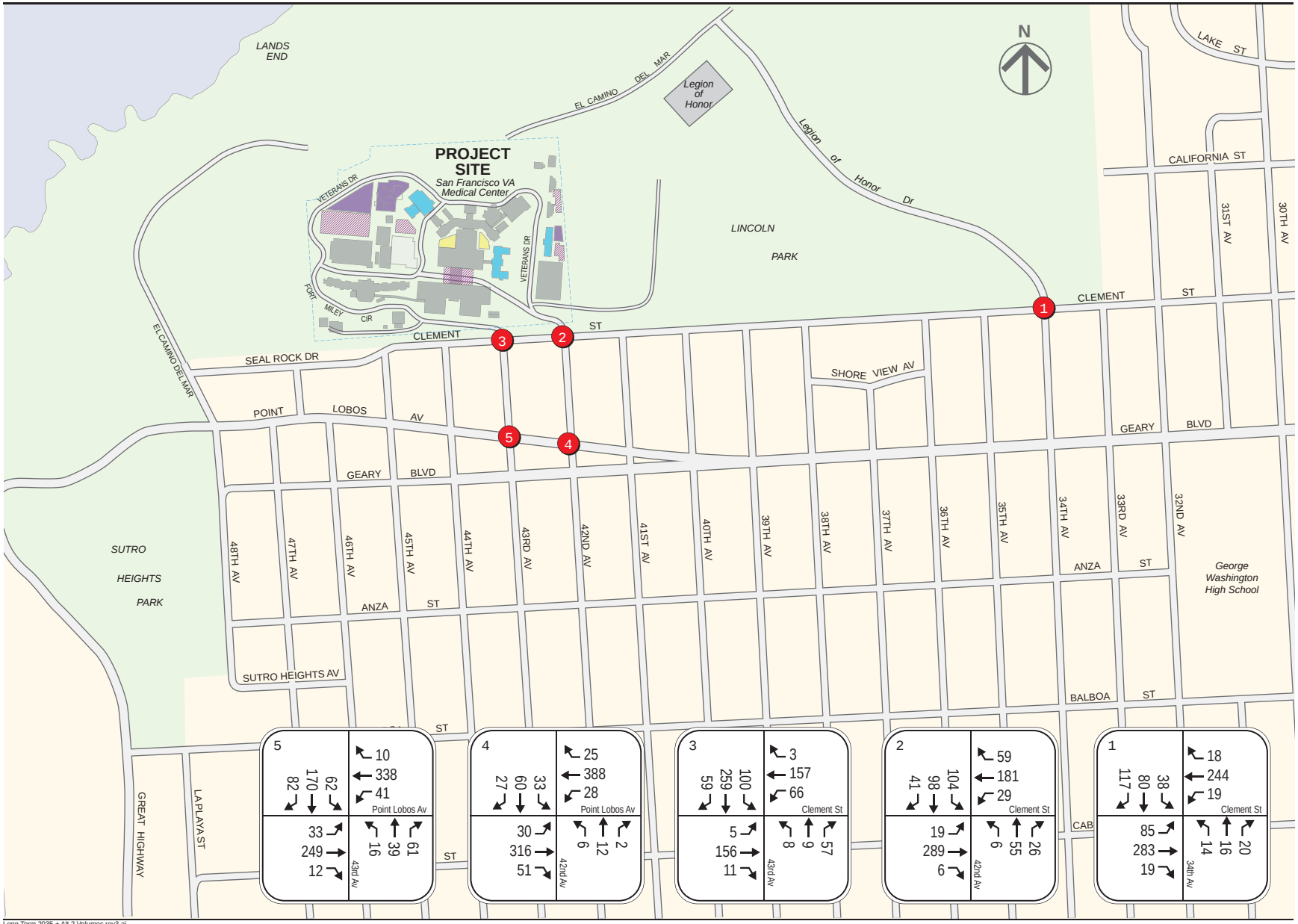

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Figure 14

Intersection Traffic Volumes - 2035 Cumulative Alternative 2 Conditions

PM Peak Hour

As discussed in Section 4.3.2, further analysis of transit impacts at the potential new SFVAMC Mission Bay Campus would be required once a specific location for the potential new Campus has been determined.

5.3.3 Pedestrian Impacts

Growth in pedestrian traffic between Year 2023 and Year 2035 is expected to be minimal, and pedestrian conditions are expected to be similar to 2023 Long-Term Alternative 2 Conditions, as discussed in Section 4.3.3. Further analysis of pedestrian impacts at the potential new SFVAMC Mission Bay Campus would be required once a specific location for the potential new Campus has been determined.

5.3.4 Bicycle Impacts

Growth in bicycle traffic between Year 2023 and Year 2035 is expected to be minimal, and bicycle conditions are expected to be similar to 2023 Long-Term Alternative 2 Conditions, as discussed in Section 4.3.4. Further analysis of bicycle impacts at the potential new SFVAMC Mission Bay Campus would be required once a specific location for the potential new Campus has been determined.

5.3.5 Parking Impacts

Parking conditions are expected to be similar to 2023 Long-Term Alternative 2 Conditions, as discussed in Section 4.3.5.

5.3.6 Loading Impacts

Loading conditions are expected to be similar to 2023 Long-Term Alternative 2 Conditions, as discussed in Section 4.3.6.

5.3.7 Site Access and Circulation Impacts

Site access and circulation are expected to be similar to 2023 Long-Term Alternative 2 Conditions, as discussed in Section 4.3.7. Further analysis of site access and circulation at the potential new SFVAMC Mission Bay Campus would be required once a specific location for the potential new Campus has been determined.

5.3.8 Construction Traffic Impacts

At this time, there are no foreseeable construction activities on or in the immediate vicinity of the SFVAMC Fort Miley Campus in the cumulative timeframe. As a result, no construction-related transportation impacts are expected.

As the potential new SFVAMC Mission Bay Campus would be located in the Mission Bay area, which is currently undergoing redevelopment, there may be construction activities around the potential new Campus in the cumulative timeframe. Further analysis of construction impacts in the cumulative timeframe would be required once a specific location for the potential new Campus has been determined.

5.4 2035 Cumulative Alternative 3 Conditions

5.4.1 Traffic Impacts

Growth in traffic as a result of planned development both within and outside of the study area was used to develop 2035 Cumulative Alternative 3 Conditions traffic volumes. The resulting traffic volumes and LOS at the study intersections are illustrated in Figure 15 and summarized in Table 23.

AECOM

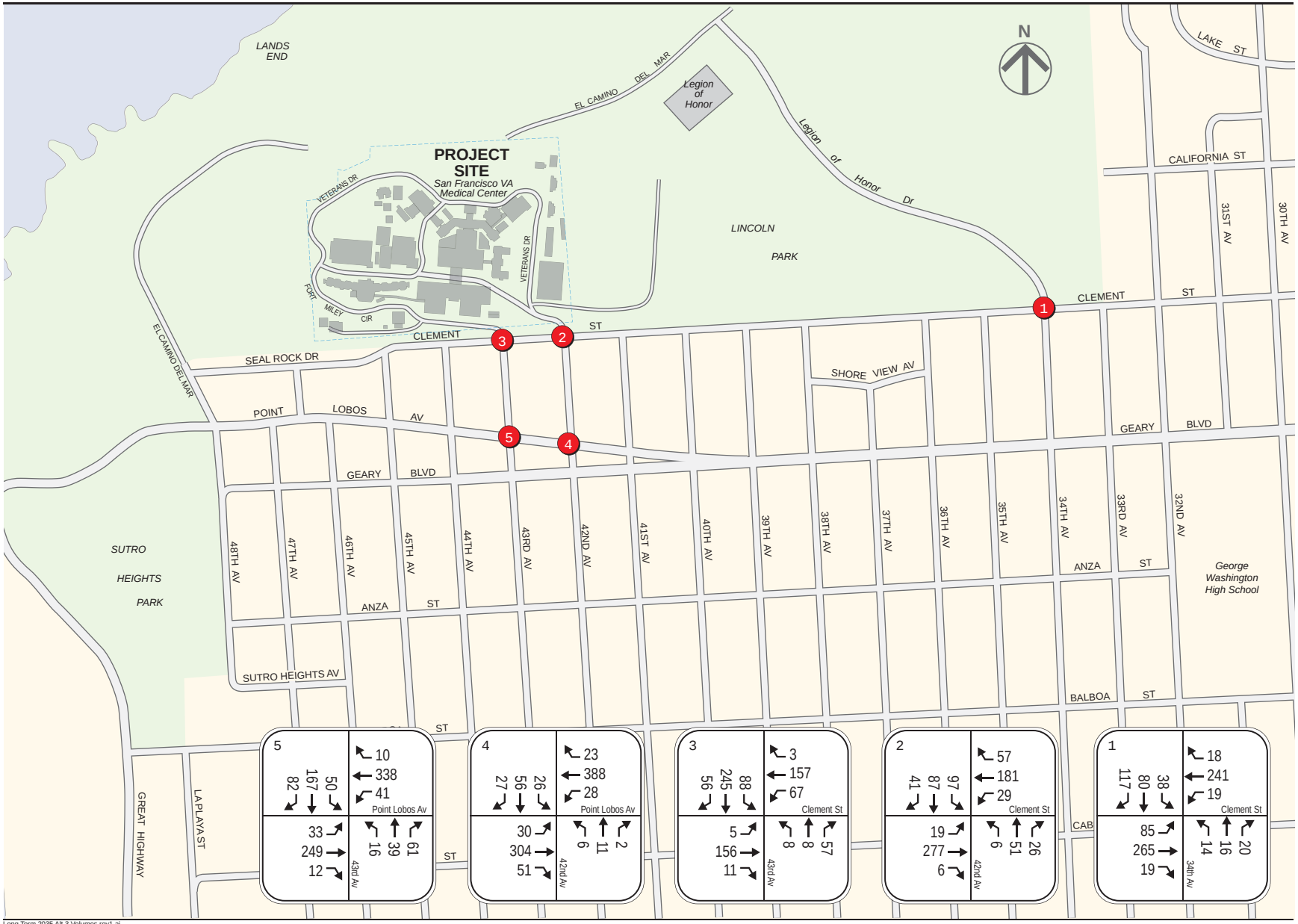

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Figure 15

Intersection Traffic Volumes - 2035 Cumulative Alternative 3 Conditions

PM Peak Hour

Table 23: Intersection Level of Service – 2035 Cumulative Alternative 3 Conditions (Weekday PM Peak Hour)

Intersection	Existing Conditions		2015 Near-Term Conditions		2023 Long-Term Conditions		2035 Cumulative Alternative 3 Conditions	
	LOS	Delay[1]	LOS	Delay[1]	LOS	Delay[1]	LOS	Delay[1]
1 34th Avenue / Clement Street	B	12.0	B	12.4	B	12.6	B	13.6
2 42nd Avenue / Clement Street	B	11.2	B	12.0	B	11.6	B	12.3
3 43rd Avenue / Clement Street	B	11.9	B	13.2	B	12.5	B	13.5
4 42nd Avenue / Point Lobos Avenue	B	12.7	B	13.4	B	13.4	B	14.6
5 43rd Avenue / Point Lobos Avenue	B	14.7	C	15.3	C	15.8	C	18.1

Source: AECOM, 2012.
Notes: [1] Delay presented in seconds per vehicle.

As shown in Table 23, under 2035 Cumulative Alternative 3 Conditions, all five study intersections are projected to operate at acceptable conditions (LOS D or better) under the weekday PM peak hours. Since Alternative 3 corresponds to the No Action Alternative, the Project would not generate any trips and as such, would not result in any traffic impacts.

5.4.2 Other Impacts

Since Alternative 3 corresponds to the No Action Alternative, the Project would not generate any trips and would, therefore, not result in any transit, pedestrian, bicycle, parking, loading, site access and circulation, or construction impacts.

5.5 2035 Cumulative Conclusion

Neither Alternative 1 nor Alternative 2 is expected to result in transportation impacts that would require mitigation.

San Francisco VA Medical Center
Long Range Development Plan Draft EIS
Transportation Impact Study

Technical Appendix

A: Intersection Turning Movement Counts
B: Intersection Level of Service Calculations
C: Project Travel Demand
D: Parking and Loading Demand and Code Requirements
E: Transit Ridership and Capacity Calculations
F: Construction Traffic

Appendix A

Intersection Turning Movement Counts

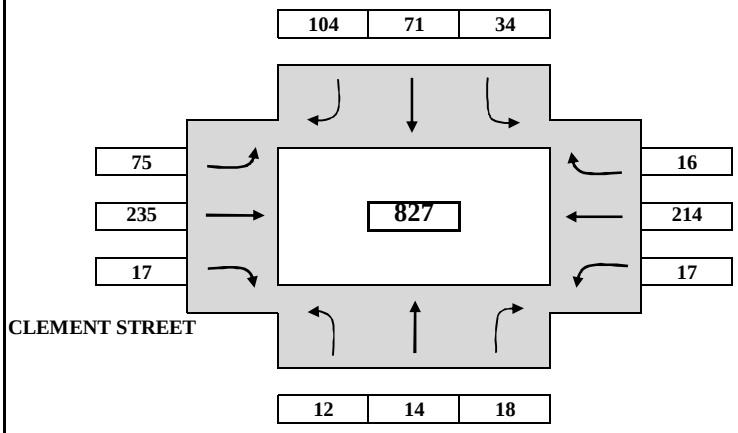
B.A.Y.M.E.T.R.I.C.S.

INTERSECTION TURNING MOVEMENT SUMMARY

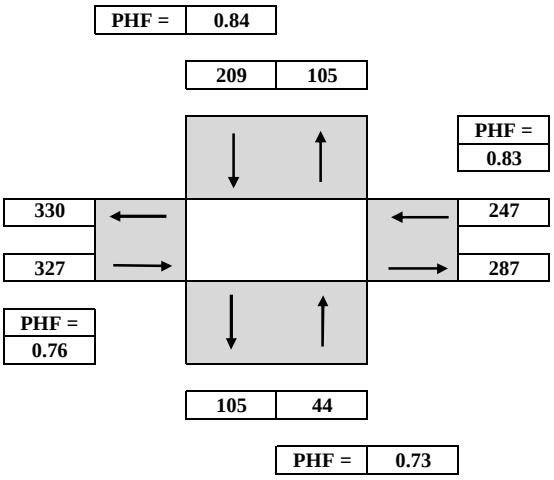
PROJECT:	SFVAMC - DATA COLLECTION	SURVEY DATE:	2/15/2011	DAY:	TUESDAY
N-S APPROACH:	34TH AVENUE	SURVEY TIME:	4:00 PM	TO	6:00 PM
E-W APPROACH	CLEMENT STREET	JURISDICTION:	SAN FRANCISCO	FILE:	3102011-1PM

PEAK HOUR
5:00 PM TO 6:00 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME From	PERIOD	To	NORTHBOUND LEFT	NORTHBOUND THRU	NORTHBOUND RIGHT	SOUTHBOUND LEFT	SOUTHBOUND THRU	SOUTHBOUND RIGHT	EASTBOUND LEFT	EASTBOUND THRU	EASTBOUND RIGHT	WESTBOUND LEFT	WESTBOUND THRU	WESTBOUND RIGHT	TOTAL
SURVEY DATA															
4:00 PM	to	4:15 PM	0	8	4	9	11	16	23	53	3	1	39	9	**176**
4:15 PM	to	4:30 PM	2	12	10	16	23	30	44	118	8	9	78	10	**360**
4:30 PM	to	4:45 PM	2	19	15	25	32	48	69	181	14	13	124	14	**556**
4:45 PM	to	5:00 PM	5	25	20	29	52	66	86	250	16	17	173	19	**758**
5:00 PM	to	5:15 PM	9	26	24	41	66	88	115	322	22	22	220	24	**979**
5:15 PM	to	5:30 PM	11	32	31	46	90	112	132	382	25	23	259	28	**1171**
5:30 PM	to	5:45 PM	14	36	33	58	110	142	147	431	29	28	322	32	**1382**
5:45 PM	to	6:00 PM	17	39	38	63	123	170	161	485	33	34	387	35	**1585**
TOTAL BY PERIOD															
4:00 PM	to	4:15 PM	0	8	4	9	11	16	23	53	3	1	39	9	**176**
4:15 PM	to	4:30 PM	2	4	6	7	12	14	21	65	5	8	39	1	**184**
4:30 PM	to	4:45 PM	0	7	5	9	9	18	25	63	6	4	46	4	**196**
4:45 PM	to	5:00 PM	3	6	5	4	20	18	17	69	2	4	49	5	**202**
5:00 PM	to	5:15 PM	4	1	4	12	14	22	29	72	6	5	47	5	**221**
5:15 PM	to	5:30 PM	2	6	7	5	24	24	17	60	3	1	39	4	**192**
5:30 PM	to	5:45 PM	3	4	2	12	20	30	15	49	4	5	63	4	**211**
5:45 PM	to	6:00 PM	3	3	5	5	13	28	14	54	4	6	65	3	**203**
HOURLY TOTALS															
4:00 PM	to	5:00 PM	5	25	20	29	52	66	86	250	16	17	173	19	**758**
4:15 PM	to	5:15 PM	9	18	20	32	55	72	92	269	19	21	181	15	**803**
4:30 PM	to	5:30 PM	9	20	21	30	67	82	88	264	17	14	181	18	**811**
4:45 PM	to	5:45 PM	12	17	18	33	78	94	78	250	15	15	198	18	**826**
5:00 PM	to	6:00 PM	12	14	18	34	71	104	75	235	17	17	214	16	**827**

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B.A.Y.M.E.T.R.I.C.S.

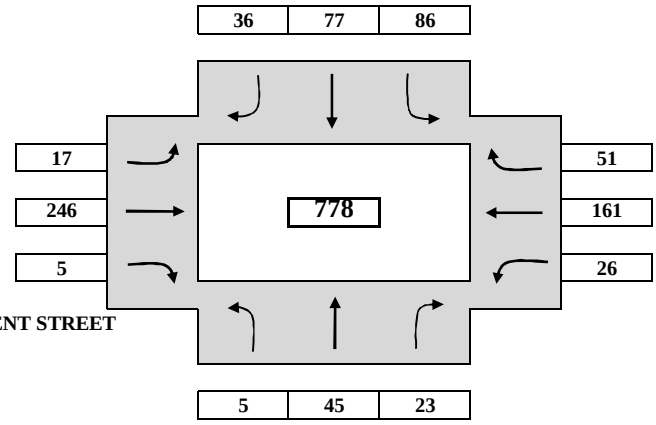
INTERSECTION TURNING MOVEMENT SUMMARY

PROJECT:	**SFVAMC - DATA COLLECTION**	**SURVEY DATE:**	**2/15/2011**	**DAY:**	**TUESDAY**
N-S APPROACH: 42ND AVENUE		**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH CLEMENT STREET		**JURISDICTION:**	**SAN FRANCISCO**	**FILE:**	**3102011-2PM**

PEAK HOUR

4:15 PM TO 5:15 PM

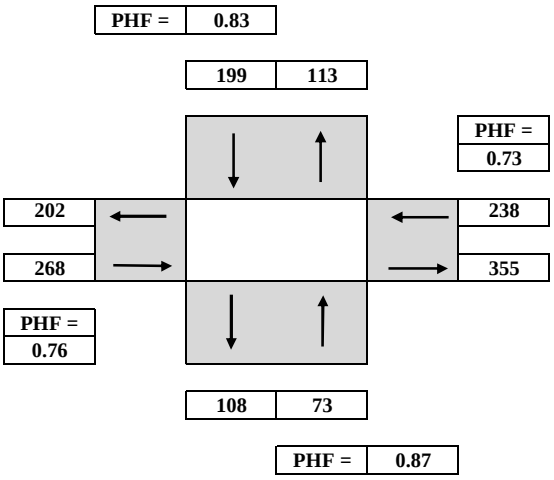
NORTH



CLEMENT STREET

42ND AVENUE

ARRIVAL / DEPARTURE VOLUMES



TIME	PERIOD		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
From		To	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	
SURVEY DATA															
4:00 PM	to	4:15 PM	1	7	3	17	22	8	4	53	1	4	34	11	**165**
4:15 PM	to	4:30 PM	3	16	9	36	41	16	10	134	2	9	63	24	**363**
4:30 PM	to	4:45 PM	5	28	16	60	62	22	16	182	2	15	99	37	**544**
4:45 PM	to	5:00 PM	5	41	19	83	82	39	20	233	5	22	140	49	**738**
5:00 PM	to	5:15 PM	6	52	26	103	99	44	21	299	6	30	195	62	**943**
5:15 PM	to	5:30 PM	7	56	36	118	110	50	26	353	7	38	225	74	**1100**
5:30 PM	to	5:45 PM	7	63	40	131	123	54	28	412	8	43	281	87	**1277**
5:45 PM	to	6:00 PM	8	71	45	146	139	61	33	454	10	50	345	97	**1459**
TOTAL BY PERIOD															
4:00 PM	to	4:15 PM	1	7	3	17	22	8	4	53	1	4	34	11	**165**
4:15 PM	to	4:30 PM	2	9	6	19	19	8	6	81	1	5	29	13	**198**
4:30 PM	to	4:45 PM	2	12	7	24	21	6	6	48	0	6	36	13	**181**
4:45 PM	to	5:00 PM	0	13	3	23	20	17	4	51	3	7	41	12	**194**
5:00 PM	to	5:15 PM	1	11	7	20	17	5	1	66	1	8	55	13	**205**
5:15 PM	to	5:30 PM	1	4	10	15	11	6	5	54	1	8	30	12	**157**
5:30 PM	to	5:45 PM	0	7	4	13	13	4	2	59	1	5	56	13	**177**
5:45 PM	to	6:00 PM	1	8	5	15	16	7	5	42	2	7	64	10	**182**
HOURLY TOTALS															
4:00 PM	to	5:00 PM	5	41	19	83	82	39	20	233	5	22	140	49	**738**
4:15 PM	to	5:15 PM	5	45	23	86	77	36	17	246	5	26	161	51	**778**
4:30 PM	to	5:30 PM	4	40	27	82	69	34	16	219	5	29	162	50	**737**
4:45 PM	to	5:45 PM	2	35	24	71	61	32	12	230	6	28	182	50	**733**
5:00 PM	to	6:00 PM	3	30	26	63	57	22	13	221	5	28	205	48	**721**

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B.A.Y.M.E.T.R.I.C.S.

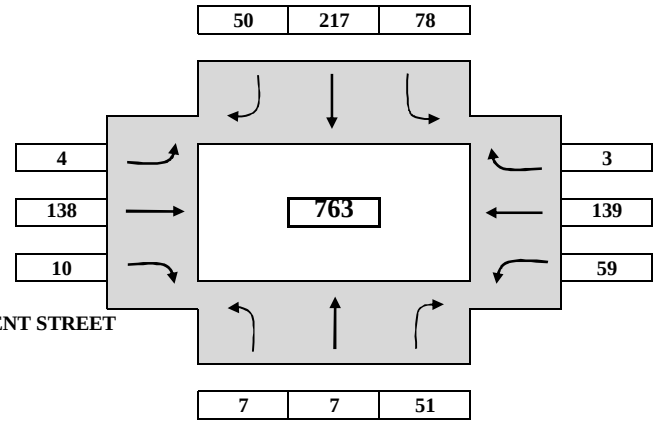
INTERSECTION TURNING MOVEMENT SUMMARY

PROJECT:	**SFVAMC - DATA COLLECTION**	**SURVEY DATE:**	**2/15/2011**	**DAY:**	**TUESDAY**
N-S APPROACH: 43RD AVENUE		**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH CLEMENT STREET		**JURISDICTION:**	**SAN FRANCISCO**	**FILE:**	**3102011-3PM**

PEAK HOUR

4:15 PM TO 5:15 PM

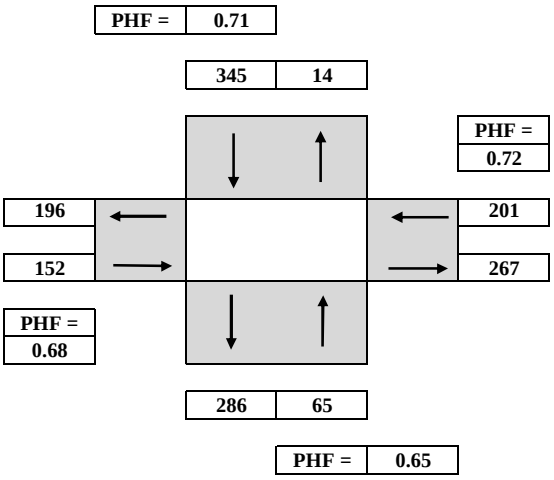
NORTH



CLEMENT STREET

43RD AVENUE

ARRIVAL / DEPARTURE VOLUMES



TIME	PERIOD		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
From		To	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	
SURVEY DATA															
4:00 PM	to	4:15 PM	4	4	17	10	31	7	2	33	1	9	33	0	**151**
4:15 PM	to	4:30 PM	5	7	30	30	87	17	5	84	3	23	60	0	**351**
4:30 PM	to	4:45 PM	8	9	44	42	129	33	6	112	5	39	86	2	**515**
4:45 PM	to	5:00 PM	10	10	59	70	205	50	6	134	8	57	125	2	**736**
5:00 PM	to	5:15 PM	11	11	68	88	248	57	6	171	11	68	172	3	**914**
5:15 PM	to	5:30 PM	11	13	80	105	275	67	6	203	12	80	197	4	**1053**
5:30 PM	to	5:45 PM	13	15	90	113	299	73	6	244	15	98	239	5	**1210**
5:45 PM	to	6:00 PM	15	16	100	123	330	86	6	276	17	120	284	8	**1381**
TOTAL BY PERIOD															
4:00 PM	to	4:15 PM	4	4	17	10	31	7	2	33	1	9	33	0	**151**
4:15 PM	to	4:30 PM	1	3	13	20	56	10	3	51	2	14	27	0	**200**
4:30 PM	to	4:45 PM	3	2	14	12	42	16	1	28	2	16	26	2	**164**
4:45 PM	to	5:00 PM	2	1	15	28	76	17	0	22	3	18	39	0	**221**
5:00 PM	to	5:15 PM	1	1	9	18	43	7	0	37	3	11	47	1	**178**
5:15 PM	to	5:30 PM	0	2	12	17	27	10	0	32	1	12	25	1	**139**
5:30 PM	to	5:45 PM	2	2	10	8	24	6	0	41	3	18	42	1	**157**
5:45 PM	to	6:00 PM	2	1	10	10	31	13	0	32	2	22	45	3	**171**
HOURLY TOTALS															
4:00 PM	to	5:00 PM	10	10	59	70	205	50	6	134	8	57	125	2	**736**
4:15 PM	to	5:15 PM	7	7	51	78	217	50	4	138	10	59	139	3	**763**
4:30 PM	to	5:30 PM	6	6	50	75	188	50	1	119	9	57	137	4	**702**
4:45 PM	to	5:45 PM	5	6	46	71	170	40	0	132	10	59	153	3	**695**
5:00 PM	to	6:00 PM	5	6	41	53	125	36	0	142	9	63	159	6	**645**

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B.A.Y.M.E.T.R.I.C.S.

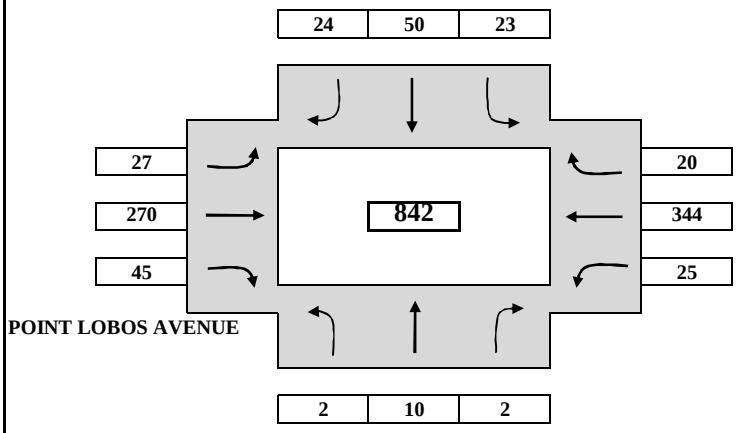
INTERSECTION TURNING MOVEMENT SUMMARY

PROJECT:	**SFVAMC - DATA COLLECTION**	**SURVEY DATE:**	**2/15/2011**	**DAY:**	**TUESDAY**
N-S APPROACH:	**42ND AVENUE**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH	**POINT LOBOS AVENUE**	**JURISDICTION:**	**SAN FRANCISCO**	**FILE:**	**3102011-4PM**

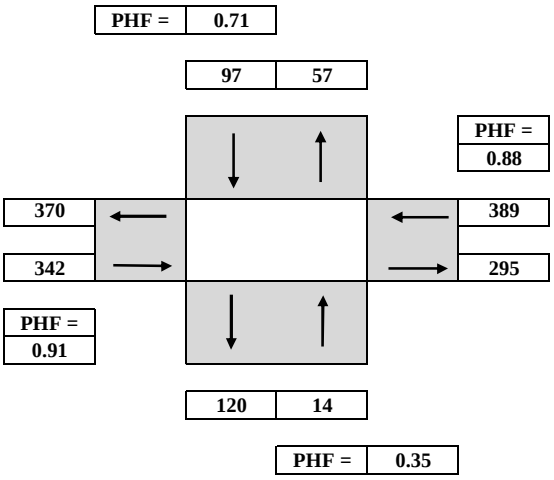
PEAK HOUR

5:00 PM TO 6:00 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME From		PERIOD To	NORTHBOUND LEFT	NORTHBOUND THRU	NORTHBOUND RIGHT	SOUTHBOUND LEFT	SOUTHBOUND THRU	SOUTHBOUND RIGHT	EASTBOUND LEFT	EASTBOUND THRU	EASTBOUND RIGHT	WESTBOUND LEFT	WESTBOUND THRU	WESTBOUND RIGHT	TOTAL
SURVEY DATA															
4:00 PM	to	4:15 PM	2	4	0	14	13	7	5	61	9	4	78	4	**201**
4:15 PM	to	4:30 PM	2	8	0	20	23	14	14	122	26	8	145	7	**389**
4:30 PM	to	4:45 PM	3	15	0	26	38	22	22	191	41	12	214	17	**601**
4:45 PM	to	5:00 PM	4	22	2	32	55	28	27	254	49	15	288	25	**801**
5:00 PM	to	5:15 PM	4	24	2	38	68	33	40	317	59	20	359	30	**994**
5:15 PM	to	5:30 PM	5	27	2	45	78	39	43	375	72	23	446	36	**1191**
5:30 PM	to	5:45 PM	5	29	3	49	90	47	47	444	87	32	541	42	**1416**
5:45 PM	to	6:00 PM	6	32	4	55	105	52	54	524	94	40	632	45	**1643**
TOTAL BY PERIOD															
4:00 PM	to	4:15 PM	2	4	0	14	13	7	5	61	9	4	78	4	**201**
4:15 PM	to	4:30 PM	0	4	0	6	10	7	9	61	17	4	67	3	**188**
4:30 PM	to	4:45 PM	1	7	0	6	15	8	8	69	15	4	69	10	**212**
4:45 PM	to	5:00 PM	1	7	2	6	17	6	5	63	8	3	74	8	**200**
5:00 PM	to	5:15 PM	0	2	0	6	13	5	13	63	10	5	71	5	**193**
5:15 PM	to	5:30 PM	1	3	0	7	10	6	3	58	13	3	87	6	**197**
5:30 PM	to	5:45 PM	0	2	1	4	12	8	4	69	15	9	95	6	**225**
5:45 PM	to	6:00 PM	1	3	1	6	15	5	7	80	7	8	91	3	**227**
HOURLY TOTALS															
4:00 PM	to	5:00 PM	4	22	2	32	55	28	27	254	49	15	288	25	**801**
4:15 PM	to	5:15 PM	2	20	2	24	55	26	35	256	50	16	281	26	**793**
4:30 PM	to	5:30 PM	3	19	2	25	55	25	29	253	46	15	301	29	**802**
4:45 PM	to	5:45 PM	2	14	3	23	52	25	25	253	46	20	327	25	**815**
5:00 PM	to	6:00 PM	2	10	2	23	50	24	27	270	45	25	344	20	**842**

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B.A.Y.M.E.T.R.I.C.S.

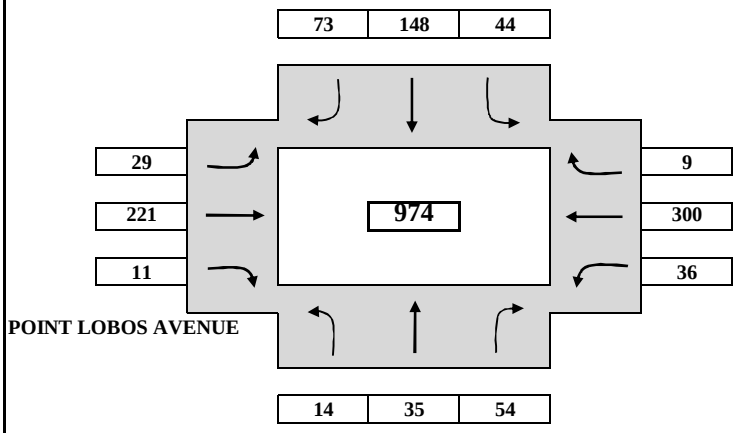
INTERSECTION TURNING MOVEMENT SUMMARY

PROJECT:	**SFVAMC - DATA COLLECTION**	**SURVEY DATE:**	**2/15/2011**	**DAY:**	**TUESDAY**
N-S APPROACH: 43RD AVENUE		**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH POINT LOBOS AVENUE		**JURISDICTION:**	**SAN FRANCISCO**	**FILE:**	**3102011-5PM**

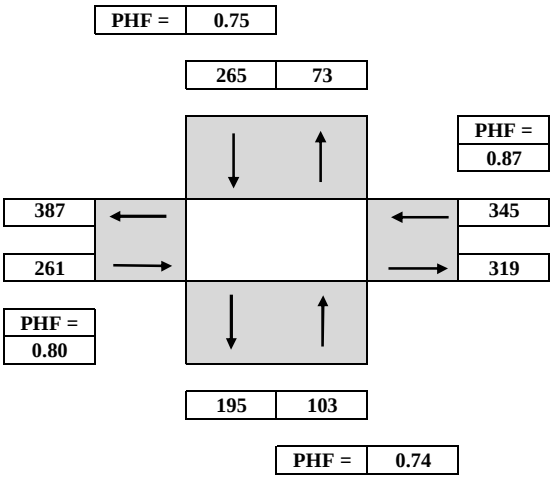
PEAK HOUR

4:45 PM TO 5:45 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME From	PERIOD	To	NORTHBOUND LEFT	NORTHBOUND THRU	NORTHBOUND RIGHT	SOUTHBOUND LEFT	SOUTHBOUND THRU	SOUTHBOUND RIGHT	EASTBOUND LEFT	EASTBOUND THRU	EASTBOUND RIGHT	WESTBOUND LEFT	WESTBOUND THRU	WESTBOUND RIGHT	TOTAL
SURVEY DATA															
4:00 PM	to	4:15 PM	0	17	9	13	23	12	8	59	2	11	73	3	**230**
4:15 PM	to	4:30 PM	2	30	26	24	67	29	13	111	4	22	133	4	**465**
4:30 PM	to	4:45 PM	6	42	45	35	96	40	18	170	6	31	196	8	**693**
4:45 PM	to	5:00 PM	10	53	52	51	142	66	27	227	11	39	263	11	**952**
5:00 PM	to	5:15 PM	13	60	71	61	183	88	32	278	13	44	328	13	**1184**
5:15 PM	to	5:30 PM	13	65	87	69	215	98	41	328	14	57	408	16	**1411**
5:30 PM	to	5:45 PM	20	77	99	79	244	113	47	391	17	67	496	17	**1667**
5:45 PM	to	6:00 PM	24	86	103	86	278	125	53	464	20	77	576	20	**1912**
TOTAL BY PERIOD															
4:00 PM	to	4:15 PM	0	17	9	13	23	12	8	59	2	11	73	3	**230**
4:15 PM	to	4:30 PM	2	13	17	11	44	17	5	52	2	11	60	1	**235**
4:30 PM	to	4:45 PM	4	12	19	11	29	11	5	59	2	9	63	4	**228**
4:45 PM	to	5:00 PM	4	11	7	16	46	26	9	57	5	8	67	3	**259**
5:00 PM	to	5:15 PM	3	7	19	10	41	22	5	51	2	5	65	2	**232**
5:15 PM	to	5:30 PM	0	5	16	8	32	10	9	50	1	13	80	3	**227**
5:30 PM	to	5:45 PM	7	12	12	10	29	15	6	63	3	10	88	1	**256**
5:45 PM	to	6:00 PM	4	9	4	7	34	12	6	73	3	10	80	3	**245**
HOURLY TOTALS															
4:00 PM	to	5:00 PM	10	53	52	51	142	66	27	227	11	39	263	11	**952**
4:15 PM	to	5:15 PM	13	43	62	48	160	76	24	219	11	33	255	10	**954**
4:30 PM	to	5:30 PM	11	35	61	45	148	69	28	217	10	35	275	12	**946**
4:45 PM	to	5:45 PM	14	35	54	44	148	73	29	221	11	36	300	9	**974**
5:00 PM	to	6:00 PM	14	33	51	35	136	59	26	237	9	38	313	9	**960**

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Appendix B

Intersection Level of Service Calculations

Existing Conditions
Weekday PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in V/C
# 1 34th Ave / Clement St	B	11.8	0.525	B	11.8	0.525	+ 0.000
# 2 42nd Ave / Clement St	B	11.0	0.438	B	11.0	0.438	+ 0.000
# 3 43rd Avenue / Clement Street	B	11.7	0.550	B	11.7	0.550	+ 0.000
# 4 43rd Ave / Point Lobos Ave	B	12.4	0.571	B	12.4	0.571	+ 0.000
# 5 42nd Ave / Point Lobos Ave	B	14.2	0.617	B	14.2	0.617	+ 0.000

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 34th Ave / Clement St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.525
Loss Time (sec): 0 Average Delay (sec/veh): 11.8
Optimal Cycle: 0 Level Of Service: B

Street Name:	34th Ave						Clement St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	14	18	34	71	104	75	235	17	17	214	16
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:	12	14	18	34	71	104	75	235	17	17	214	16
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	13	16	20	38	79	116	83	261	19	19	238	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	16	20	38	79	116	83	261	19	19	238	18
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:	13	16	20	38	79	116	83	261	19	19	238	18
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:	0.27	0.32	0.41	0.16	0.34	0.50	0.23	0.72	0.05	0.07	0.87	0.06
Final Sat.:	151	176	226	103	216	316	159	497	36	46	584	44
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.37	0.37	0.37	0.53	0.53	0.53	0.41	0.41	0.41
Crit Moves:		****		****				****		****		
Delay/Veh:	9.1	9.1	9.1	10.9	10.9	10.9	13.1	13.1	13.1	11.3	11.3	11.3
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:	9.1	9.1	9.1	10.9	10.9	10.9	13.1	13.1	13.1	11.3	11.3	11.3
LOS by Move:	A	A	A	B	B	B	B	B	B	B	B	B
ApproachDel:	9.1			10.9			13.1			11.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.1			10.9			13.1			11.3		
LOS by Appr:	A			B			B			B		
AllWayAvgQ:	0.1	0.1	0.1	0.5	0.5	0.5	1.0	1.0	1.0	0.6	0.6	0.6

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 42nd Ave / Clement St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.438
Loss Time (sec): 0 Average Delay (sec/veh): 11.0
Optimal Cycle: 0 Level Of Service: B

Street Name:	42nd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	5		45		23	86		77		36	17		246		5	26		161		51
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:	5		45		23	86		77		36	17		246		5	26		161		51
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:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	6		50		26	96		86		40	19		273		6	29		179		57
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	6		50		26	96		86		40	19		273		6	29		179		57
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:	6		50		26	96		86		40	19		273		6	29		179		57
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:	0.07	0.62		0.31		0.43	0.39		0.18		0.06	0.92		0.02		0.11	0.68		0.21	
Final Sat.:	40		361		185	270		242		113	43		624		13	75		463		147
Capacity Analysis Module:																				
Vol/Sat:	0.14	0.14		0.14		0.35	0.35		0.35		0.44	0.44		0.44		0.39	0.39		0.39	
Crit Moves:			****					****					****					****		
Delay/Veh:	9.2		9.2		9.2	11.0		11.0		11.0	11.7		11.7		11.7	10.9		10.9		10.9
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:	9.2		9.2		9.2	11.0		11.0		11.0	11.7		11.7		11.7	10.9		10.9		10.9
LOS by Move:	A		A		A	B		B		B	B		B		B	B		B		B
ApproachDel:	9.2					11.0					11.7					10.9				
Delay Adj:	1.00					1.00					1.00					1.00				
ApprAdjDel:	9.2					11.0					11.7					10.9				
LOS by Appr:	A					B					B					B				
AllWayAvgQ:	0.1	0.1		0.1		0.5	0.5		0.5		0.7	0.7		0.7		0.5	0.5		0.5	

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 43rd Avenue / Clement Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.550
Loss Time (sec): 0 Average Delay (sec/veh): 11.7
Optimal Cycle: 0 Level Of Service: B

Street Name:	43rd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	7		7		51	78		217		50	4		138		10	59		139		3
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:	7		7		51	78		217		50	4		138		10	59		139		3
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:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	8		8		57	87		241		56	4		153		11	66		154		3
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	8		8		57	87		241		56	4		153		11	66		154		3
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:	8		8		57	87		241		56	4		153		11	66		154		3
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:	0.11	0.11		0.78		0.23	0.63		0.14		0.03	0.91		0.06		0.29	0.70		0.01	
Final Sat.:	69		69		506	158		438		101	16		568		41	186		438		9
Capacity Analysis Module:																				
Vol/Sat:	0.11	0.11		0.11		0.55	0.55		0.55		0.27	0.27		0.27		0.35	0.35		0.35	
Crit Moves:			****					****					****					****		
Delay/Veh:	8.6		8.6		8.6	13.4		13.4		13.4	10.1		10.1		10.1	10.9		10.9		10.9
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:	8.6		8.6		8.6	13.4		13.4		13.4	10.1		10.1		10.1	10.9		10.9		10.9
LOS by Move:	A		A		A	B		B		B	B		B		B	B		B		B
ApproachDel:	8.6					13.4					10.1					10.9				
Delay Adj:	1.00					1.00					1.00					1.00				
ApprAdjDel:	8.6					13.4					10.1					10.9				
LOS by Appr:	A					B					B					B				
AllWayAvgQ:	0.1	0.1		0.1		1.1	1.1		1.1		0.3	0.3		0.3		0.5	0.5		0.5	

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 43rd Ave / Point Lobos Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.571
Loss Time (sec): 0 Average Delay (sec/veh): 12.4
Optimal Cycle: 0 Level Of Service: B

Street Name:	43rd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	10	2	23	50	24	27	270	45	25	344	20
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:	5	10	2	23	50	24	27	270	45	25	344	20
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	11	2	26	56	27	30	300	50	28	382	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	11	2	26	56	27	30	300	50	28	382	22
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:	6	11	2	26	56	27	30	300	50	28	382	22
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:	0.29	0.59	0.12	0.24	0.51	0.25	0.08	0.79	0.13	0.06	0.89	0.05
Final Sat.:	155	311	62	137	299	143	59	593	99	49	669	39
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.19	0.19	0.19	0.51	0.51	0.51	0.57	0.57	0.57
Crit Moves:		****			****		****					****
Delay/Veh:	9.0	9.0	9.0	9.7	9.7	9.7	12.2	12.2	12.2	13.4	13.4	13.4
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:	9.0	9.0	9.0	9.7	9.7	9.7	12.2	12.2	12.2	13.4	13.4	13.4
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
ApproachDel:	9.0			9.7			12.2			13.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.0			9.7			12.2			13.4		
LOS by Appr:	A			A			B			B		
AllWayAvgQ:	0.0	0.0	0.0	0.2	0.2	0.2	0.9	0.9	0.9	1.2	1.2	1.2

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 42nd Ave / Point Lobos Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.617
Loss Time (sec): 0 Average Delay (sec/veh): 14.2
Optimal Cycle: 0 Level Of Service: B

Street Name:	42nd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	14	35	54	44	148	73	29	221	11	36	300	9
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:	14	35	54	44	148	73	29	221	11	36	300	9
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	16	39	60	49	164	81	32	246	12	40	333	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	39	60	49	164	81	32	246	12	40	333	10
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:	16	39	60	49	164	81	32	246	12	40	333	10
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:	0.14	0.34	0.52	0.17	0.56	0.27	0.11	0.85	0.04	0.10	0.87	0.03
Final Sat.:	70	175	271	96	325	160	66	505	25	65	541	16
Capacity Analysis Module:												
Vol/Sat:	0.22	0.22	0.22	0.51	0.51	0.51	0.49	0.49	0.49	0.62	0.62	0.62
Crit Moves:			****			****		****		****		
Delay/Veh:	10.4	10.4	10.4	13.8	13.8	13.8	13.4	13.4	13.4	16.2	16.2	16.2
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:	10.4	10.4	10.4	13.8	13.8	13.8	13.4	13.4	13.4	16.2	16.2	16.2
LOS by Move:	B	B	B	B	B	B	B	B	B	C	C	C
ApproachDel:	10.4			13.8			13.4			16.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.4			13.8			13.4			16.2		
LOS by Appr:	B			B			B			C		
AllWayAvgQ:	0.2	0.2	0.2	0.8	0.8	0.8	0.8	0.8	0.8	1.3	1.3	1.3

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

2015 Near-Term Conditions
Weekday PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in V/C
# 1 34th Ave / Clement St	B	12.0	0.539	B	12.0	0.539	+ 0.000
# 2 42nd Ave / Clement St	B	11.2	0.450	B	11.2	0.450	+ 0.000
# 3 43rd Avenue / Clement Street	B	11.9	0.565	B	11.9	0.565	+ 0.000
# 4 43rd Ave / Point Lobos Ave	B	12.7	0.585	B	12.7	0.585	+ 0.000
# 5 42nd Ave / Point Lobos Ave	B	14.7	0.634	B	14.7	0.634	+ 0.000

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 34th Ave / Clement St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.539
Loss Time (sec): 0 Average Delay (sec/veh): 12.0
Optimal Cycle: 0 Level Of Service: B

Street Name:	34th Ave						Clement St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	14	18	34	71	104	75	235	17	17	214	16
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	12	14	18	35	72	106	77	240	17	17	218	16
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	14	16	20	39	80	118	85	266	19	19	243	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	16	20	39	80	118	85	266	19	19	243	18
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:	14	16	20	39	80	118	85	266	19	19	243	18
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:	0.27	0.32	0.41	0.16	0.34	0.50	0.23	0.72	0.05	0.07	0.87	0.06
Final Sat.:	149	173	223	103	214	314	158	494	36	46	580	43
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.38	0.38	0.38	0.54	0.54	0.54	0.42	0.42	0.42
Crit Moves:	****				****			****			****	
Delay/Veh:	9.2	9.2	9.2	11.1	11.1	11.1	13.4	13.4	13.4	11.5	11.5	11.5
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:	9.2	9.2	9.2	11.1	11.1	11.1	13.4	13.4	13.4	11.5	11.5	11.5
LOS by Move:	A	A	A	B	B	B	B	B	B	B	B	B
ApproachDel:	9.2			11.1			13.4			11.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.2			11.1			13.4			11.5		
LOS by Appr:	A			B			B			B		
AllWayAvgQ:	0.1	0.1	0.1	0.5	0.5	0.5	1.0	1.0	1.0	0.6	0.6	0.6

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 42nd Ave / Clement St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.450
Loss Time (sec): 0 Average Delay (sec/veh): 11.2
Optimal Cycle: 0 Level Of Service: B

Street Name:	42nd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	5		45		23	86		77		36	17		246		5	26		161		51
Growth Adj:	1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02	
Initial Bse:	5		46		23	88		79		37	17		251		5	27		164		52
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:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	6		51		26	97		87		41	19		279		6	29		182		58
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	6		51		26	97		87		41	19		279		6	29		182		58
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:	6		51		26	97		87		41	19		279		6	29		182		58
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:	0.07	0.62		0.31		0.43	0.39		0.18		0.06	0.92		0.02		0.11	0.68		0.21	
Final Sat.:	40		357		183	268		240		112	43		620		13	74		459		146
Capacity Analysis Module:																				
Vol/Sat:	0.14	0.14		0.14		0.36	0.36		0.36		0.45	0.45		0.45		0.40	0.40		0.40	
Crit Moves:	****					****						****				****				
Delay/Veh:	9.3		9.3		9.3	11.1		11.1		11.1	11.9		11.9		11.9	11.1		11.1		11.1
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:	9.3		9.3		9.3	11.1		11.1		11.1	11.9		11.9		11.9	11.1		11.1		11.1
LOS by Move:	A		A		A	B		B		B	B		B		B	B		B		B
ApproachDel:	9.3					11.1					11.9					11.1				
Delay Adj:	1.00					1.00					1.00					1.00				
ApprAdjDel:	9.3					11.1					11.9					11.1				
LOS by Appr:	A					B					B					B				
AllWayAvgQ:	0.1	0.1		0.1		0.5	0.5		0.5		0.7	0.7		0.7		0.6	0.6		0.6	

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 43rd Avenue / Clement Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.565
Loss Time (sec): 0 Average Delay (sec/veh): 11.9
Optimal Cycle: 0 Level Of Service: B

Street Name:	43rd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	7		7		51	78		217		50	4		138		10	59		139		3
Growth Adj:	1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02	
Initial Bse:	7		7		52	80		221		51	4		141		10	60		142		3
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:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	8		8		58	88		246		57	5		156		11	67		158		3
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	8		8		58	88		246		57	5		156		11	67		158		3
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:	8		8		58	88		246		57	5		156		11	67		158		3
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:	0.11	0.11		0.78		0.23	0.63		0.14		0.03	0.91		0.06		0.29	0.70		0.01	
Final Sat.:	69		69		500	157		436		100	16		563		41	185		435		9
Capacity Analysis Module:																				
Vol/Sat:	0.12	0.12		0.12		0.56	0.56		0.56		0.28	0.28		0.28		0.36	0.36		0.36	
Crit Moves:		****						****				****							****	
Delay/Veh:	8.6		8.6		8.6	13.8		13.8		13.8	10.2		10.2		10.2	11.1		11.1		11.1
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:	8.6		8.6		8.6	13.8		13.8		13.8	10.2		10.2		10.2	11.1		11.1		11.1
LOS by Move:	A		A		A	B		B		B	B		B		B	B		B		B
ApproachDel:	8.6					13.8					10.2					11.1				
Delay Adj:	1.00					1.00					1.00					1.00				
ApprAdjDel:	8.6					13.8					10.2					11.1				
LOS by Appr:	A					B					B					B				
AllWayAvgQ:	0.1	0.1		0.1		1.1	1.1		1.1		0.3	0.3		0.3		0.5	0.5		0.5	

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 43rd Ave / Point Lobos Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.585
Loss Time (sec): 0 Average Delay (sec/veh): 12.7
Optimal Cycle: 0 Level Of Service: B

Street Name:	43rd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	10	2	23	50	24	27	270	45	25	344	20
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	5	10	2	23	51	24	28	275	46	26	351	20
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	11	2	26	57	27	31	306	51	28	390	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	11	2	26	57	27	31	306	51	28	390	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:	6	11	2	26	57	27	31	306	51	28	390	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:	0.29	0.59	0.12	0.24	0.51	0.25	0.08	0.79	0.13	0.06	0.89	0.05
Final Sat.:	154	307	61	136	296	142	59	591	98	48	667	39
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.19	0.19	0.19	0.52	0.52	0.52	0.58	0.58	0.58
Crit Moves:		****				****	****				****	
Delay/Veh:	9.1	9.1	9.1	9.8	9.8	9.8	12.4	12.4	12.4	13.8	13.8	13.8
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:	9.1	9.1	9.1	9.8	9.8	9.8	12.4	12.4	12.4	13.8	13.8	13.8
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
ApproachDel:	9.1			9.8			12.4			13.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.1			9.8			12.4			13.8		
LOS by Appr:	A			A			B			B		
AllWayAvgQ:	0.0	0.0	0.0	0.2	0.2	0.2	1.0	1.0	1.0	1.3	1.3	1.3

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 42nd Ave / Point Lobos Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.634
Loss Time (sec): 0 Average Delay (sec/veh): 14.7
Optimal Cycle: 0 Level Of Service: B

Street Name:	42nd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	14	35	54	44	148	73	29	221	11	36	300	9
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	14	36	55	45	151	74	30	225	11	37	306	9
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	16	40	61	50	168	83	33	250	12	41	340	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	40	61	50	168	83	33	250	12	41	340	10
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:	16	40	61	50	168	83	33	250	12	41	340	10
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:	0.14	0.34	0.52	0.17	0.56	0.27	0.11	0.85	0.04	0.10	0.87	0.03
Final Sat.:	69	172	266	96	322	159	66	500	25	64	536	16
Capacity Analysis Module:												
Vol/Sat:	0.23	0.23	0.23	0.52	0.52	0.52	0.50	0.50	0.50	0.63	0.63	0.63
Crit Moves:			****		****		****				****	
Delay/Veh:	10.5	10.5	10.5	14.2	14.2	14.2	13.8	13.8	13.8	16.9	16.9	16.9
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:	10.5	10.5	10.5	14.2	14.2	14.2	13.8	13.8	13.8	16.9	16.9	16.9
LOS by Move:	B	B	B	B	B	B	B	B	B	C	C	C
ApproachDel:	10.5			14.2			13.8			16.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.5			14.2			13.8			16.9		
LOS by Appr:	B			B			B			C		
AllWayAvgQ:	0.2	0.2	0.2	0.9	0.9	0.9	0.8	0.8	0.8	1.4	1.4	1.4

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

2015 Near-Term Alternatives 1 and 2 Conditions Weekday PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in V/C
# 1 34th Ave / Clement St	B	12.0	0.539	B	12.7	0.585	+ 0.046
# 2 42nd Ave / Clement St	B	11.2	0.450	B	12.0	0.494	+ 0.044
# 3 43rd Avenue / Clement Street	B	11.9	0.565	B	13.2	0.636	+ 0.071
# 4 43rd Ave / Point Lobos Ave	B	12.7	0.585	B	13.4	0.607	+ 0.022
# 5 42nd Ave / Point Lobos Ave	B	14.7	0.634	C	15.3	0.649	+ 0.014

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

Intersection #1 34th Ave / Clement St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.585
Loss Time (sec): 0 Average Delay (sec/veh): 12.7
Optimal Cycle: 0 Level Of Service: B

Street Name:	34th Ave						Clement St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	14	18	34	71	104	75	235	17	17	214	16
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	12	14	18	35	72	106	77	240	17	17	218	16
Added Vol:	0	0	0	0	0	0	0	28	0	0	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	14	18	35	72	106	77	268	17	17	222	16
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	14	16	20	39	80	118	85	297	19	19	247	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	16	20	39	80	118	85	297	19	19	247	18
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:	14	16	20	39	80	118	85	297	19	19	247	18
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:	0.27	0.32	0.41	0.16	0.34	0.50	0.21	0.74	0.05	0.07	0.87	0.06
Final Sat.:	145	169	217	100	210	307	145	508	33	45	574	42
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.38	0.38	0.38	0.59	0.59	0.59	0.43	0.43	0.43
Crit Moves:		****			****			****			****	
Delay/Veh:	9.3	9.3	9.3	11.3	11.3	11.3	14.5	14.5	14.5	11.8	11.8	11.8
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:	9.3	9.3	9.3	11.3	11.3	11.3	14.5	14.5	14.5	11.8	11.8	11.8
LOS by Move:	A	A	A	B	B	B	B	B	B	B	B	B
ApproachDel:	9.3			11.3			14.5			11.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.3			11.3			14.5			11.8		
LOS by Appr:	A			B			B			B		
AllWayAvgQ:	0.1	0.1	0.1	0.5	0.5	0.5	1.2	1.2	1.2	0.7	0.7	0.7

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

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

Intersection #2 42nd Ave / Clement St

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.494
Loss Time (sec): 0 | Average Delay (sec/veh): 12.0
Optimal Cycle: 0 | Level Of Service: B

Street Name:	42nd Ave									Clement St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	45	23	86	77	36	17	246	5	26	161	51
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	5	46	23	88	79	37	17	251	5	27	164	52
Added Vol:	0	6	0	11	16	0	0	18	0	0	1	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	52	23	99	95	37	17	269	5	27	165	56
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	58	26	110	105	41	19	299	6	29	184	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	58	26	110	105	41	19	299	6	29	184	62
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:	6	58	26	110	105	41	19	299	6	29	184	62
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:	0.06	0.65	0.29	0.43	0.41	0.16	0.06	0.92	0.02	0.11	0.67	0.22
Final Sat.:	35	358	162	260	249	97	39	605	11	70	436	148
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.16	0.42	0.42	0.42	0.49	0.49	0.49	0.42	0.42	0.42
Crit Moves:			****		****		****					****
Delay/Veh:	9.6	9.6	9.6	12.1	12.1	12.1	12.8	12.8	12.8	11.6	11.6	11.6
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:	9.6	9.6	9.6	12.1	12.1	12.1	12.8	12.8	12.8	11.6	11.6	11.6
LOS by Move:	A	A	A	B	B	B	B	B	B	B	B	B
ApproachDel:	9.6			12.1			12.8			11.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.6			12.1			12.8			11.6		
LOS by Appr:	A			B			B			B		
AllWayAvgQ:	0.1	0.1	0.1	0.6	0.6	0.6	0.8	0.8	0.8	0.6	0.6	0.6

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

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

Intersection #3 43rd Avenue / Clement Street

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.636
Loss Time (sec): 0 | Average Delay (sec/veh): 13.2
Optimal Cycle: 0 | Level Of Service: B

Street Name:	43rd Ave									Clement St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	7	51	78	217	50	4	138	10	59	139	3
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	7	7	52	80	221	51	4	141	10	60	142	3
Added Vol:	0	1	0	18	22	4	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	8	52	98	243	55	4	141	10	60	142	4
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	8	9	58	108	270	61	5	156	11	67	158	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	9	58	108	270	61	5	156	11	67	158	5
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:	8	9	58	108	270	61	5	156	11	67	158	5
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:	0.11	0.12	0.77	0.25	0.61	0.14	0.03	0.91	0.06	0.29	0.69	0.02
Final Sat.:	66	75	479	170	425	96	16	544	39	178	419	12
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.12	0.64	0.64	0.64	0.29	0.29	0.29	0.38	0.38	0.38
Crit Moves:		****				****		****			****	
Delay/Veh:	8.8	8.8	8.8	15.8	15.8	15.8	10.5	10.5	10.5	11.5	11.5	11.5
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:	8.8	8.8	8.8	15.8	15.8	15.8	10.5	10.5	10.5	11.5	11.5	11.5
LOS by Move:	A	A	A	C	C	C	B	B	B	B	B	B
ApproachDel:	8.8			15.8			10.5			11.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.8			15.8			10.5			11.5		
LOS by Appr:	A			C			B			B		
AllWayAvgQ:	0.1	0.1	0.1	1.5	1.5	1.5	0.3	0.3	0.3	0.5	0.5	0.5

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

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

Intersection #4 43rd Ave / Point Lobos Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.607
Loss Time (sec):	0	Average Delay (sec/veh):	13.4
Optimal Cycle:	0	Level Of Service:	B

Street Name:	43rd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	10	2	23	50	24	27	270	45	25	344	20
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	5	10	2	23	51	24	28	275	46	26	351	20
Added Vol:	0	2	0	11	6	0	0	18	0	0	1	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	12	2	34	57	24	28	293	46	26	352	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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	14	2	38	63	27	31	326	51	28	391	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	14	2	38	63	27	31	326	51	28	391	27
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:	6	14	2	38	63	27	31	326	51	28	391	27
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:	0.26	0.63	0.11	0.30	0.49	0.21	0.07	0.80	0.13	0.06	0.88	0.06
Final Sat.:	133	319	53	168	277	119	55	586	92	47	645	45
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.23	0.23	0.23	0.56	0.56	0.56	0.61	0.61	0.61
Crit Moves:	****				****			****			****	
Delay/Veh:	9.3	9.3	9.3	10.2	10.2	10.2	13.4	13.4	13.4	14.6	14.6	14.6
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:	9.3	9.3	9.3	10.2	10.2	10.2	13.4	13.4	13.4	14.6	14.6	14.6
LOS by Move:	A	A	A	B	B	B	B	B	B	B	B	B
ApproachDel:	9.3			10.2			13.4			14.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.3			10.2			13.4			14.6		
LOS by Appr:	A			B			B			B		
AllWayAvgQ:	0.0	0.0	0.0	0.2	0.2	0.2	1.1	1.1	1.1	1.4	1.4	1.4

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

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

Intersection #5 42nd Ave / Point Lobos Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.649
Loss Time (sec):	0	Average Delay (sec/veh):	15.3
Optimal Cycle:	0	Level Of Service:	C

Street Name:	42nd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	14	35	54	44	148	73	29	221	11	36	300	9
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	14	36	55	45	151	74	30	225	11	37	306	9
Added Vol:	0	0	0	18	4	0	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	36	55	63	155	74	30	225	11	37	306	10
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	16	40	61	70	172	83	33	250	12	41	340	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	40	61	70	172	83	33	250	12	41	340	11
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:	16	40	61	70	172	83	33	250	12	41	340	11
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:	0.14	0.34	0.52	0.22	0.53	0.25	0.11	0.85	0.04	0.10	0.87	0.03
Final Sat.:	67	168	260	123	304	146	64	489	24	63	524	17
Capacity Analysis Module:												
Vol/Sat:	0.24	0.24	0.24	0.57	0.57	0.57	0.51	0.51	0.51	0.65	0.65	0.65
Crit Moves:			****		****		****			****		
Delay/Veh:	10.7	10.7	10.7	15.3	15.3	15.3	14.2	14.2	14.2	17.6	17.6	17.6
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:	10.7	10.7	10.7	15.3	15.3	15.3	14.2	14.2	14.2	17.6	17.6	17.6
LOS by Move:	B	B	B	C	C	C	B	B	B	C	C	C
ApproachDel:	10.7			15.3			14.2			17.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.7			15.3			14.2			17.6		
LOS by Appr:	B			C			B			C		
AllWayAvgQ:	0.2	0.2	0.2	1.0	1.0	1.0	0.9	0.9	0.9	1.5	1.5	1.5

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

2023 Long-Term Conditions Weekday PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in V/C
# 1 34th Ave / Clement St	B	12.6	0.569	B	12.6	0.569	+ 0.000
# 2 42nd Ave / Clement St	B	11.6	0.475	B	11.6	0.475	+ 0.000
# 3 43rd Avenue / Clement Street	B	12.5	0.594	B	12.5	0.594	+ 0.000
# 4 43rd Ave / Point Lobos Ave	B	13.4	0.615	B	13.4	0.615	+ 0.000
# 5 42nd Ave / Point Lobos Ave	C	15.8	0.673	C	15.8	0.673	+ 0.000

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 34th Ave / Clement St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.569
Loss Time (sec): 0 Average Delay (sec/veh): 12.6
Optimal Cycle: 0 Level Of Service: B

Street Name:	34th Ave						Clement St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	14	18	34	71	104	75	235	17	17	214	16
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	13	15	19	36	75	110	80	250	18	18	227	17
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	14	17	21	40	84	123	89	277	20	20	253	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	17	21	40	84	123	89	277	20	20	253	19
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:	14	17	21	40	84	123	89	277	20	20	253	19
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:	0.27	0.32	0.41	0.16	0.34	0.50	0.23	0.72	0.05	0.07	0.87	0.06
Final Sat.:	145	169	217	101	211	309	156	487	35	45	571	43
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.10	0.40	0.40	0.40	0.57	0.57	0.57	0.44	0.44	0.44
Crit Moves:	****				****		****				****	
Delay/Veh:	9.3	9.3	9.3	11.5	11.5	11.5	14.2	14.2	14.2	12.0	12.0	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:	9.3	9.3	9.3	11.5	11.5	11.5	14.2	14.2	14.2	12.0	12.0	12.0
LOS by Move:	A	A	A	B	B	B	B	B	B	B	B	B
ApproachDel:	9.3			11.5			14.2			12.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.3			11.5			14.2			12.0		
LOS by Appr:	A			B			B			B		
AllWayAvgQ:	0.1	0.1	0.1	0.5	0.5	0.5	1.1	1.1	1.1	0.7	0.7	0.7

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 42nd Ave / Clement St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.475
Loss Time (sec):	0	Average Delay (sec/veh):	11.6
Optimal Cycle:	0	Level Of Service:	B

Street Name:	42nd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	5		45		23	86		77		36	17		246		5	26		161		51
Growth Adj:	1.06	1.06			1.06	1.06	1.06			1.06	1.06	1.06			1.06	1.06	1.06			1.06
Initial Bse:	5		48		24	91		82		38	18		261		5	28		171		54
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:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90
PHF Volume:	6		53		27	101		91		42	20		290		6	31		190		60
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	6		53		27	101		91		42	20		290		6	31		190		60
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:	6		53		27	101		91		42	20		290		6	31		190		60
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:	0.07	0.62			0.31	0.43	0.39			0.18	0.06	0.92			0.02	0.11	0.68			0.21
Final Sat.:	39		349		178	264		236		110	42		612		12	73		453		143
Capacity Analysis Module:																				
Vol/Sat:	0.15	0.15			0.15	0.39	0.39			0.39	0.47	0.47			0.47	0.42	0.42			0.42
Crit Moves:			****					****					****					****		
Delay/Veh:	9.5		9.5		9.5	11.5		11.5		11.5	12.4		12.4		12.4	11.5		11.5		11.5
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:	9.5		9.5		9.5	11.5		11.5		11.5	12.4		12.4		12.4	11.5		11.5		11.5
LOS by Move:	A		A		A	B		B		B	B		B		B	B		B		B
ApproachDel:	9.5					11.5					12.4					11.5				
Delay Adj:	1.00					1.00					1.00					1.00				
ApprAdjDel:	9.5					11.5					12.4					11.5				
LOS by Appr:	A					B					B					B				
AllWayAvgQ:	0.1	0.1			0.1	0.5	0.5			0.5	0.8	0.8			0.8	0.6	0.6			0.6

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 43rd Avenue / Clement Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	0	Average Delay (sec/veh):	12.5
Optimal Cycle:	0	Level Of Service:	B

Street Name:	43rd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	7		7		51	78		217		50	4		138		10	59		139		3
Growth Adj:	1.06	1.06			1.06	1.06	1.06			1.06	1.06	1.06			1.06	1.06	1.06			1.06
Initial Bse:	7		7		54	83		230		53	4		147		11	63		148		3
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:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90
PHF Volume:	8		8		60	92		256		59	5		163		12	70		164		4
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	8		8		60	92		256		59	5		163		12	70		164		4
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:	8		8		60	92		256		59	5		163		12	70		164		4
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:	0.11	0.11			0.78	0.23	0.63			0.14	0.03	0.91			0.06	0.29	0.70			0.01
Final Sat.:	67		67		488	155		431		99	16		553		40	182		428		9
Capacity Analysis Module:																				
Vol/Sat:	0.12	0.12			0.12	0.59	0.59			0.59	0.29	0.29			0.29	0.38	0.38			0.38
Crit Moves:					****			****							****	****				
Delay/Veh:	8.8		8.8		8.8	14.7		14.7		14.7	10.5		10.5		10.5	11.5		11.5		11.5
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:	8.8		8.8		8.8	14.7		14.7		14.7	10.5		10.5		10.5	11.5		11.5		11.5
LOS by Move:	A		A		A	B		B		B	B		B		B	B		B		B
ApproachDel:	8.8					14.7					10.5					11.5				
Delay Adj:	1.00					1.00					1.00					1.00				
ApprAdjDel:	8.8					14.7					10.5					11.5				
LOS by Appr:	A					B					B					B				
AllWayAvgQ:	0.1	0.1			0.1	1.3	1.3			1.3	0.3	0.3			0.3	0.5	0.5			0.5

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 43rd Ave / Point Lobos Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.615
Loss Time (sec): 0 Average Delay (sec/veh): 13.4
Optimal Cycle: 0 Level Of Service: B

Street Name:	43rd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	10	2	23	50	24	27	270	45	25	344	20
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	5	11	2	24	53	25	29	287	48	27	365	21
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	12	2	27	59	28	32	319	53	30	406	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	12	2	27	59	28	32	319	53	30	406	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:	6	12	2	27	59	28	32	319	53	30	406	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:	0.29	0.59	0.12	0.24	0.51	0.25	0.08	0.79	0.13	0.06	0.89	0.05
Final Sat.:	150	300	60	134	291	140	59	585	98	48	660	38
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.20	0.20	0.20	0.54	0.54	0.54	0.62	0.62	0.62
Crit Moves:		****		****			****				****	
Delay/Veh:	9.2	9.2	9.2	10.0	10.0	10.0	13.0	13.0	13.0	14.7	14.7	14.7
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:	9.2	9.2	9.2	10.0	10.0	10.0	13.0	13.0	13.0	14.7	14.7	14.7
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
ApproachDel:	9.2			10.0			13.0			14.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.2			10.0			13.0			14.7		
LOS by Appr:	A			A			B			B		
AllWayAvgQ:	0.0	0.0	0.0	0.2	0.2	0.2	1.1	1.1	1.1	1.4	1.4	1.4

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 42nd Ave / Point Lobos Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.673
Loss Time (sec): 0 Average Delay (sec/veh): 15.8
Optimal Cycle: 0 Level Of Service: C

Street Name:	42nd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	14	35	54	44	148	73	29	221	11	36	300	9
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	15	37	57	47	157	78	31	235	12	38	319	10
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	17	41	64	52	175	86	34	261	13	42	354	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	41	64	52	175	86	34	261	13	42	354	11
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:	17	41	64	52	175	86	34	261	13	42	354	11
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:	0.14	0.34	0.52	0.17	0.56	0.27	0.11	0.85	0.04	0.10	0.87	0.03
Final Sat.:	66	166	256	94	315	155	64	488	24	63	526	16
Capacity Analysis Module:												
Vol/Sat:	0.25	0.25	0.25	0.55	0.55	0.55	0.53	0.53	0.53	0.67	0.67	0.67
Crit Moves:	****			****			****			****		
Delay/Veh:	10.9	10.9	10.9	15.1	15.1	15.1	14.7	14.7	14.7	18.6	18.6	18.6
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:	10.9	10.9	10.9	15.1	15.1	15.1	14.7	14.7	14.7	18.6	18.6	18.6
LOS by Move:	B	B	B	C	C	C	B	B	B	C	C	C
ApproachDel:	10.9			15.1			14.7			18.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.9			15.1			14.7			18.6		
LOS by Appr:	B			C			B			C		
AllWayAvgQ:	0.2	0.2	0.2	1.0	1.0	1.0	0.9	0.9	0.9	1.7	1.7	1.7

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

2023 Long-Term Alternative 1 Conditions Weekday PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in V/C
# 1 34th Ave / Clement St	B	12.6	0.569	C	19.1	0.797	+ 0.228
# 2 42nd Ave / Clement St	B	11.6	0.475	C	22.3	0.769	+ 0.295
# 3 43rd Avenue / Clement Street	B	12.5	0.594	D	27.7	0.927	+ 0.332
# 4 43rd Ave / Point Lobos Ave	B	13.4	0.615	C	22.5	0.825	+ 0.210
# 5 42nd Ave / Point Lobos Ave	C	15.8	0.673	C	21.3	0.760	+ 0.087

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

Intersection #1 34th Ave / Clement St

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.797
Loss Time (sec): 0 | Average Delay (sec/veh): 19.1
Optimal Cycle: 0 | Level Of Service: C

Street Name:	34th Ave						Clement St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	14	18	34	71	104	75	235	17	17	214	16
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	13	15	19	36	75	110	80	250	18	18	227	17
Added Vol:	0	0	0	0	0	0	0	124	0	0	80	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	15	19	36	75	110	80	374	18	18	307	17
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	14	17	21	40	84	123	89	415	20	20	341	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	17	21	40	84	123	89	415	20	20	341	19
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:	14	17	21	40	84	123	89	415	20	20	341	19
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:	0.27	0.32	0.41	0.16	0.34	0.50	0.17	0.79	0.04	0.05	0.90	0.05
Final Sat.:	127	148	190	90	187	274	111	521	25	33	561	31
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.45	0.45	0.45	0.80	0.80	0.80	0.61	0.61	0.61
Crit Moves:	****				****				****	****		
Delay/Veh:	10.2	10.2	10.2	13.1	13.1	13.1	25.1	25.1	25.1	16.1	16.1	16.1
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:	10.2	10.2	10.2	13.1	13.1	13.1	25.1	25.1	25.1	16.1	16.1	16.1
LOS by Move:	B	B	B	B	B	B	D	D	D	C	C	C
ApproachDel:	10.2			13.1			25.1			16.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.2			13.1			25.1			16.1		
LOS by Appr:	B			B			D			C		
AllWayAvgQ:	0.1	0.1	0.1	0.6	0.6	0.6	3.0	3.0	3.0	1.3	1.3	1.3

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

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

Intersection #2 42nd Ave / Clement St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.769
Loss Time (sec):	0	Average Delay (sec/veh):	22.3
Optimal Cycle:	0	Level Of Service:	C

Street Name:	42nd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	5		45		23	86		77		36	17		246		5	26		161		51
Growth Adj:	1.06	1.06		1.06		1.06	1.06		1.06		1.06	1.06		1.06		1.06	1.06		1.06	
Initial Bse:	5		48		24	91		82		38	18		261		5	28		171		54
Added Vol:	0		100		0	46		71		0	0		77		0	0		10		70
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	5		148		24	137		153		38	18		338		5	28		181		124
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:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	6		164		27	153		170		42	20		376		6	31		201		138
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	6		164		27	153		170		42	20		376		6	31		201		138
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:	6		164		27	153		170		42	20		376		6	31		201		138
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:	0.03	0.83		0.14		0.42	0.46		0.12		0.05	0.94		0.01		0.08	0.55		0.37	
Final Sat.:	13		354		59	209		233		58	26		489		8	43		284		195
Capacity Analysis Module:																				
Vol/Sat:	0.46	0.46		0.46		0.73	0.73		0.73		0.77	0.77		0.77		0.71	0.71		0.71	
Crit Moves:	****					****					****					****				
Delay/Veh:	14.8	14.8		14.8		23.4	23.4		23.4		25.9	25.9		25.9		21.5	21.5		21.5	
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:	14.8	14.8		14.8		23.4	23.4		23.4		25.9	25.9		25.9		21.5	21.5		21.5	
LOS by Move:	B		B		B	C		C		C	D		D		D	C		C		C
ApproachDel:			14.8					23.4					25.9					21.5		
Delay Adj:			1.00					1.00					1.00					1.00		
ApprAdjDel:			14.8					23.4					25.9					21.5		
LOS by Appr:			B					C					D					C		
AllWayAvgQ:	0.5	0.5		0.5		1.9	1.9		1.9		2.4	2.4		2.4		1.7	1.7		1.7	

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

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

Intersection #3 43rd Avenue / Clement Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.927
Loss Time (sec):	0	Average Delay (sec/veh):	27.7
Optimal Cycle:	0	Level Of Service:	D

Street Name:	43rd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	7		7		51	78		217		50	4		138		10	59		139		3
Growth Adj:	1.06	1.06		1.06		1.06	1.06		1.06		1.06	1.06		1.06		1.06	1.06		1.06	
Initial Bse:	7		7		54	83		230		53	4		147		11	63		148		3
Added Vol:	0		16		0	77		96		19	4		0		0	0		0		10
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	7		23		54	160		326		72	8		147		11	63		148		13
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:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	8		26		60	178		363		80	9		163		12	70		164		15
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	8		26		60	178		363		80	9		163		12	70		164		15
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:	8		26		60	178		363		80	9		163		12	70		164		15
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:	0.09	0.27		0.64		0.29	0.58		0.13		0.05	0.89		0.06		0.28	0.66		0.06	
Final Sat.:	49		155		359	192		391		86	27		482		35	156		367		33
Capacity Analysis Module:																				
Vol/Sat:	0.17	0.17		0.17		0.93	0.93		0.93		0.34	0.34		0.34		0.45	0.45		0.45	
Crit Moves:			****					****					****						****	
Delay/Veh:	9.9		9.9		9.9	40.6		40.6		40.6	12.2		12.2		12.2	13.7		13.7		13.7
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:	9.9		9.9		9.9	40.6		40.6		40.6	12.2		12.2		12.2	13.7		13.7		13.7
LOS by Move:	A		A		A	E		E		E	B		B		B	B		B		B
ApproachDel:			9.9					40.6					12.2					13.7		
Delay Adj:			1.00					1.00					1.00					1.00		
ApprAdjDel:			9.9					40.6					12.2					13.7		
LOS by Appr:			A					E					B					B		
AllWayAvgQ:	0.2	0.2		0.2		6.0	6.0		6.0		0.4	0.4		0.4		0.7	0.7		0.7	

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

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

Intersection #4 43rd Ave / Point Lobos Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.825
Loss Time (sec):	0	Average Delay (sec/veh):	22.5
Optimal Cycle:	0	Level Of Service:	C

Street Name:	43rd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	10	2	23	50	24	27	270	45	25	344	20
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	5	11	2	24	53	25	29	287	48	27	365	21
Added Vol:	0	30	0	46	25	0	0	77	0	0	12	70
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	41	2	70	78	25	29	364	48	27	377	91
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	45	2	78	87	28	32	404	53	30	419	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	45	2	78	87	28	32	404	53	30	419	101
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:	6	45	2	78	87	28	32	404	53	30	419	101
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:	0.11	0.85	0.04	0.40	0.45	0.15	0.06	0.83	0.11	0.05	0.77	0.18
Final Sat.:	50	382	20	205	228	74	42	536	70	36	508	123
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.12	0.38	0.38	0.38	0.75	0.75	0.75	0.82	0.82	0.82
Crit Moves:		****			****			****		****		
Delay/Veh:	10.7	10.7	10.7	12.9	12.9	12.9	22.2	22.2	22.2	27.2	27.2	27.2
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:	10.7	10.7	10.7	12.9	12.9	12.9	22.2	22.2	22.2	27.2	27.2	27.2
LOS by Move:	B	B	B	B	B	B	C	C	C	D	D	D
ApproachDel:		10.7			12.9			22.2			27.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.7			12.9			22.2			27.2	
LOS by Appr:		B			B			C			D	
AllWayAvgQ:	0.1	0.1	0.1	0.5	0.5	0.5	2.5	2.5	2.5	3.5	3.5	3.5

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

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

Intersection #5 42nd Ave / Point Lobos Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.760
Loss Time (sec):	0	Average Delay (sec/veh):	21.3
Optimal Cycle:	0	Level Of Service:	C

Street Name:	42nd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	14	35	54	44	148	73	29	221	11	36	300	9
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	15	37	57	47	157	78	31	235	12	38	319	10
Added Vol:	0	4	0	77	19	0	0	0	0	0	0	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	41	57	124	176	78	31	235	12	38	319	22
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	17	46	64	137	196	86	34	261	13	42	354	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	46	64	137	196	86	34	261	13	42	354	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:	17	46	64	137	196	86	34	261	13	42	354	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:	0.13	0.36	0.51	0.33	0.47	0.20	0.11	0.85	0.04	0.10	0.84	0.06
Final Sat.:	57	157	218	181	257	113	58	441	22	56	469	32
Capacity Analysis Module:												
Vol/Sat:	0.29	0.29	0.29	0.76	0.76	0.76	0.59	0.59	0.59	0.76	0.76	0.76
Crit Moves:		****			****			****			****	
Delay/Veh:	11.9	11.9	11.9	24.4	24.4	24.4	17.1	17.1	17.1	24.1	24.1	24.1
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:	11.9	11.9	11.9	24.4	24.4	24.4	17.1	17.1	17.1	24.1	24.1	24.1
LOS by Move:	B	B	B	C	C	C	C	C	C	C	C	C
ApproachDel:		11.9			24.4			17.1			24.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.9			24.4			17.1			24.1	
LOS by Appr:		B			C			C			C	
AllWayAvgQ:	0.3	0.3	0.3	2.3	2.3	2.3	1.1	1.1	1.1	2.3	2.3	2.3

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

2023 Long-Term Alternative 2 Conditions Weekday PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in V/C
# 1 34th Ave / Clement St	B	12.6	0.569	B	13.0	0.599	+ 0.030
# 2 42nd Ave / Clement St	B	11.6	0.475	B	12.1	0.505	+ 0.030
# 3 43rd Avenue / Clement Street	B	12.5	0.594	B	13.4	0.643	+ 0.049
# 4 43rd Ave / Point Lobos Ave	B	13.4	0.615	B	13.8	0.626	+ 0.011
# 5 42nd Ave / Point Lobos Ave	C	15.8	0.673	C	16.3	0.681	+ 0.008

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

Intersection #1 34th Ave / Clement St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.599
Loss Time (sec): 0 Average Delay (sec/veh): 13.0
Optimal Cycle: 0 Level Of Service: B

Street Name:	34th Ave						Clement St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	14	18	34	71	104	75	235	17	17	214	16
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	13	15	19	36	75	110	80	250	18	18	227	17
Added Vol:	0	0	0	0	0	0	0	18	0	0	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	15	19	36	75	110	80	268	18	18	230	17
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	14	17	21	40	84	123	89	297	20	20	256	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	17	21	40	84	123	89	297	20	20	256	19
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:	14	17	21	40	84	123	89	297	20	20	256	19
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:	0.27	0.32	0.41	0.16	0.34	0.50	0.22	0.73	0.05	0.07	0.87	0.06
Final Sat.:	142	166	213	100	208	305	148	496	33	45	568	42
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.10	0.40	0.40	0.40	0.60	0.60	0.60	0.45	0.45	0.45
Crit Moves:	****			****			****				****	
Delay/Veh:	9.4	9.4	9.4	11.6	11.6	11.6	15.0	15.0	15.0	12.2	12.2	12.2
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:	9.4	9.4	9.4	11.6	11.6	11.6	15.0	15.0	15.0	12.2	12.2	12.2
LOS by Move:	A	A	A	B	B	B	C	C	C	B	B	B
ApproachDel:	9.4			11.6			15.0			12.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.4			11.6			15.0			12.2		
LOS by Appr:	A			B			C			B		
AllWayAvgQ:	0.1	0.1	0.1	0.5	0.5	0.5	1.3	1.3	1.3	0.7	0.7	0.7

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

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

Intersection #2 42nd Ave / Clement St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.505
Loss Time (sec):	0	Average Delay (sec/veh):	12.1
Optimal Cycle:	0	Level Of Service:	B

Street Name:	42nd Ave						Clement St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	45	23	86	77	36	17	246	5	26	161	51
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	5	48	24	91	82	38	18	261	5	28	171	54
Added Vol:	0	4	0	7	11	0	0	12	0	0	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	52	24	98	93	38	18	273	5	28	171	56
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	58	27	109	103	42	20	304	6	31	190	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	58	27	109	103	42	20	304	6	31	190	62
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:	6	58	27	109	103	42	20	304	6	31	190	62
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:	0.06	0.64	0.30	0.43	0.40	0.17	0.06	0.92	0.02	0.11	0.67	0.22
Final Sat.:	36	349	165	258	244	100	40	602	12	71	438	144
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.16	0.42	0.42	0.42	0.50	0.50	0.50	0.43	0.43	0.43
Crit Moves:		****		****					****			****
Delay/Veh:	9.7	9.7	9.7	12.1	12.1	12.1	13.1	13.1	13.1	11.8	11.8	11.8
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:	9.7	9.7	9.7	12.1	12.1	12.1	13.1	13.1	13.1	11.8	11.8	11.8
LOS by Move:	A	A	A	B	B	B	B	B	B	B	B	B
ApproachDel:	9.7			12.1			13.1			11.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.7			12.1			13.1			11.8		
LOS by Appr:	A			B			B			B		
AllWayAvgQ:	0.1	0.1	0.1	0.6	0.6	0.6	0.9	0.9	0.9	0.7	0.7	0.7

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

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

Intersection #3 43rd Avenue / Clement Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.643
Loss Time (sec):	0	Average Delay (sec/veh):	13.4
Optimal Cycle:	0	Level Of Service:	B

Street Name:	43rd Ave						Clement St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	7	51	78	217	50	4	138	10	59	139	3
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	7	7	54	83	230	53	4	147	11	63	148	3
Added Vol:	0	1	0	12	14	3	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	8	54	95	244	56	4	147	11	63	148	3
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	8	9	60	105	272	62	5	163	12	70	164	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	9	60	105	272	62	5	163	12	70	164	4
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:	8	9	60	105	272	62	5	163	12	70	164	4
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:	0.11	0.12	0.77	0.24	0.62	0.14	0.03	0.91	0.06	0.29	0.70	0.01
Final Sat.:	65	74	472	164	422	97	16	541	39	178	419	9
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.13	0.64	0.64	0.64	0.30	0.30	0.30	0.39	0.39	0.39
Crit Moves:		****			****		****				****	
Delay/Veh:	8.9	8.9	8.9	16.1	16.1	16.1	10.7	10.7	10.7	11.7	11.7	11.7
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:	8.9	8.9	8.9	16.1	16.1	16.1	10.7	10.7	10.7	11.7	11.7	11.7
LOS by Move:	A	A	A	C	C	C	B	B	B	B	B	B
ApproachDel:	8.9			16.1			10.7			11.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.9			16.1			10.7			11.7		
LOS by Appr:	A			C			B			B		
AllWayAvgQ:	0.1	0.1	0.1	1.5	1.5	1.5	0.4	0.4	0.4	0.5	0.5	0.5

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

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

Intersection #4 43rd Ave / Point Lobos Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	0	Average Delay (sec/veh):	13.8
Optimal Cycle:	0	Level Of Service:	B

Street Name:	43rd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	10	2	23	50	24	27	270	45	25	344	20
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	5	11	2	24	53	25	29	287	48	27	365	21
Added Vol:	0	1	0	7	4	0	0	12	0	0	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	12	2	31	57	25	29	299	48	27	365	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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	13	2	35	63	28	32	332	53	30	406	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	13	2	35	63	28	32	332	53	30	406	26
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:	6	13	2	35	63	28	32	332	53	30	406	26
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:	0.28	0.61	0.11	0.28	0.50	0.22	0.08	0.79	0.13	0.06	0.88	0.06
Final Sat.:	139	305	56	154	280	125	56	582	93	47	648	41
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.23	0.23	0.23	0.57	0.57	0.57	0.63	0.63	0.63
Crit Moves:		****		****			****				****	
Delay/Veh:	9.3	9.3	9.3	10.3	10.3	10.3	13.7	13.7	13.7	15.2	15.2	15.2
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:	9.3	9.3	9.3	10.3	10.3	10.3	13.7	13.7	13.7	15.2	15.2	15.2
LOS by Move:	A	A	A	B	B	B	B	B	B	C	C	C
ApproachDel:	9.3			10.3			13.7			15.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.3			10.3			13.7			15.2		
LOS by Appr:	A			B			B			C		
AllWayAvgQ:	0.0	0.0	0.0	0.2	0.2	0.2	1.2	1.2	1.2	1.5	1.5	1.5

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

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

Intersection #5 42nd Ave / Point Lobos Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	0	Average Delay (sec/veh):	16.3
Optimal Cycle:	0	Level Of Service:	C

Street Name:	42nd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	14	35	54	44	148	73	29	221	11	36	300	9
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	15	37	57	47	157	78	31	235	12	38	319	10
Added Vol:	0	0	0	12	3	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	37	57	59	160	78	31	235	12	38	319	10
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	17	41	64	65	178	86	34	261	13	42	354	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	41	64	65	178	86	34	261	13	42	354	11
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:	17	41	64	65	178	86	34	261	13	42	354	11
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:	0.14	0.34	0.52	0.20	0.54	0.26	0.11	0.85	0.04	0.10	0.87	0.03
Final Sat.:	65	163	252	111	304	147	63	482	24	62	520	16
Capacity Analysis Module:												
Vol/Sat:	0.25	0.25	0.25	0.59	0.59	0.59	0.54	0.54	0.54	0.68	0.68	0.68
Crit Moves:	****				****		****			****		
Delay/Veh:	11.0	11.0	11.0	16.0	16.0	16.0	15.0	15.0	15.0	19.1	19.1	19.1
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:	11.0	11.0	11.0	16.0	16.0	16.0	15.0	15.0	15.0	19.1	19.1	19.1
LOS by Move:	B	B	B	C	C	C	B	B	B	C	C	C
ApproachDel:	11.0			16.0			15.0			19.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.0			16.0			15.0			19.1		
LOS by Appr:	B			C			B			C		
AllWayAvgQ:	0.2	0.2	0.2	1.1	1.1	1.1	1.0	1.0	1.0	1.7	1.7	1.7

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

2035 Cumulative Conditions Weekday PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in V/C
# 1 34th Ave / Clement St	B	13.6	0.616	B	13.6	0.616	+ 0.000
# 2 42nd Ave / Clement St	B	12.3	0.515	B	12.3	0.515	+ 0.000
# 3 43rd Avenue / Clement Street	B	13.5	0.643	B	13.5	0.643	+ 0.000
# 4 43rd Ave / Point Lobos Ave	B	14.6	0.661	B	14.6	0.661	+ 0.000
# 5 42nd Ave / Point Lobos Ave	C	18.1	0.736	C	18.1	0.736	+ 0.000

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

Intersection #1 34th Ave / Clement St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.616
Loss Time (sec): 0 Average Delay (sec/veh): 13.6
Optimal Cycle: 0 Level Of Service: B

Street Name:	34th Ave						Clement St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	14	18	34	71	104	75	235	17	17	214	16
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	14	16	20	38	80	117	85	265	19	19	241	18
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:	14	16	20	38	80	117	85	265	19	19	241	18
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	15	18	23	43	89	130	94	294	21	21	268	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	18	23	43	89	130	94	294	21	21	268	20
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:	15	18	23	43	89	130	94	294	21	21	268	20
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:	0.27	0.32	0.41	0.16	0.34	0.50	0.23	0.72	0.05	0.07	0.87	0.06
Final Sat.:	138	161	207	98	206	301	153	478	35	44	558	42
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.43	0.43	0.43	0.62	0.62	0.62	0.48	0.48	0.48
Crit Moves:		****			****		****				****	
Delay/Veh:	9.6	9.6	9.6	12.1	12.1	12.1	15.7	15.7	15.7	12.8	12.8	12.8
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:	9.6	9.6	9.6	12.1	12.1	12.1	15.7	15.7	15.7	12.8	12.8	12.8
LOS by Move:	A	A	A	B	B	B	C	C	C	B	B	B
ApproachDel:	9.6			12.1			15.7			12.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.6			12.1			15.7			12.8		
LOS by Appr:	A			B			C			B		
AllWayAvgQ:	0.1	0.1	0.1	0.6	0.6	0.6	1.4	1.4	1.4	0.8	0.8	0.8

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

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

Intersection #2 42nd Ave / Clement St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.515
Loss Time (sec): 0 Average Delay (sec/veh): 12.3
Optimal Cycle: 0 Level Of Service: B

Street Name:	42nd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	5		45		23	86		77		36	17		246		5	26		161		51
Growth Adj:	1.13	1.13			1.13	1.13	1.13			1.13	1.13	1.13			1.13	1.13	1.13			1.13
Initial Bse:	6		51		26	97		87		41	19		277		6	29		181		57
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:	6		51		26	97		87		41	19		277		6	29		181		57
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:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90
PHF Volume:	6		56		29	108		96		45	21		308		6	33		202		64
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	6		56		29	108		96		45	21		308		6	33		202		64
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:	6		56		29	108		96		45	21		308		6	33		202		64
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:	0.07	0.62			0.31	0.43	0.39			0.18	0.06	0.92			0.02	0.11	0.68			0.21
Final Sat.:	37		335		171	257		230		108	41		598		12	71		442		140
Capacity Analysis Module:																				
Vol/Sat:	0.17	0.17			0.17	0.42	0.42			0.42	0.52	0.52			0.52	0.46	0.46			0.46
Crit Moves:		****					****					****				****				
Delay/Veh:	9.8		9.8		9.8	12.1		12.1		12.1	13.3		13.3		13.3	12.2		12.2		12.2
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:	9.8		9.8		9.8	12.1		12.1		12.1	13.3		13.3		13.3	12.2		12.2		12.2
LOS by Move:	A		A		A	B		B		B	B		B		B	B		B		B
ApproachDel:	9.8					12.1					13.3					12.2				
Delay Adj:	1.00					1.00					1.00					1.00				
ApprAdjDel:	9.8					12.1					13.3					12.2				
LOS by Appr:	A					B					B					B				
AllWayAvgQ:	0.1	0.1			0.1	0.6	0.6			0.6	0.9	0.9			0.9	0.7	0.7			0.7

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

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

Intersection #3 43rd Avenue / Clement Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.643
Loss Time (sec): 0 Average Delay (sec/veh): 13.5
Optimal Cycle: 0 Level Of Service: B

Street Name:	43rd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	7		7		51	78		217		50	4		138		10	59		139		3
Growth Adj:	1.13	1.13			1.13	1.13	1.13			1.13	1.13	1.13			1.13	1.13	1.13			1.13
Initial Bse:	8		8		57	88		245		56	5		156		11	66		157		3
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:	8		8		57	88		245		56	5		156		11	66		157		3
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:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90
PHF Volume:	9		9		64	98		272		63	5		173		13	74		174		4
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	9		9		64	98		272		63	5		173		13	74		174		4
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:	9		9		64	98		272		63	5		173		13	74		174		4
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:	0.11	0.11			0.78	0.23	0.63			0.14	0.03	0.91			0.06	0.29	0.70			0.01
Final Sat.:	64		64		469	152		423		97	16		538		39	177		417		9
Capacity Analysis Module:																				
Vol/Sat:	0.14	0.14			0.14	0.64	0.64			0.64	0.32	0.32			0.32	0.42	0.42			0.42
Crit Moves:	****						****				****						****			
Delay/Veh:	9.0		9.0		9.0	16.3		16.3		16.3	10.9		10.9		10.9	12.1		12.1		12.1
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:	9.0		9.0		9.0	16.3		16.3		16.3	10.9		10.9		10.9	12.1		12.1		12.1
LOS by Move:	A		A		A	C		C		C	B		B		B	B		B		B
ApproachDel:	9.0					16.3					10.9					12.1				
Delay Adj:	1.00					1.00					1.00					1.00				
ApprAdjDel:	9.0					16.3					10.9					12.1				
LOS by Appr:	A					C					B					B				
AllWayAvgQ:	0.1	0.1			0.1	1.5	1.5			1.5	0.4	0.4			0.4	0.6	0.6			0.6

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

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

Intersection #4 43rd Ave / Point Lobos Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.661
Loss Time (sec): 0 Average Delay (sec/veh): 14.6
Optimal Cycle: 0 Level Of Service: B

Street Name:	43rd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	10	2	23	50	24	27	270	45	25	344	20
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	6	11	2	26	56	27	30	304	51	28	388	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:	6	11	2	26	56	27	30	304	51	28	388	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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	13	3	29	63	30	34	338	56	31	431	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	13	3	29	63	30	34	338	56	31	431	25
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:	6	13	3	29	63	30	34	338	56	31	431	25
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:	0.29	0.59	0.12	0.24	0.51	0.25	0.08	0.79	0.13	0.06	0.89	0.05
Final Sat.:	145	289	58	131	284	137	58	576	96	47	651	38
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.22	0.22	0.22	0.59	0.59	0.59	0.66	0.66	0.66
Crit Moves:	****			****			****			****		
Delay/Veh:	9.4	9.4	9.4	10.3	10.3	10.3	14.1	14.1	14.1	16.3	16.3	16.3
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:	9.4	9.4	9.4	10.3	10.3	10.3	14.1	14.1	14.1	16.3	16.3	16.3
LOS by Move:	A	A	A	B	B	B	B	B	B	C	C	C
ApproachDel:	9.4			10.3			14.1			16.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.4			10.3			14.1			16.3		
LOS by Appr:	A			B			B			C		
AllWayAvgQ:	0.0	0.0	0.0	0.2	0.2	0.2	1.3	1.3	1.3	1.7	1.7	1.7

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

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

Intersection #5 42nd Ave / Point Lobos Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.736
Loss Time (sec): 0 Average Delay (sec/veh): 18.1
Optimal Cycle: 0 Level Of Service: C

Street Name:	42nd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	14	35	54	44	148	73	29	221	11	36	300	9
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	16	39	61	50	167	82	33	249	12	41	338	10
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:	16	39	61	50	167	82	33	249	12	41	338	10
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	18	44	68	55	185	91	36	277	14	45	376	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	44	68	55	185	91	36	277	14	45	376	11
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:	18	44	68	55	185	91	36	277	14	45	376	11
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:	0.14	0.34	0.52	0.17	0.56	0.27	0.11	0.85	0.04	0.10	0.87	0.03
Final Sat.:	62	156	241	91	305	150	62	471	23	61	510	15
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.28	0.61	0.61	0.61	0.59	0.59	0.59	0.74	0.74	0.74
Crit Moves:	****			****			****			****		
Delay/Veh:	11.5	11.5	11.5	17.0	17.0	17.0	16.4	16.4	16.4	22.2	22.2	22.2
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:	11.5	11.5	11.5	17.0	17.0	17.0	16.4	16.4	16.4	22.2	22.2	22.2
LOS by Move:	B	B	B	C	C	C	C	C	C	C	C	C
ApproachDel:	11.5			17.0			16.4			22.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.5			17.0			16.4			22.2		
LOS by Appr:	B			C			C			C		
AllWayAvgQ:	0.3	0.3	0.3	1.2	1.2	1.2	1.1	1.1	1.1	2.2	2.2	2.2

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

2035 Cumulative Alternative 1 Conditions Weekday PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in V/C
# 1 34th Ave / Clement St	B	13.6	0.616	C	22.3	0.850	+ 0.235
# 2 42nd Ave / Clement St	B	12.3	0.515	D	26.7	0.830	+ 0.315
# 3 43rd Avenue / Clement Street	B	13.5	0.643	D	34.6	0.982	+ 0.339
# 4 43rd Ave / Point Lobos Ave	B	14.6	0.661	D	27.1	0.881	+ 0.220
# 5 42nd Ave / Point Lobos Ave	C	18.1	0.736	D	26.1	0.825	+ 0.089

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

Intersection #1 34th Ave / Clement St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.850
Loss Time (sec): 0 Average Delay (sec/veh): 22.3
Optimal Cycle: 0 Level Of Service: C

Street Name:	34th Ave						Clement St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	14	18	34	71	104	75	235	17	17	214	16
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	14	16	20	38	80	117	85	265	19	19	241	18
Added Vol:	0	0	0	0	0	0	0	124	0	0	80	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	16	20	38	80	117	85	389	19	19	321	18
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	15	18	23	43	89	130	94	432	21	21	357	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	18	23	43	89	130	94	432	21	21	357	20
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:	15	18	23	43	89	130	94	432	21	21	357	20
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:	0.27	0.32	0.41	0.16	0.34	0.50	0.17	0.79	0.04	0.05	0.90	0.05
Final Sat.:	124	145	186	89	185	271	110	508	25	33	547	31
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.12	0.48	0.48	0.48	0.85	0.85	0.85	0.65	0.65	0.65
Crit Moves:		****			****		****				****	
Delay/Veh:	10.6	10.6	10.6	14.0	14.0	14.0	30.7	30.7	30.7	17.9	17.9	17.9
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:	10.6	10.6	10.6	14.0	14.0	14.0	30.7	30.7	30.7	17.9	17.9	17.9
LOS by Move:	B	B	B	B	B	B	D	D	D	C	C	C
ApproachDel:	10.6			14.0			30.7			17.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.6			14.0			30.7			17.9		
LOS by Appr:	B			B			D			C		
AllWayAvgQ:	0.1	0.1	0.1	0.7	0.7	0.7	4.0	4.0	4.0	1.6	1.6	1.6

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

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

Intersection #2 42nd Ave / Clement St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.830
Loss Time (sec): 0 Average Delay (sec/veh): 26.7
Optimal Cycle: 0 Level Of Service: D

Street Name:	42nd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	5		45		23	86		77		36	17		246		5	26		161		51
Growth Adj:	1.13	1.13		1.13		1.13	1.13		1.13		1.13	1.13		1.13		1.13	1.13		1.13	
Initial Bse:	6		51		26	97		87		41	19		277		6	29		181		57
Added Vol:	0		100		0	46		71		0	0		77		0	0		10		70
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	6		151		26	143		158		41	19		354		6	29		191		127
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:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	6		167		29	159		175		45	21		394		6	33		213		142
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	6		167		29	159		175		45	21		394		6	33		213		142
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:	6		167		29	159		175		45	21		394		6	33		213		142
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:	0.03	0.83		0.14		0.42	0.46		0.12		0.05	0.94		0.01		0.08	0.55		0.37	
Final Sat.:	13		338		58	203		224		58	26		474		8	43		278		185
Capacity Analysis Module:																				
Vol/Sat:	0.50	0.50		0.50		0.78	0.78		0.78		0.83	0.83		0.83		0.77	0.77		0.77	
Crit Moves:				****			****					****					****			
Delay/Veh:	15.9	15.9		15.9		27.6	27.6		27.6		32.0	32.0		32.0		25.6	25.6		25.6	
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:	15.9	15.9		15.9		27.6	27.6		27.6		32.0	32.0		32.0		25.6	25.6		25.6	
LOS by Move:	C		C		C	D		D		D	D		D		D	D		D		D
ApproachDel:			15.9					27.6					32.0					25.6		
Delay Adj:			1.00					1.00					1.00					1.00		
ApprAdjDel:			15.9					27.6					32.0					25.6		
LOS by Appr:			C					D					D					D		
AllWayAvgQ:	0.6	0.6		0.6		2.4	2.4		2.4		3.1	3.1		3.1		2.2	2.2		2.2	

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

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

Intersection #3 43rd Avenue / Clement Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.982
Loss Time (sec): 0 Average Delay (sec/veh): 34.6
Optimal Cycle: 0 Level Of Service: D

Street Name:	43rd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	7		7		51	78		217		50	4		138		10	59		139		3
Growth Adj:	1.13	1.13		1.13		1.13	1.13		1.13		1.13	1.13		1.13		1.13	1.13		1.13	
Initial Bse:	8		8		57	88		245		56	5		156		11	66		157		3
Added Vol:	0		16		0	77		96		19	4		0		0	0		0		10
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	8		24		57	165		341		75	9		156		11	66		157		13
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:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	9		27		64	183		378		84	9		173		13	74		174		15
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	9		27		64	183		378		84	9		173		13	74		174		15
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:	9		27		64	183		378		84	9		173		13	74		174		15
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:	0.09	0.27		0.64		0.28	0.59		0.13		0.05	0.89		0.06		0.28	0.66		0.06	
Final Sat.:	49		147		354	187		385		85	26		478		35	155		366		31
Capacity Analysis Module:																				
Vol/Sat:	0.18	0.18		0.18		0.98	0.98		0.98		0.36	0.36		0.36		0.48	0.48		0.48	
Crit Moves:	****					****						****					****			
Delay/Veh:	10.3	10.3		10.3		53.0	53.0		53.0		12.9	12.9		12.9		14.8	14.8		14.8	
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:	10.3	10.3		10.3		53.0	53.0		53.0		12.9	12.9		12.9		14.8	14.8		14.8	
LOS by Move:	B		B		B	F		F		F	B		B		B	B		B		B
ApproachDel:			10.3					53.0					12.9					14.8		
Delay Adj:			1.00					1.00					1.00					1.00		
ApprAdjDel:			10.3					53.0					12.9					14.8		
LOS by Appr:			B					F					B					B		
AllWayAvgQ:	0.2	0.2		0.2		8.1	8.1		8.1		0.5	0.5		0.5		0.8	0.8		0.8	

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

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

Intersection #4 43rd Ave / Point Lobos Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.881
Loss Time (sec): 0 Average Delay (sec/veh): 27.1
Optimal Cycle: 0 Level Of Service: D

Street Name:	43rd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	10	2	23	50	24	27	270	45	25	344	20
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	6	11	2	26	56	27	30	304	51	28	388	23
Added Vol:	0	30	0	46	25	0	0	77	0	0	12	70
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	41	2	72	81	27	30	381	51	28	400	93
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	46	3	80	90	30	34	424	56	31	444	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	46	3	80	90	30	34	424	56	31	444	103
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:	6	46	3	80	90	30	34	424	56	31	444	103
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:	0.11	0.84	0.05	0.40	0.45	0.15	0.07	0.82	0.11	0.05	0.77	0.18
Final Sat.:	52	378	21	201	227	76	42	526	70	36	504	117
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.12	0.40	0.40	0.40	0.81	0.81	0.81	0.88	0.88	0.88
Crit Moves:	****				****			****			****	
Delay/Veh:	11.0	11.0	11.0	13.5	13.5	13.5	26.4	26.4	26.4	34.1	34.1	34.1
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:	11.0	11.0	11.0	13.5	13.5	13.5	26.4	26.4	26.4	34.1	34.1	34.1
LOS by Move:	B	B	B	B	B	B	D	D	D	D	D	D
ApproachDel:	11.0			13.5			26.4			34.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.0			13.5			26.4			34.1		
LOS by Appr:	B			B			D			D		
AllWayAvgQ:	0.1	0.1	0.1	0.5	0.5	0.5	3.2	3.2	3.2	4.7	4.7	4.7

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

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

Intersection #5 42nd Ave / Point Lobos Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.825
Loss Time (sec): 0 Average Delay (sec/veh): 26.1
Optimal Cycle: 0 Level Of Service: D

Street Name:	42nd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	14	35	54	44	148	73	29	221	11	36	300	9
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	16	39	61	50	167	82	33	249	12	41	338	10
Added Vol:	0	4	0	77	19	0	0	0	0	0	0	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	43	61	127	186	82	33	249	12	41	338	22
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	18	48	68	141	206	91	36	277	14	45	376	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	48	68	141	206	91	36	277	14	45	376	25
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:	18	48	68	141	206	91	36	277	14	45	376	25
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:	0.13	0.36	0.51	0.32	0.47	0.21	0.11	0.85	0.04	0.10	0.84	0.06
Final Sat.:	56	154	216	171	251	111	56	424	21	55	455	30
Capacity Analysis Module:												
Vol/Sat:	0.31	0.31	0.31	0.82	0.82	0.82	0.65	0.65	0.65	0.83	0.83	0.83
Crit Moves:	****					****	****					****
Delay/Veh:	12.8	12.8	12.8	30.2	30.2	30.2	19.8	19.8	19.8	30.7	30.7	30.7
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:	12.8	12.8	12.8	30.2	30.2	30.2	19.8	19.8	19.8	30.7	30.7	30.7
LOS by Move:	B	B	B	D	D	D	C	C	C	D	D	D
ApproachDel:	12.8			30.2			19.8			30.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.8			30.2			19.8			30.7		
LOS by Appr:	B			D			C			D		
AllWayAvgQ:	0.3	0.3	0.3	3.1	3.1	3.1	1.4	1.4	1.4	3.2	3.2	3.2

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

2035 Cumulative Alternative 2 Conditions Weekday PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in V/C
# 1 34th Ave / Clement St	B	13.6	0.616	B	14.2	0.647	+ 0.031
# 2 42nd Ave / Clement St	B	12.3	0.515	B	13.0	0.546	+ 0.031
# 3 43rd Avenue / Clement Street	B	13.5	0.643	B	14.6	0.692	+ 0.049
# 4 43rd Ave / Point Lobos Ave	B	14.6	0.661	C	15.2	0.675	+ 0.013
# 5 42nd Ave / Point Lobos Ave	C	18.1	0.736	C	18.8	0.746	+ 0.010

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

Intersection #1 34th Ave / Clement St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.647
Loss Time (sec): 0 Average Delay (sec/veh): 14.2
Optimal Cycle: 0 Level Of Service: B

Street Name:	34th Ave						Clement St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	12	14	18	34	71	104	75	235	17	17	214	16
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	14	16	20	38	80	117	85	265	19	19	241	18
Added Vol:	0	0	0	0	0	0	0	18	0	0	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	16	20	38	80	117	85	283	19	19	244	18
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	15	18	23	43	89	130	94	314	21	21	271	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	18	23	43	89	130	94	314	21	21	271	20
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:	15	18	23	43	89	130	94	314	21	21	271	20
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:	0.27	0.32	0.41	0.16	0.34	0.50	0.22	0.73	0.05	0.07	0.87	0.06
Final Sat.:	135	158	203	97	203	297	145	486	33	43	554	41
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.44	0.44	0.44	0.65	0.65	0.65	0.49	0.49	0.49
Crit Moves:		****			****			****			****	
Delay/Veh:	9.7	9.7	9.7	12.3	12.3	12.3	16.7	16.7	16.7	13.0	13.0	13.0
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:	9.7	9.7	9.7	12.3	12.3	12.3	16.7	16.7	16.7	13.0	13.0	13.0
LOS by Move:	A	A	A	B	B	B	C	C	C	B	B	B
ApproachDel:	9.7			12.3			16.7			13.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.7			12.3			16.7			13.0		
LOS by Appr:	A			B			C			B		
AllWayAvgQ:	0.1	0.1	0.1	0.6	0.6	0.6	1.6	1.6	1.6	0.8	0.8	0.8

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

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

Intersection #2 42nd Ave / Clement St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.546
Loss Time (sec): 0 Average Delay (sec/veh): 13.0
Optimal Cycle: 0 Level Of Service: B

Street Name:	42nd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	5		45		23	86		77		36	17		246		5	26		161		51
Growth Adj:	1.13	1.13			1.13	1.13	1.13			1.13	1.13	1.13			1.13	1.13	1.13			1.13
Initial Bse:	6		51		26	97		87		41	19		277		6	29		181		57
Added Vol:	0		4		0	7		11		0	0		12		0	0		0		2
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	6		55		26	104		98		41	19		289		6	29		181		59
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:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90
PHF Volume:	6		61		29	115		109		45	21		321		6	33		202		66
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	6		61		29	115		109		45	21		321		6	33		202		66
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:	6		61		29	115		109		45	21		321		6	33		202		66
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:	0.07	0.63			0.30	0.43	0.40			0.17	0.06	0.92			0.02	0.11	0.67			0.22
Final Sat.:	35		335		159	252		237		98	39		589		11	69		427		140
Capacity Analysis Module:																				
Vol/Sat:	0.18	0.18			0.18	0.46	0.46			0.46	0.55	0.55			0.55	0.47	0.47			0.47
Crit Moves:					****					****	****									****
Delay/Veh:	10.0	10.0			10.0	12.9	12.9			12.9	14.1	14.1			14.1	12.6	12.6			12.6
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:	10.0	10.0			10.0	12.9	12.9			12.9	14.1	14.1			14.1	12.6	12.6			12.6
LOS by Move:	A		A		A	B		B		B	B		B		B	B		B		B
ApproachDel:			10.0					12.9					14.1					12.6		
Delay Adj:			1.00					1.00					1.00					1.00		
ApprAdjDel:			10.0					12.9					14.1					12.6		
LOS by Appr:			A					B					B					B		
AllWayAvgQ:	0.2	0.2			0.2	0.7	0.7			0.7	1.0	1.0			1.0	0.8	0.8			0.8

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

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

Intersection #3 43rd Avenue / Clement Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.692
Loss Time (sec): 0 Average Delay (sec/veh): 14.6
Optimal Cycle: 0 Level Of Service: B

Street Name:	43rd Ave									Clement St								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	7		7		51	78		217		50	4		138		10	59		139		3
Growth Adj:	1.13	1.13			1.13	1.13	1.13			1.13	1.13	1.13			1.13	1.13	1.13			1.13
Initial Bse:	8		8		57	88		245		56	5		156		11	66		157		3
Added Vol:	0		1		0	12		14		3	0		0		0	0		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	8		9		57	100		259		59	5		156		11	66		157		3
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:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90
PHF Volume:	9		10		64	111		287		66	5		173		13	74		174		4
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	9		10		64	111		287		66	5		173		13	74		174		4
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:	9		10		64	111		287		66	5		173		13	74		174		4
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:	0.11	0.12			0.77	0.24	0.62			0.14	0.03	0.91			0.06	0.29	0.70			0.01
Final Sat.:	62		70		454	161		415		95	15		526		38	173		409		9
Capacity Analysis Module:																				
Vol/Sat:	0.14	0.14			0.14	0.69	0.69			0.69	0.33	0.33			0.33	0.43	0.43			0.43
Crit Moves:	****							****			****							****		
Delay/Veh:	9.2		9.2		9.2	18.2	18.2			18.2	11.2	11.2			11.2	12.4	12.4			12.4
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:	9.2		9.2		9.2	18.2	18.2			18.2	11.2	11.2			11.2	12.4	12.4			12.4
LOS by Move:	A		A		A	C		C		C	B		B		B	B		B		B
ApproachDel:			9.2					18.2					11.2					12.4		
Delay Adj:			1.00					1.00					1.00					1.00		
ApprAdjDel:			9.2					18.2					11.2					12.4		
LOS by Appr:			A					C					B					B		
AllWayAvgQ:	0.1	0.1			0.1	1.9	1.9			1.9	0.4	0.4			0.4	0.6	0.6			0.6

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

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

Intersection #4 43rd Ave / Point Lobos Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.675
Loss Time (sec): 0 Average Delay (sec/veh): 15.2
Optimal Cycle: 0 Level Of Service: C

Street Name:	43rd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	10	2	23	50	24	27	270	45	25	344	20
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	6	11	2	26	56	27	30	304	51	28	388	23
Added Vol:	0	1	0	7	4	0	0	12	0	0	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	12	2	33	60	27	30	316	51	28	388	25
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	14	3	37	67	30	34	351	56	31	431	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	14	3	37	67	30	34	351	56	31	431	27
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:	6	14	3	37	67	30	34	351	56	31	431	27
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:	0.28	0.61	0.11	0.27	0.51	0.22	0.08	0.79	0.13	0.06	0.88	0.06
Final Sat.:	135	293	54	149	274	123	55	573	92	46	638	40
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.24	0.24	0.24	0.61	0.61	0.61	0.67	0.67	0.67
Crit Moves:	****			****			****			****		
Delay/Veh:	9.5	9.5	9.5	10.6	10.6	10.6	15.0	15.0	15.0	16.9	16.9	16.9
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:	9.5	9.5	9.5	10.6	10.6	10.6	15.0	15.0	15.0	16.9	16.9	16.9
LOS by Move:	A	A	A	B	B	B	B	B	B	C	C	C
ApproachDel:	9.5			10.6			15.0			16.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.5			10.6			15.0			16.9		
LOS by Appr:	A			B			B			C		
AllWayAvgQ:	0.0	0.0	0.0	0.3	0.3	0.3	1.4	1.4	1.4	1.8	1.8	1.8

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

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

Intersection #5 42nd Ave / Point Lobos Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.746
Loss Time (sec): 0 Average Delay (sec/veh): 18.8
Optimal Cycle: 0 Level Of Service: C

Street Name:	42nd Ave						Point Lobos Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	14	35	54	44	148	73	29	221	11	36	300	9
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	16	39	61	50	167	82	33	249	12	41	338	10
Added Vol:	0	0	0	12	3	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	39	61	62	170	82	33	249	12	41	338	10
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	18	44	68	68	189	91	36	277	14	45	376	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	44	68	68	189	91	36	277	14	45	376	11
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:	18	44	68	68	189	91	36	277	14	45	376	11
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:	0.14	0.34	0.52	0.20	0.54	0.26	0.11	0.85	0.04	0.10	0.87	0.03
Final Sat.:	61	153	236	107	295	143	61	464	23	60	504	15
Capacity Analysis Module:												
Vol/Sat:	0.29	0.29	0.29	0.64	0.64	0.64	0.60	0.60	0.60	0.75	0.75	0.75
Crit Moves:	****			****			****			****		
Delay/Veh:	11.6	11.6	11.6	18.1	18.1	18.1	16.8	16.8	16.8	22.9	22.9	22.9
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:	11.6	11.6	11.6	18.1	18.1	18.1	16.8	16.8	16.8	22.9	22.9	22.9
LOS by Move:	B	B	B	C	C	C	C	C	C	C	C	C
ApproachDel:	11.6			18.1			16.8			22.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.6			18.1			16.8			22.9		
LOS by Appr:	B			C			C			C		
AllWayAvgQ:	0.3	0.3	0.3	1.3	1.3	1.3	1.2	1.2	1.2	2.2	2.2	2.2

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

Appendix C

Project Travel Demand

AVO	1.08

Alternative 1 Near-Term (Phase 1)						Vehicle-Trips							Person-Trips						
Phase	Proposed Action	ITE Land Use	Net-New SF	Independent Variable		Daily	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
							In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total
1.1	Building 41 Research	Research & Development Center (760)	12,500	12.5	1,000 GSF	101	13	3	15	2	11	13	109	14	3	16	2	12	14
1.3	Building 22 Hoptel Addition	Motel (320)	8,700	8.0	rooms	45	1	2	4	2	2	4	49	1	2	4	2	2	4
1.4	Patient Welcome Center	Office Building (710)	13,450	13.5	1,000 GSF	148	18	3	21	3	17	20	160	20	3	23	4	18	22
1.5	Building 24 Mental Health Clinic Expansion	Hospital (610)	13,300	13.3	1,000 GSF	219	9	6	15	6	9	15	237	9	7	16	7	9	16
Total			**47,950**			**514**	**41**	**14**	**55**	**14**	**39**	**52**	**555**	**44**	**15**	**59**	**15**	**42**	**57**

Alternative 1 Long-Term (Phase 2)						Vehicle-Trips							Person-Trips						
Phase	Proposed Action	ITE Land Use	Net-New SF	Independent Variable		Daily	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
							In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total
2.1	Operating Room Expansion (D-Wing)	Hospital (610)	5,300	5.3	1,000 GSF	87	4	2	6	3	4	6	94	4	3	6	3	4	7
2.2	IT Support Space Expansion (Building 207)	Office Building (710)	7,000	7.0	1,000 GSF	77	10	1	11	2	9	10	83	10	1	12	2	9	11
2.3	Building 23 (Mental Health Research Expansion)	Research & Development Center (760)	15,000	15.0	1,000 GSF	122	15	3	18	2	14	16	131	16	3	20	3	15	17
2.4	Building 40 Research	Research & Development Center (760)	42,400	42.4	1,000 GSF	344	43	9	52	7	39	45	371	46	9	56	7	42	49
2.5	Ambulatory Care Center	Medical-Dental Office Building (720)	120,000	120.0	1,000 GSF	4,336	218	58	276	112	303	415	4,682	235	63	298	121	327	448
Total			**189,700**			**4,966**	**289**	**74**	**363**	**126**	**367**	**493**	**5,363**	**312**	**79**	**392**	**136**	**397**	**533**

Alternative 1 Total			**237,650**			**5,480**	**330**	**87**	**417**	**139**	**406**	**545**	**5,918**	**357**	**94**	**451**	**151**	**438**	**589**

AVO	1.08

Alternative 2 Near-Term (Phase 1)						Vehicle-Trips							Person-Trips						
Phase	Proposed Action	ITE Land Use	Net-New SF	Independent Variable		Daily	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
							In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total
1.1	Building 41 Research	Research & Development Center (760)	12,500	12.5	1,000 GSF	101	13	3	15	2	11	13	109	14	3	16	2	12	14
1.3	Building 22 Hoptel Addition	Motel (320)	8,700	8.0	rooms	45	1	2	4	2	2	4	49	1	2	4	2	2	4
1.4	Patient Welcome Center	Office Building (710)	13,450	13.5	1,000 GSF	148	18	3	21	3	17	20	160	20	3	23	4	18	22
1.5	Building 24 Mental Health Clinic Expansion	Hospital (610)	13,300	13.3	1,000 GSF	219	9	6	15	6	9	15	237	9	7	16	7	9	16
Total			**47,950**			**514**	**41**	**14**	**55**	**14**	**39**	**52**	**555**	**44**	**15**	**59**	**15**	**42**	**57**

Alternative 2 Long-Term (Phase 2)						Vehicle-Trips							Person-Trips						
Phase	Proposed Action	ITE Land Use	Net-New SF	Independent Variable		Daily	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
							In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total
Fort Miley Campus																			
2.1	Operating Room Expansion (D-Wing)	Hospital (610)	5,300	5.3	1,000 GSF	87	4	2	6	3	4	6	94	4	3	6	3	4	7
2.2	IT Support Space Expansion (Building 207)	Office Building (710)	7,000	7.0	1,000 GSF	77	10	1	11	2	9	10	83	10	1	12	2	9	11
2.3	Building 23 (Mental Health Research Expansion)	Research & Development Center (760)	15,000	15.0	1,000 GSF	122	15	3	18	2	14	16	131	16	3	20	3	15	17
2.4	Building 40 Research	Research & Development Center (760)	42,400	42.4	1,000 GSF	344	43	9	52	7	39	45	371	46	9	56	7	42	49
Subtotal			**69,700**			**630**	**71**	**16**	**87**	**14**	**64**	**78**	**680**	**77**	**17**	**94**	**15**	**70**	**84**
Mission Bay Campus																			
2.5	Ambulatory Care Center	Medical-Dental Office Building (720)	150,000	150.0	1,000 GSF	5,420	273	72	345	140	379	519	5,853	294	78	373	151	409	561
2.7	Research Building	Research & Development Center (760)	200,000	200.0	1,000 GSF	1,622	203	41	244	32	182	214	1,752	219	45	264	35	196	231
Subtotal			**350,000**			**7,042**	**475**	**114**	**589**	**172**	**561**	**733**	**7,605**	**513**	**123**	**636**	**186**	**606**	**792**
Total			**419,700**			**7,672**	**546**	**130**	**676**	**186**	**625**	**811**	**8,285**	**590**	**140**	**730**	**201**	**675**	**876**

Fort Miley Campus			**117,650**			**1,144**	**112**	**29**	**141**	**27**	**103**	**130**	**1,236**	**121**	**31**	**153**	**30**	**111**	**141**
Mission Bay Campus			**350,000**			**7,042**	**475**	**114**	**589**	**172**	**561**	**733**	**7,605**	**513**	**123**	**636**	**186**	**606**	**792**
Alternative 2 Total			**467,650**			**8,185**	**587**	**143**	**730**	**200**	**664**	**863**	**8,840**	**634**	**155**	**789**	**216**	**717**	**932**

Alternative 1
Near-Term (Phase 1)

SFVAMC LRDP EIS Transportation Impact Study

Alternative 1 Near-Term (Phase 1) – Weekday

Daily / PM Peak Hour Trips by Mode	Daily Hospital	Daily Office	Daily R&D	Daily Hotel	Daily Total	PM Peak Hour Hospital	PM Peak Hour Office	PM Peak Hour R&D	PM Peak Hour Hotel	PM Peak Hour Total
Auto	128	86	59	27	300	9	11	8	2	30
Transit	62	42	29	12	145	4	7	4	1	16
Walk	34	23	16	7	80	2	3	2	1	8
Other	13	8	6	3	30	1	1	1	0	2
Internal	0	0	0	0	0	0	0	0	0	0
Total	**237**	**160**	**109**	**49**	**555**	**16**	**22**	**14**	**4**	**57**
Vehicle Trips	73	51	35	14	173	5	8	6	1	20

PM Peak Hour Distribution	Total Peak Hour PTs	Vehicle Trips Hospital	Vehicle Trips R&D	Vehicle Trips Hotel	Vehicle Trips Office	Vehicle Trips Total	Transit Trips Hospital	Transit Trips R&D	Transit Trips Hotel	Transit Trips Office	Transit Trips Total
Superdistrict 1	5	0	0	0	1	2	1	1	0	1	2
Superdistrict 2	17	1	2	0	3	6	1	1	0	2	4
Superdistrict 3	8	1	1	0	1	3	1	1	0	1	3
Superdistrict 4	7	1	1	0	1	3	1	1	0	1	3
East Bay	4	0	0	0	1	1	0	0	0	0	1
North Bay	3	0	0	0	1	2	0	0	0	0	0
South Bay	5	1	1	0	1	3	0	0	0	1	1
Out of Region	3	0	0	0	0	1	0	0	0	0	1
Internal	0	0	0	0	0	0	0	0	0	0	0
Total	**52**	**5**	**6**	**1**	**8**	**20**	**4**	**4**	**1**	**7**	**16**

PM Peak Hour In/Out Split	Hospital Work	Hospital Non-work	Hotel Work	Hotel Non-work	Office Work	Office Non-work	R&D Work	R&D Non-work
Inbound	50%	50%	50%	50%	0%	50%	0%	50%
Outbound	50%	50%	50%	50%	100%	50%	100%	50%

PM Peak Hour Total Trips	Inbound Hospital	Inbound Office	Inbound R&D	Inbound Hotel	Inbound Total	Outbound Hospital	Outbound Office	Outbound R&D	Outbound Hotel	Outbound Total
Total vehicle trips	3	0	0	1	4	3	8	5	1	16
Total Auto Trips	4	1	1	1	7	4	10	7	1	23
Total Trips	8	2	1	2	13	8	20	13	2	43

PM Peak Hour Vehicle-Trips	Inbound Hospital	Inbound Office	Inbound R&D	Inbound Hotel	Inbound Total	Outbound Hospital	Outbound Office	Outbound R&D	Outbound Hotel	Outbound Total
Superdistrict 1	0.2	0.1	0.0	0.1	0.4	0.2	0.6	0.4	0.1	1.2
Superdistrict 2	0.7	0.1	0.1	0.2	1.1	0.7	2.4	1.6	0.2	4.9
Superdistrict 3	0.4	0.1	0.0	0.1	0.6	0.4	1.2	0.8	0.1	2.5
Superdistrict 4	0.3	0.0	0.0	0.1	0.5	0.3	1.3	0.9	0.1	2.6
East Bay	0.2	0.0	0.0	0.1	0.3	0.2	0.5	0.3	0.1	1.0
North Bay	0.2	0.0	0.0	0.1	0.3	0.2	0.7	0.5	0.1	1.4
South Bay	0.3	0.1	0.0	0.1	0.5	0.3	1.2	0.8	0.1	2.3
Out of Region	0.2	0.1	0.0	0.0	0.3	0.2	0.1	0.1	0.0	0.4
Internal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**2.5**	**0.5**	**0.3**	**0.7**	**4.1**	**2.5**	**7.9**	**5.3**	**0.7**	**16.4**

PM Peak Hour Transit Trips	Inbound Hospital	Inbound Office	Inbound R&D	Inbound Hotel	Inbound Total	Outbound Hospital	Outbound Office	Outbound R&D	Outbound Hotel	Outbound Total
Superdistrict 1	0.3	0.1	0.1	0.1	0.6	0.3	0.7	0.5	0.1	1.6
Superdistrict 2	0.6	0.1	0.1	0.2	0.9	0.6	1.7	1.1	0.2	3.5
Superdistrict 3	0.4	0.1	0.0	0.1	0.6	0.4	1.4	0.9	0.1	2.9
Superdistrict 4	0.3	0.1	0.0	0.1	0.5	0.3	1.1	0.7	0.1	2.3
East Bay	0.2	0.1	0.0	0.0	0.3	0.2	0.4	0.3	0.0	1.0
North Bay	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.4
South Bay	0.1	0.0	0.0	0.0	0.2	0.1	0.5	0.4	0.0	1.0
Out of Region	0.2	0.1	0.0	0.0	0.3	0.2	0.1	0.0	0.0	0.3
Internal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**2.1**	**0.4**	**0.3**	**0.6**	**3.4**	**2.1**	**6.1**	**4.1**	**0.6**	**12.9**

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Near-Term (Phase 1) – Weekday
Office
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		160 person-trips	Total Person-trips [1] [2]:		22 person-trips
Work Trips [3]:	36%	58 person-trips	Work Trips [3]:	83%	18 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	2	2	1	0
		Transit	40.7%		2		1	
		Walk	16.7%		1		0	
		Other	3.3%		0		0	
		TOTAL	***100.0%***		***5***	***2***	***2***	***0***
Superdistrict 2	35.2%	Auto	41.0%	1.14	8	7	3	2
		Transit	24.4%		5		2	
		Walk	30.6%		6		2	
		Other	4.0%		1		0	
		TOTAL	***100.0%***		***20***	***7***	***6***	***2***
Superdistrict 3	15.8%	Auto	49.9%	1.25	5	4	1	1
		Transit	48.0%		4		1	
		Walk	0.0%		0		0	
		Other	2.1%		0		0	
		TOTAL	***100.0%***		***9***	***4***	***3***	***1***
Superdistrict 4	15.1%	Auto	55.9%	1.22	5	4	2	1
		Transit	38.9%		3		1	
		Walk	3.0%		0		0	
		Other	2.2%		0		0	
		TOTAL	***100.0%***		***9***	***4***	***3***	***1***
East Bay	7.1%	Auto	67.4%	2.02	3	1	1	0
		Transit	31.0%		1		0	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***4***	***1***	***1***	***0***
North Bay	7.0%	Auto	81.5%	1.53	3	2	1	1
		Transit	16.1%		1		0	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***4***	***2***	***1***	***1***
South Bay	10.6%	Auto	69.9%	1.21	4	4	1	1
		Transit	27.5%		2		1	
		Walk	0.0%		0		0	
		Other	2.6%		0		0	
		TOTAL	***100.0%***		***6***	***4***	***2***	***1***
Out of Region	0.8%	Auto	95.7%	3.16	0	0	0	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	30	24	9	7
		Transit	31.7%		18		6	
		Walk	12.6%		7		2	
		Other	2.9%		2		1	
		TOTAL	***100.0%***		***58***	***24***	***18***	***7***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Near-Term (Phase 1) – Weekday
Office
Non-Work Trips

DAILY				PM PEAK HOUR			
Total Person-trips [1] [2]:		160	person-trips	Total Person-trips [1] [2]:		22	person-trips
Non-Work Trips [3]:	64%	102	person-trips	Non-Work Trips [3]:	17%	4	person-trips
Internal Trips:	0%	0	person-trips	Internal Trips:	0%	0	person-trips
External Trips:		102	person-trips	External Trips:		4	person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	6	3	0	0
		Transit	35.5%		5		0	
		Walk	16.4%		2		0	
		Other	6.4%		1		0	
		TOTAL	***100.0%***		***13***	***3***	***0***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	14	7	1	0
		Transit	23.7%		7		0	
		Walk	19.7%		5		0	
		Other	5.7%		2		0	
		TOTAL	***100.0%***		***28***	***7***	***1***	***0***
Superdistrict 3	14.0%	Auto	57.1%	2.05	8	4	0	0
		Transit	22.3%		3		0	
		Walk	9.9%		1		0	
		Other	10.7%		2		0	
		TOTAL	***100.0%***		***14***	***4***	***1***	***0***
Superdistrict 4	9.0%	Auto	63.4%	2.16	6	3	0	0
		Transit	32.4%		3		0	
		Walk	4.2%		0		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***9***	***3***	***0***	***0***
East Bay	11.0%	Auto	52.2%	2.20	6	3	0	0
		Transit	25.0%		3		0	
		Walk	14.1%		2		0	
		Other	8.7%		1		0	
		TOTAL	***100.0%***		***11***	***3***	***0***	***0***
North Bay	4.0%	Auto	73.6%	1.89	3	2	0	0
		Transit	8.8%		0		0	
		Walk	14.7%		1		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***4***	***2***	***0***	***0***
South Bay	8.0%	Auto	80.5%	2.30	7	3	0	0
		Transit	8.3%		1		0	
		Walk	5.6%		0		0	
		Other	5.6%		0		0	
		TOTAL	***100.0%***		***8***	***3***	***0***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	7	3	0	0
		Transit	19.7%		3		0	
		Walk	23.8%		3		0	
		Other	8.2%		1		0	
		TOTAL	***100.0%***		***14***	***3***	***1***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	56	27	2	1
		Transit	23.6%		24		1	
		Walk	15.1%		15		1	
		Other	6.5%		7		0	
		TOTAL	***100.0%***		***102***	***27***	***4***	***1***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Near-Term (Phase 1) – Weekday
Hospital
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		237 person-trips	Total Person-trips [1] [2]:		16 person-trips
Work Trips [3]:	30%	71 person-trips	Work Trips [3]:	30%	5 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	2	2	0	0
		Transit	40.7%		2		0	
		Walk	16.7%		1		0	
		Other	3.3%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***0***	***0***
Superdistrict 2	35.2%	Auto	41.0%	1.14	10	9	1	1
		Transit	24.4%		6		0	
		Walk	30.6%		8		1	
		Other	4.0%		1		0	
		TOTAL	***100.0%***		***25***	***9***	***2***	***1***
Superdistrict 3	15.8%	Auto	49.9%	1.25	6	4	0	0
		Transit	48.0%		5		0	
		Walk	0.0%		0		0	
		Other	2.1%		0		0	
		TOTAL	***100.0%***		***11***	***4***	***1***	***0***
Superdistrict 4	15.1%	Auto	55.9%	1.22	6	5	0	0
		Transit	38.9%		4		0	
		Walk	3.0%		0		0	
		Other	2.2%		0		0	
		TOTAL	***100.0%***		***11***	***5***	***1***	***0***
East Bay	7.1%	Auto	67.4%	2.02	3	2	0	0
		Transit	31.0%		2		0	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***5***	***2***	***0***	***0***
North Bay	7.0%	Auto	81.5%	1.53	4	3	0	0
		Transit	16.1%		1		0	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***5***	***3***	***0***	***0***
South Bay	10.6%	Auto	69.9%	1.21	5	4	0	0
		Transit	27.5%		2		0	
		Walk	0.0%		0		0	
		Other	2.6%		0		0	
		TOTAL	***100.0%***		***8***	***4***	***1***	***0***
Out of Region	0.8%	Auto	95.7%	3.16	1	0	0	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	37	29	3	2
		Transit	31.7%		23		2	
		Walk	12.6%		9		1	
		Other	2.9%		2		0	
		TOTAL	***100.0%***		***71***	***29***	***5***	***2***

Notes:
[1] ITE Trip Generation, Code 610
[2] 2000 US Census Journey-to-work data
[3] Survey Data
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Near-Term (Phase 1) – Weekday
Hospital
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		237 person-trips	Total Person-trips [1] [2]:		16 person-trips
Work Trips [3]:	70%	166 person-trips	Work Trips [3]:	70%	11 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	9	5	1	0
		Transit	35.5%		8		1	
		Walk	16.4%		4		0	
		Other	6.4%		1		0	
		TOTAL	***100.0%***		***22***	***5***	***1***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	23	12	2	1
		Transit	23.7%		11		1	
		Walk	19.7%		9		1	
		Other	5.7%		3		0	
		TOTAL	***100.0%***		***45***	***12***	***3***	***1***
Superdistrict 3	14.0%	Auto	57.1%	2.05	13	6	1	0
		Transit	22.3%		5		0	
		Walk	9.9%		2		0	
		Other	10.7%		2		0	
		TOTAL	***100.0%***		***23***	***6***	***2***	***0***
Superdistrict 4	9.0%	Auto	63.4%	2.16	9	4	1	0
		Transit	32.4%		5		0	
		Walk	4.2%		1		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***15***	***4***	***1***	***0***
East Bay	11.0%	Auto	52.2%	2.20	10	4	1	0
		Transit	25.0%		5		0	
		Walk	14.1%		3		0	
		Other	8.7%		2		0	
		TOTAL	***100.0%***		***18***	***4***	***1***	***0***
North Bay	4.0%	Auto	73.6%	1.89	5	3	0	0
		Transit	8.8%		1		0	
		Walk	14.7%		1		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***7***	***3***	***0***	***0***
South Bay	8.0%	Auto	80.5%	2.30	11	5	1	0
		Transit	8.3%		1		0	
		Walk	5.6%		1		0	
		Other	5.6%		1		0	
		TOTAL	***100.0%***		***13***	***5***	***1***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	11	5	1	0
		Transit	19.7%		5		0	
		Walk	23.8%		6		0	
		Other	8.2%		2		0	
		TOTAL	***100.0%***		***23***	***5***	***2***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	91	44	6	3
		Transit	23.6%		39		3	
		Walk	15.1%		25		2	
		Other	6.5%		11		1	
		TOTAL	***100.0%***		***166***	***44***	***11***	***3***

Notes:
[1] ITE Trip Generation, Code 610
[2] 2000 US Census Journey-to-work data
[3] Survey Data
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Near-Term (Phase 1) – Weekday
R&D
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		109 person-trips	Total Person-trips [1] [2]:		14 person-trips
Work Trips [3]:	36%	39 person-trips	Work Trips [3]:	83%	12 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	1	1	0	0
		Transit	40.7%		1		0	
		Walk	16.7%		1		0	
		Other	3.3%		0		0	
		TOTAL	***100.0%***		***3***	***1***	***1***	***0***
Superdistrict 2	35.2%	Auto	41.0%	1.14	6	5	2	2
		Transit	24.4%		3		1	
		Walk	30.6%		4		1	
		Other	4.0%		1		0	
		TOTAL	***100.0%***		***14***	***5***	***4***	***2***
Superdistrict 3	15.8%	Auto	49.9%	1.25	3	2	1	1
		Transit	48.0%		3		1	
		Walk	0.0%		0		0	
		Other	2.1%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***2***	***1***
Superdistrict 4	15.1%	Auto	55.9%	1.22	3	3	1	1
		Transit	38.9%		2		1	
		Walk	3.0%		0		0	
		Other	2.2%		0		0	
		TOTAL	***100.0%***		***6***	***3***	***2***	***1***
East Bay	7.1%	Auto	67.4%	2.02	2	1	1	0
		Transit	31.0%		1		0	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***3***	***1***	***1***	***0***
North Bay	7.0%	Auto	81.5%	1.53	2	1	1	0
		Transit	16.1%		0		0	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***3***	***1***	***1***	***0***
South Bay	10.6%	Auto	69.9%	1.21	3	2	1	1
		Transit	27.5%		1		0	
		Walk	0.0%		0		0	
		Other	2.6%		0		0	
		TOTAL	***100.0%***		***4***	***2***	***1***	***1***
Out of Region	0.8%	Auto	95.7%	3.16	0	0	0	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	21	16	6	5
		Transit	31.7%		13		4	
		Walk	12.6%		5		2	
		Other	2.9%		1		0	
		TOTAL	***100.0%***		***39***	***16***	***12***	***5***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Near-Term (Phase 1) – Weekday
R&D
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		109 person-trips	Total Person-trips [1] [2]:		14 person-trips
Non-Work Trips [3]:	64%	70 person-trips	Non-Work Trips [3]:	17%	2 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	4	2	0	0
		Transit	35.5%		3		0	
		Walk	16.4%		1		0	
		Other	6.4%		1		0	
		TOTAL	***100.0%***		***9***	***2***	***0***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	10	5	0	0
		Transit	23.7%		4		0	
		Walk	19.7%		4		0	
		Other	5.7%		1		0	
		TOTAL	***100.0%***		***19***	***5***	***1***	***0***
Superdistrict 3	14.0%	Auto	57.1%	2.05	6	3	0	0
		Transit	22.3%		2		0	
		Walk	9.9%		1		0	
		Other	10.7%		1		0	
		TOTAL	***100.0%***		***10***	***3***	***0***	***0***
Superdistrict 4	9.0%	Auto	63.4%	2.16	4	2	0	0
		Transit	32.4%		2		0	
		Walk	4.2%		0		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***0***	***0***
East Bay	11.0%	Auto	52.2%	2.20	4	2	0	0
		Transit	25.0%		2		0	
		Walk	14.1%		1		0	
		Other	8.7%		1		0	
		TOTAL	***100.0%***		***8***	***2***	***0***	***0***
North Bay	4.0%	Auto	73.6%	1.89	2	1	0	0
		Transit	8.8%		0		0	
		Walk	14.7%		0		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***3***	***1***	***0***	***0***
South Bay	8.0%	Auto	80.5%	2.30	5	2	0	0
		Transit	8.3%		0		0	
		Walk	5.6%		0		0	
		Other	5.6%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***0***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	5	2	0	0
		Transit	19.7%		2		0	
		Walk	23.8%		2		0	
		Other	8.2%		1		0	
		TOTAL	***100.0%***		***10***	***2***	***0***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	38	19	1	1
		Transit	23.6%		17		1	
		Walk	15.1%		11		0	
		Other	6.5%		5		0	
		TOTAL	***100.0%***		***70***	***19***	***2***	***1***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Near-Term (Phase 1) – Weekday
Hotel
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		49 person-trips	Total Person-trips [1] [2]:		4 person-trips
Work Trips [3]:	12%	6 person-trips	Work Trips [3]:	60%	2 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	0	0	0	0
		Transit	40.7%		0		0	
		Walk	16.7%		0		0	
		Other	3.3%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
Superdistrict 2	35.2%	Auto	41.0%	1.14	1	1	0	0
		Transit	24.4%		1		0	
		Walk	30.6%		1		0	
		Other	4.0%		0		0	
		TOTAL	***100.0%***		***2***	***1***	***1***	***0***
Superdistrict 3	15.8%	Auto	49.9%	1.25	0	0	0	0
		Transit	48.0%		0		0	
		Walk	0.0%		0		0	
		Other	2.1%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
Superdistrict 4	15.1%	Auto	55.9%	1.22	0	0	0	0
		Transit	38.9%		0		0	
		Walk	3.0%		0		0	
		Other	2.2%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
East Bay	7.1%	Auto	67.4%	2.02	0	0	0	0
		Transit	31.0%		0		0	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
North Bay	7.0%	Auto	81.5%	1.53	0	0	0	0
		Transit	16.1%		0		0	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
South Bay	10.6%	Auto	69.9%	1.21	0	0	0	0
		Transit	27.5%		0		0	
		Walk	0.0%		0		0	
		Other	2.6%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
Out of Region	0.8%	Auto	95.7%	3.16	0	0	0	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	3	2	1	1
		Transit	31.7%		2		1	
		Walk	12.6%		1		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***2***	***1***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Near-Term (Phase 1) – Weekday
Hotel
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		49 person-trips	Total Person-trips [1] [2]:		4 person-trips
Non-Work Trips [3]:	88%	43 person-trips	Non-Work Trips [3]:	40%	2 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	2	1	0	0
		Transit	35.5%		2		0	
		Walk	16.4%		1		0	
		Other	6.4%		0		0	
		TOTAL	***100.0%***		***6***	***1***	***0***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	6	3	0	0
		Transit	23.7%		3		0	
		Walk	19.7%		2		0	
		Other	5.7%		1		0	
		TOTAL	***100.0%***		***12***	***3***	***0***	***0***
Superdistrict 3	14.0%	Auto	57.1%	2.05	3	2	0	0
		Transit	22.3%		1		0	
		Walk	9.9%		1		0	
		Other	10.7%		1		0	
		TOTAL	***100.0%***		***6***	***2***	***0***	***0***
Superdistrict 4	9.0%	Auto	63.4%	2.16	2	1	0	0
		Transit	32.4%		1		0	
		Walk	4.2%		0		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***4***	***1***	***0***	***0***
East Bay	11.0%	Auto	52.2%	2.20	2	1	0	0
		Transit	25.0%		1		0	
		Walk	14.1%		1		0	
		Other	8.7%		0		0	
		TOTAL	***100.0%***		***5***	***1***	***0***	***0***
North Bay	4.0%	Auto	73.6%	1.89	1	1	0	0
		Transit	8.8%		0		0	
		Walk	14.7%		0		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***2***	***1***	***0***	***0***
South Bay	8.0%	Auto	80.5%	2.30	3	1	0	0
		Transit	8.3%		0		0	
		Walk	5.6%		0		0	
		Other	5.6%		0		0	
		TOTAL	***100.0%***		***3***	***1***	***0***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	3	1	0	0
		Transit	19.7%		1		0	
		Walk	23.8%		1		0	
		Other	8.2%		0		0	
		TOTAL	***100.0%***		***6***	***1***	***0***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	23	11	1	0
		Transit	23.6%		10		0	
		Walk	15.1%		6		0	
		Other	6.5%		3		0	
		TOTAL	***100.0%***		***43***	***11***	***2***	***0***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

Alternative 1
Long-Term (Phase 2)

SFVAMC LRDP EIS Transportation Impact Study

Alternative 1 Long-Term (Phase 2) – Weekday

Daily / PM Peak Hour Trips by Mode	Daily Hospital	Daily Office	Daily R&D	Daily Hotel	Daily Total	PM Peak Hour Hospital	PM Peak Hour Office	PM Peak Hour R&D	PM Peak Hour Hotel	PM Peak Hour Total
Auto	2,715	131	331	27	3,203	255	17	43	2	318
Transit	1,305	64	162	12	1,543	123	10	25	1	158
Walk	721	35	87	7	850	68	4	11	1	83
Other	273	13	32	3	321	26	1	3	0	30
Internal	0	0	0	0	0	0	0	0	0	0
Total	**5,014**	**243**	**612**	**49**	**5,918**	**471**	**33**	**81**	**4**	**589**
Vehicle Trips	1,552	77	195	14	1,838	146	13	31	1	191

PM Peak Hour Distribution	Total Peak Hour PTs	Vehicle Trips Hospital	Vehicle Trips R&D	Vehicle Trips Hotel	Vehicle Trips Office	Vehicle Trips Total	Transit Trips Hospital	Transit Trips R&D	Transit Trips Hotel	Transit Trips Office	Transit Trips Total
Superdistrict 1	65	13	2	0	1	16	20	3	0	1	24
Superdistrict 2	177	41	9	0	4	55	33	7	0	3	43
Superdistrict 3	86	22	5	0	2	29	21	6	0	2	29
Superdistrict 4	67	18	5	0	2	26	18	4	0	2	24
East Bay	55	12	2	0	1	15	12	2	0	1	15
North Bay	30	10	3	0	1	14	3	1	0	0	4
South Bay	53	18	4	0	2	24	6	2	0	1	9
Out of Region	51	11	1	0	0	12	9	0	0	0	10
Internal	0	0	0	0	0	0	0	0	0	0	0
Total	**585**	**146**	**31**	**1**	**13**	**191**	**123**	**25**	**1**	**10**	**158**

PM Peak Hour In/Out Split	Hospital Work	Hospital Non-work	Hotel Work	Hotel Non-work	Office Work	Office Non-work	R&D Work	R&D Non-work
Inbound	50%	50%	50%	50%	0%	50%	0%	50%
Outbound	50%	50%	50%	50%	100%	50%	100%	50%

PM Peak Hour Total Trips	Inbound Hospital	Inbound Office	Inbound R&D	Inbound Hotel	Inbound Total	Outbound Hospital	Outbound Office	Outbound R&D	Outbound Hotel	Outbound Total
Total vehicle trips	73	1	2	1	76	73	12	29	1	115
Total Auto Trips	128	2	4	1	134	128	16	39	1	184
Total Trips	236	3	7	2	247	236	30	74	2	342

PM Peak Hour Vehicle-Trips	Inbound Hospital	Inbound Office	Inbound R&D	Inbound Hotel	Inbound Total	Outbound Hospital	Outbound Office	Outbound R&D	Outbound Hotel	Outbound Total
Superdistrict 1	6.6	0.1	0.2	0.1	6.9	6.6	0.8	2.1	0.1	9.5
Superdistrict 2	20.5	0.2	0.5	0.2	21.4	20.5	3.7	9.0	0.2	33.4
Superdistrict 3	10.9	0.1	0.3	0.1	11.4	10.9	1.8	4.5	0.1	17.3
Superdistrict 4	9.2	0.1	0.2	0.1	9.6	9.2	2.0	4.8	0.1	16.1
East Bay	6.0	0.1	0.2	0.1	6.3	6.0	0.7	1.8	0.1	8.5
North Bay	5.2	0.0	0.1	0.1	5.4	5.2	1.1	2.6	0.1	8.9
South Bay	8.9	0.1	0.2	0.1	9.3	8.9	1.8	4.3	0.1	15.1
Out of Region	5.6	0.1	0.2	0.0	5.9	5.6	0.2	0.4	0.0	6.1
Internal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**72.9**	**0.7**	**1.8**	**0.7**	**76.2**	**72.9**	**12.0**	**29.4**	**0.7**	**115.0**

PM Peak Hour Transit Trips	Inbound Hospital	Inbound Office	Inbound R&D	Inbound Hotel	Inbound Total	Outbound Hospital	Outbound Office	Outbound R&D	Outbound Hotel	Outbound Total
Superdistrict 1	10.0	0.1	0.3	0.1	10.6	10.0	1.1	2.6	0.1	13.8
Superdistrict 2	16.6	0.2	0.4	0.2	17.4	16.6	2.5	6.2	0.2	25.5
Superdistrict 3	10.5	0.1	0.2	0.1	10.9	10.5	2.2	5.3	0.1	18.1
Superdistrict 4	9.0	0.1	0.2	0.1	9.3	9.0	1.7	4.1	0.1	14.9
East Bay	6.1	0.1	0.2	0.0	6.4	6.1	0.7	1.7	0.0	8.5
North Bay	1.4	0.0	0.0	0.0	1.4	1.4	0.3	0.8	0.0	2.5
South Bay	3.2	0.0	0.0	0.0	3.3	3.2	0.8	2.0	0.0	6.0
Out of Region	4.6	0.1	0.2	0.0	4.8	4.6	0.1	0.2	0.0	4.9
Internal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**61.3**	**0.7**	**1.6**	**0.6**	**64.2**	**61.3**	**9.3**	**22.9**	**0.6**	**94.1**

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Long-Term (Phase 2) – Weekday
Office
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		243 person-trips	Total Person-trips [1] [2]:		33 person-trips
Work Trips [3]:	36%	88 person-trips	Work Trips [3]:	83%	27 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	3	2	1	1
		Transit	40.7%		3		1	
		Walk	16.7%		1		0	
		Other	3.3%		0		0	
		TOTAL	***100.0%***		***7***	***2***	***2***	***1***
Superdistrict 2	35.2%	Auto	41.0%	1.14	13	11	4	3
		Transit	24.4%		8		2	
		Walk	30.6%		9		3	
		Other	4.0%		1		0	
		TOTAL	***100.0%***		***31***	***11***	***10***	***3***
Superdistrict 3	15.8%	Auto	49.9%	1.25	7	6	2	2
		Transit	48.0%		7		2	
		Walk	0.0%		0		0	
		Other	2.1%		0		0	
		TOTAL	***100.0%***		***14***	***6***	***4***	***2***
Superdistrict 4	15.1%	Auto	55.9%	1.22	7	6	2	2
		Transit	38.9%		5		2	
		Walk	3.0%		0		0	
		Other	2.2%		0		0	
		TOTAL	***100.0%***		***13***	***6***	***4***	***2***
East Bay	7.1%	Auto	67.4%	2.02	4	2	1	1
		Transit	31.0%		2		1	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***2***	***1***
North Bay	7.0%	Auto	81.5%	1.53	5	3	2	1
		Transit	16.1%		1		0	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***6***	***3***	***2***	***1***
South Bay	10.6%	Auto	69.9%	1.21	6	5	2	2
		Transit	27.5%		3		1	
		Walk	0.0%		0		0	
		Other	2.6%		0		0	
		TOTAL	***100.0%***		***9***	***5***	***3***	***2***
Out of Region	0.8%	Auto	95.7%	3.16	1	0	0	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	46	36	14	11
		Transit	31.7%		28		9	
		Walk	12.6%		11		3	
		Other	2.9%		3		1	
		TOTAL	***100.0%***		***88***	***36***	***27***	***11***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Long-Term (Phase 2) – Weekday
Office
Non-Work Trips

DAILY				PM PEAK HOUR			
Total Person-trips [1] [2]:		243	person-trips	Total Person-trips [1] [2]:		33	person-trips
Non-Work Trips [3]:	64%	156	person-trips	Non-Work Trips [3]:	17%	6	person-trips
Internal Trips:	0%	0	person-trips	Internal Trips:	0%	0	person-trips
External Trips:		156	person-trips	External Trips:		6	person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	8	4	0	0
		Transit	35.5%		7		0	
		Walk	16.4%		3		0	
		Other	6.4%		1		0	
		TOTAL	***100.0%***		***20***	***4***	***1***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	21	11	1	0
		Transit	23.7%		10		0	
		Walk	19.7%		8		0	
		Other	5.7%		2		0	
		TOTAL	***100.0%***		***42***	***11***	***2***	***0***
Superdistrict 3	14.0%	Auto	57.1%	2.05	12	6	0	0
		Transit	22.3%		5		0	
		Walk	9.9%		2		0	
		Other	10.7%		2		0	
		TOTAL	***100.0%***		***22***	***6***	***1***	***0***
Superdistrict 4	9.0%	Auto	63.4%	2.16	9	4	0	0
		Transit	32.4%		5		0	
		Walk	4.2%		1		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***14***	***4***	***1***	***0***
East Bay	11.0%	Auto	52.2%	2.20	9	4	0	0
		Transit	25.0%		4		0	
		Walk	14.1%		2		0	
		Other	8.7%		1		0	
		TOTAL	***100.0%***		***17***	***4***	***1***	***0***
North Bay	4.0%	Auto	73.6%	1.89	5	2	0	0
		Transit	8.8%		1		0	
		Walk	14.7%		1		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***0***	***0***
South Bay	8.0%	Auto	80.5%	2.30	10	4	0	0
		Transit	8.3%		1		0	
		Walk	5.6%		1		0	
		Other	5.6%		1		0	
		TOTAL	***100.0%***		***12***	***4***	***0***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	11	5	0	0
		Transit	19.7%		4		0	
		Walk	23.8%		5		0	
		Other	8.2%		2		0	
		TOTAL	***100.0%***		***22***	***5***	***1***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	85	41	3	1
		Transit	23.6%		37		1	
		Walk	15.1%		24		1	
		Other	6.5%		10		0	
		TOTAL	***100.0%***		***156***	***41***	***6***	***1***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Long-Term (Phase 2) – Weekday
Hospital
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		5,014 person-trips	Total Person-trips [1] [2]:		471 person-trips
Work Trips [3]:	30%	1,504 person-trips	Work Trips [3]:	30%	141 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	50	42	5	4
		Transit	40.7%		51		5	
		Walk	16.7%		21		2	
		Other	3.3%		4		0	
		TOTAL	***100.0%***		***126***	***42***	***12***	***4***
Superdistrict 2	35.2%	Auto	41.0%	1.14	217	190	20	18
		Transit	24.4%		129		12	
		Walk	30.6%		162		15	
		Other	4.0%		21		2	
		TOTAL	***100.0%***		***529***	***190***	***50***	***18***
Superdistrict 3	15.8%	Auto	49.9%	1.25	119	95	11	9
		Transit	48.0%		114		11	
		Walk	0.0%		0		0	
		Other	2.1%		5		0	
		TOTAL	***100.0%***		***238***	***95***	***22***	***9***
Superdistrict 4	15.1%	Auto	55.9%	1.22	127	104	12	10
		Transit	38.9%		88		8	
		Walk	3.0%		7		1	
		Other	2.2%		5		0	
		TOTAL	***100.0%***		***227***	***104***	***21***	***10***
East Bay	7.1%	Auto	67.4%	2.02	72	36	7	3
		Transit	31.0%		33		3	
		Walk	0.0%		0		0	
		Other	1.6%		2		0	
		TOTAL	***100.0%***		***107***	***36***	***10***	***3***
North Bay	7.0%	Auto	81.5%	1.53	86	56	8	5
		Transit	16.1%		17		2	
		Walk	0.0%		0		0	
		Other	2.4%		3		0	
		TOTAL	***100.0%***		***105***	***56***	***10***	***5***
South Bay	10.6%	Auto	69.9%	1.21	111	92	10	9
		Transit	27.5%		44		4	
		Walk	0.0%		0		0	
		Other	2.6%		4		0	
		TOTAL	***100.0%***		***159***	***92***	***15***	***9***
Out of Region	0.8%	Auto	95.7%	3.16	12	4	1	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***12***	***4***	***1***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	793	619	75	58
		Transit	31.7%		477		45	
		Walk	12.6%		190		18	
		Other	2.9%		44		4	
		TOTAL	***100.0%***		***1,504***	***619***	***141***	***58***

Notes:
[1] ITE Trip Generation, Code 610
[2] 2000 US Census Journey-to-work data
[3] Survey Data
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Long-Term (Phase 2) – Weekday
Hospital
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		5,014 person-trips	Total Person-trips [1] [2]:		471 person-trips
Work Trips [3]:	70%	3,510 person-trips	Work Trips [3]:	70%	330 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	190	99	18	9
		Transit	35.5%		162		15	
		Walk	16.4%		75		7	
		Other	6.4%		29		3	
		TOTAL	***100.0%***		***456***	***99***	***43***	***9***
Superdistrict 2	27.0%	Auto	50.9%	1.96	482	246	45	23
		Transit	23.7%		225		21	
		Walk	19.7%		187		18	
		Other	5.7%		54		5	
		TOTAL	***100.0%***		***948***	***246***	***89***	***23***
Superdistrict 3	14.0%	Auto	57.1%	2.05	281	137	26	13
		Transit	22.3%		110		10	
		Walk	9.9%		49		5	
		Other	10.7%		53		5	
		TOTAL	***100.0%***		***491***	***137***	***46***	***13***
Superdistrict 4	9.0%	Auto	63.4%	2.16	200	93	19	9
		Transit	32.4%		102		10	
		Walk	4.2%		13		1	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***316***	***93***	***30***	***9***
East Bay	11.0%	Auto	52.2%	2.20	202	92	19	9
		Transit	25.0%		97		9	
		Walk	14.1%		54		5	
		Other	8.7%		34		3	
		TOTAL	***100.0%***		***386***	***92***	***36***	***9***
North Bay	4.0%	Auto	73.6%	1.89	103	55	10	5
		Transit	8.8%		12		1	
		Walk	14.7%		21		2	
		Other	2.9%		4		0	
		TOTAL	***100.0%***		***140***	***55***	***13***	***5***
South Bay	8.0%	Auto	80.5%	2.30	226	98	21	9
		Transit	8.3%		23		2	
		Walk	5.6%		16		1	
		Other	5.6%		16		1	
		TOTAL	***100.0%***		***281***	***98***	***26***	***9***
Out of Region	14.0%	Auto	48.3%	2.07	237	115	22	11
		Transit	19.7%		97		9	
		Walk	23.8%		117		11	
		Other	8.2%		40		4	
		TOTAL	***100.0%***		***491***	***115***	***46***	***11***
TOTAL	100.0%	Auto	54.8%	2.06	1,922	933	181	88
		Transit	23.6%		827		78	
		Walk	15.1%		531		50	
		Other	6.5%		229		22	
		TOTAL	***100.0%***		***3,510***	***933***	***330***	***88***

Notes:
[1] ITE Trip Generation, Code 610
[2] 2000 US Census Journey-to-work data
[3] Survey Data
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Long-Term (Phase 2) – Weekday
R&D
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		612 person-trips	Total Person-trips [1] [2]:		81 person-trips
Work Trips [3]:	36%	220 person-trips	Work Trips [3]:	83%	67 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	7	6	2	2
		Transit	40.7%		8		2	
		Walk	16.7%		3		1	
		Other	3.3%		1		0	
		TOTAL	***100.0%***		***19***	***6***	***6***	***2***
Superdistrict 2	35.2%	Auto	41.0%	1.14	32	28	10	8
		Transit	24.4%		19		6	
		Walk	30.6%		24		7	
		Other	4.0%		3		1	
		TOTAL	***100.0%***		***78***	***28***	***24***	***8***
Superdistrict 3	15.8%	Auto	49.9%	1.25	17	14	5	4
		Transit	48.0%		17		5	
		Walk	0.0%		0		0	
		Other	2.1%		1		0	
		TOTAL	***100.0%***		***35***	***14***	***11***	***4***
Superdistrict 4	15.1%	Auto	55.9%	1.22	19	15	6	5
		Transit	38.9%		13		4	
		Walk	3.0%		1		0	
		Other	2.2%		1		0	
		TOTAL	***100.0%***		***33***	***15***	***10***	***5***
East Bay	7.1%	Auto	67.4%	2.02	11	5	3	2
		Transit	31.0%		5		1	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***16***	***5***	***5***	***2***
North Bay	7.0%	Auto	81.5%	1.53	13	8	4	2
		Transit	16.1%		2		1	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***15***	***8***	***5***	***2***
South Bay	10.6%	Auto	69.9%	1.21	16	13	5	4
		Transit	27.5%		6		2	
		Walk	0.0%		0		0	
		Other	2.6%		1		0	
		TOTAL	***100.0%***		***23***	***13***	***7***	***4***
Out of Region	0.8%	Auto	95.7%	3.16	2	1	1	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***2***	***1***	***1***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	116	91	35	28
		Transit	31.7%		70		21	
		Walk	12.6%		28		8	
		Other	2.9%		6		2	
		TOTAL	***100.0%***		***220***	***91***	***67***	***28***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Long-Term (Phase 2) – Weekday
R&D
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		612 person-trips	Total Person-trips [1] [2]:		81 person-trips
Non-Work Trips [3]:	64%	392 person-trips	Non-Work Trips [3]:	17%	14 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	21	11	1	0
		Transit	35.5%		18		1	
		Walk	16.4%		8		0	
		Other	6.4%		3		0	
		TOTAL	***100.0%***		***51***	***11***	***2***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	54	27	2	1
		Transit	23.7%		25		1	
		Walk	19.7%		21		1	
		Other	5.7%		6		0	
		TOTAL	***100.0%***		***106***	***27***	***4***	***1***
Superdistrict 3	14.0%	Auto	57.1%	2.05	31	15	1	1
		Transit	22.3%		12		0	
		Walk	9.9%		5		0	
		Other	10.7%		6		0	
		TOTAL	***100.0%***		***55***	***15***	***2***	***1***
Superdistrict 4	9.0%	Auto	63.4%	2.16	22	10	1	0
		Transit	32.4%		11		0	
		Walk	4.2%		1		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***35***	***10***	***1***	***0***
East Bay	11.0%	Auto	52.2%	2.20	22	10	1	0
		Transit	25.0%		11		0	
		Walk	14.1%		6		0	
		Other	8.7%		4		0	
		TOTAL	***100.0%***		***43***	***10***	***2***	***0***
North Bay	4.0%	Auto	73.6%	1.89	12	6	0	0
		Transit	8.8%		1		0	
		Walk	14.7%		2		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***16***	***6***	***1***	***0***
South Bay	8.0%	Auto	80.5%	2.30	25	11	1	0
		Transit	8.3%		3		0	
		Walk	5.6%		2		0	
		Other	5.6%		2		0	
		TOTAL	***100.0%***		***31***	***11***	***1***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	26	13	1	0
		Transit	19.7%		11		0	
		Walk	23.8%		13		0	
		Other	8.2%		4		0	
		TOTAL	***100.0%***		***55***	***13***	***2***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	215	104	8	4
		Transit	23.6%		92		3	
		Walk	15.1%		59		2	
		Other	6.5%		26		1	
		TOTAL	***100.0%***		***392***	***104***	***14***	***4***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Long-Term (Phase 2) – Weekday
Hotel
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		49 person-trips	Total Person-trips [1] [2]:		4 person-trips
Work Trips [3]:	12%	6 person-trips	Work Trips [3]:	60%	2 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	0	0	0	0
		Transit	40.7%		0		0	
		Walk	16.7%		0		0	
		Other	3.3%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
Superdistrict 2	35.2%	Auto	41.0%	1.14	1	1	0	0
		Transit	24.4%		1		0	
		Walk	30.6%		1		0	
		Other	4.0%		0		0	
		TOTAL	***100.0%***		***2***	***1***	***1***	***0***
Superdistrict 3	15.8%	Auto	49.9%	1.25	0	0	0	0
		Transit	48.0%		0		0	
		Walk	0.0%		0		0	
		Other	2.1%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
Superdistrict 4	15.1%	Auto	55.9%	1.22	0	0	0	0
		Transit	38.9%		0		0	
		Walk	3.0%		0		0	
		Other	2.2%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
East Bay	7.1%	Auto	67.4%	2.02	0	0	0	0
		Transit	31.0%		0		0	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
North Bay	7.0%	Auto	81.5%	1.53	0	0	0	0
		Transit	16.1%		0		0	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
South Bay	10.6%	Auto	69.9%	1.21	0	0	0	0
		Transit	27.5%		0		0	
		Walk	0.0%		0		0	
		Other	2.6%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
Out of Region	0.8%	Auto	95.7%	3.16	0	0	0	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	3	2	1	1
		Transit	31.7%		2		1	
		Walk	12.6%		1		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***2***	***1***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 1 Long-Term (Phase 2) – Weekday
Hotel
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		49 person-trips	Total Person-trips [1] [2]:		4 person-trips
Non-Work Trips [3]:	88%	43 person-trips	Non-Work Trips [3]:	40%	2 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	2	1	0	0
		Transit	35.5%		2		0	
		Walk	16.4%		1		0	
		Other	6.4%		0		0	
		TOTAL	***100.0%***		***6***	***1***	***0***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	6	3	0	0
		Transit	23.7%		3		0	
		Walk	19.7%		2		0	
		Other	5.7%		1		0	
		TOTAL	***100.0%***		***12***	***3***	***0***	***0***
Superdistrict 3	14.0%	Auto	57.1%	2.05	3	2	0	0
		Transit	22.3%		1		0	
		Walk	9.9%		1		0	
		Other	10.7%		1		0	
		TOTAL	***100.0%***		***6***	***2***	***0***	***0***
Superdistrict 4	9.0%	Auto	63.4%	2.16	2	1	0	0
		Transit	32.4%		1		0	
		Walk	4.2%		0		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***4***	***1***	***0***	***0***
East Bay	11.0%	Auto	52.2%	2.20	2	1	0	0
		Transit	25.0%		1		0	
		Walk	14.1%		1		0	
		Other	8.7%		0		0	
		TOTAL	***100.0%***		***5***	***1***	***0***	***0***
North Bay	4.0%	Auto	73.6%	1.89	1	1	0	0
		Transit	8.8%		0		0	
		Walk	14.7%		0		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***2***	***1***	***0***	***0***
South Bay	8.0%	Auto	80.5%	2.30	3	1	0	0
		Transit	8.3%		0		0	
		Walk	5.6%		0		0	
		Other	5.6%		0		0	
		TOTAL	***100.0%***		***3***	***1***	***0***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	3	1	0	0
		Transit	19.7%		1		0	
		Walk	23.8%		1		0	
		Other	8.2%		0		0	
		TOTAL	***100.0%***		***6***	***1***	***0***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	23	11	1	0
		Transit	23.6%		10		0	
		Walk	15.1%		6		0	
		Other	6.5%		3		0	
		TOTAL	***100.0%***		***43***	***11***	***2***	***0***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

Alternative 2
Near-Term (Phase 1)

SFVAMC LRDP EIS Transportation Impact Study

Alternative 2 Near-Term (Phase 1) – Weekday

Daily / PM Peak Hour Trips by Mode	Daily Hospital	Daily Office	Daily R&D	Daily Hotel	Daily Total	PM Peak Hour Hospital	PM Peak Hour Office	PM Peak Hour R&D	PM Peak Hour Hotel	PM Peak Hour Total
Auto	128	86	59	27	300	9	11	8	2	30
Transit	62	42	29	12	145	4	7	4	1	16
Walk	34	23	16	7	80	2	3	2	1	8
Other	13	8	6	3	30	1	1	1	0	2
Internal	0	0	0	0	0	0	0	0	0	0
Total	**237**	**160**	**109**	**49**	**555**	**16**	**22**	**14**	**4**	**57**
Vehicle Trips	73	51	35	14	173	5	8	6	1	20

PM Peak Hour Distribution	Total Peak Hour PTs	Vehicle Trips Hospital	Vehicle Trips R&D	Vehicle Trips Hotel	Vehicle Trips Office	Vehicle Trips Total	Transit Trips Hospital	Transit Trips R&D	Transit Trips Hotel	Transit Trips Office	Transit Trips Total
Superdistrict 1	5	0	0	0	1	2	1	1	0	1	2
Superdistrict 2	17	1	2	0	3	6	1	1	0	2	4
Superdistrict 3	8	1	1	0	1	3	1	1	0	1	3
Superdistrict 4	7	1	1	0	1	3	1	1	0	1	3
East Bay	4	0	0	0	1	1	0	0	0	0	1
North Bay	3	0	0	0	1	2	0	0	0	0	0
South Bay	5	1	1	0	1	3	0	0	0	1	1
Out of Region	3	0	0	0	0	1	0	0	0	0	1
Internal	0	0	0	0	0	0	0	0	0	0	0
Total	**52**	**5**	**6**	**1**	**8**	**20**	**4**	**4**	**1**	**7**	**16**

PM Peak Hour In/Out Split	Hospital Work	Hospital Non-work	Hotel Work	Hotel Non-work	Office Work	Office Non-work	R&D Work	R&D Non-work
Inbound	50%	50%	50%	50%	0%	50%	0%	50%
Outbound	50%	50%	50%	50%	100%	50%	100%	50%

PM Peak Hour Total Trips	Inbound Hospital	Inbound Office	Inbound R&D	Inbound Hotel	Inbound Total	Outbound Hospital	Outbound Office	Outbound R&D	Outbound Hotel	Outbound Total
Total vehicle trips	3	0	0	1	4	3	8	5	1	16
Total Auto Trips	4	1	1	1	7	4	10	7	1	23
Total Trips	8	2	1	2	13	8	20	13	2	43

PM Peak Hour Vehicle-Trips	Inbound Hospital	Inbound Office	Inbound R&D	Inbound Hotel	Inbound Total	Outbound Hospital	Outbound Office	Outbound R&D	Outbound Hotel	Outbound Total
Superdistrict 1	0.2	0.1	0.0	0.1	0.4	0.2	0.6	0.4	0.1	1.2
Superdistrict 2	0.7	0.1	0.1	0.2	1.1	0.7	2.4	1.6	0.2	4.9
Superdistrict 3	0.4	0.1	0.0	0.1	0.6	0.4	1.2	0.8	0.1	2.5
Superdistrict 4	0.3	0.0	0.0	0.1	0.5	0.3	1.3	0.9	0.1	2.6
East Bay	0.2	0.0	0.0	0.1	0.3	0.2	0.5	0.3	0.1	1.0
North Bay	0.2	0.0	0.0	0.1	0.3	0.2	0.7	0.5	0.1	1.4
South Bay	0.3	0.1	0.0	0.1	0.5	0.3	1.2	0.8	0.1	2.3
Out of Region	0.2	0.1	0.0	0.0	0.3	0.2	0.1	0.1	0.0	0.4
Internal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**2.5**	**0.5**	**0.3**	**0.7**	**4.1**	**2.5**	**7.9**	**5.3**	**0.7**	**16.4**

PM Peak Hour Transit Trips	Inbound Hospital	Inbound Office	Inbound R&D	Inbound Hotel	Inbound Total	Outbound Hospital	Outbound Office	Outbound R&D	Outbound Hotel	Outbound Total
Superdistrict 1	0.3	0.1	0.1	0.1	0.6	0.3	0.7	0.5	0.1	1.6
Superdistrict 2	0.6	0.1	0.1	0.2	0.9	0.6	1.7	1.1	0.2	3.5
Superdistrict 3	0.4	0.1	0.0	0.1	0.6	0.4	1.4	0.9	0.1	2.9
Superdistrict 4	0.3	0.1	0.0	0.1	0.5	0.3	1.1	0.7	0.1	2.3
East Bay	0.2	0.1	0.0	0.0	0.3	0.2	0.4	0.3	0.0	1.0
North Bay	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.4
South Bay	0.1	0.0	0.0	0.0	0.2	0.1	0.5	0.4	0.0	1.0
Out of Region	0.2	0.1	0.0	0.0	0.3	0.2	0.1	0.0	0.0	0.3
Internal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**2.1**	**0.4**	**0.3**	**0.6**	**3.4**	**2.1**	**6.1**	**4.1**	**0.6**	**12.9**

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Near-Term (Phase 1) – Weekday
Office
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		160 person-trips	Total Person-trips [1] [2]:		22 person-trips
Work Trips [3]:	36%	58 person-trips	Work Trips [3]:	83%	18 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	2	2	1	0
		Transit	40.7%		2		1	
		Walk	16.7%		1		0	
		Other	3.3%		0		0	
		TOTAL	***100.0%***		***5***	***2***	***2***	***0***
Superdistrict 2	35.2%	Auto	41.0%	1.14	8	7	3	2
		Transit	24.4%		5		2	
		Walk	30.6%		6		2	
		Other	4.0%		1		0	
		TOTAL	***100.0%***		***20***	***7***	***6***	***2***
Superdistrict 3	15.8%	Auto	49.9%	1.25	5	4	1	1
		Transit	48.0%		4		1	
		Walk	0.0%		0		0	
		Other	2.1%		0		0	
		TOTAL	***100.0%***		***9***	***4***	***3***	***1***
Superdistrict 4	15.1%	Auto	55.9%	1.22	5	4	2	1
		Transit	38.9%		3		1	
		Walk	3.0%		0		0	
		Other	2.2%		0		0	
		TOTAL	***100.0%***		***9***	***4***	***3***	***1***
East Bay	7.1%	Auto	67.4%	2.02	3	1	1	0
		Transit	31.0%		1		0	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***4***	***1***	***1***	***0***
North Bay	7.0%	Auto	81.5%	1.53	3	2	1	1
		Transit	16.1%		1		0	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***4***	***2***	***1***	***1***
South Bay	10.6%	Auto	69.9%	1.21	4	4	1	1
		Transit	27.5%		2		1	
		Walk	0.0%		0		0	
		Other	2.6%		0		0	
		TOTAL	***100.0%***		***6***	***4***	***2***	***1***
Out of Region	0.8%	Auto	95.7%	3.16	0	0	0	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	30	24	9	7
		Transit	31.7%		18		6	
		Walk	12.6%		7		2	
		Other	2.9%		2		1	
		TOTAL	***100.0%***		***58***	***24***	***18***	***7***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Near-Term (Phase 1) – Weekday
Office
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		160 person-trips	Total Person-trips [1] [2]:		22 person-trips
Non-Work Trips [3]:	64%	102 person-trips	Non-Work Trips [3]:	17%	4 person-trips
Internal Trips:	0%	0 person-trips	Internal Trips:	0%	0 person-trips
External Trips:		102 person-trips	External Trips:		4 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	6	3	0	0
		Transit	35.5%		5		0	
		Walk	16.4%		2		0	
		Other	6.4%		1		0	
		TOTAL	***100.0%***		***13***	***3***	***0***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	14	7	1	0
		Transit	23.7%		7		0	
		Walk	19.7%		5		0	
		Other	5.7%		2		0	
		TOTAL	***100.0%***		***28***	***7***	***1***	***0***
Superdistrict 3	14.0%	Auto	57.1%	2.05	8	4	0	0
		Transit	22.3%		3		0	
		Walk	9.9%		1		0	
		Other	10.7%		2		0	
		TOTAL	***100.0%***		***14***	***4***	***1***	***0***
Superdistrict 4	9.0%	Auto	63.4%	2.16	6	3	0	0
		Transit	32.4%		3		0	
		Walk	4.2%		0		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***9***	***3***	***0***	***0***
East Bay	11.0%	Auto	52.2%	2.20	6	3	0	0
		Transit	25.0%		3		0	
		Walk	14.1%		2		0	
		Other	8.7%		1		0	
		TOTAL	***100.0%***		***11***	***3***	***0***	***0***
North Bay	4.0%	Auto	73.6%	1.89	3	2	0	0
		Transit	8.8%		0		0	
		Walk	14.7%		1		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***4***	***2***	***0***	***0***
South Bay	8.0%	Auto	80.5%	2.30	7	3	0	0
		Transit	8.3%		1		0	
		Walk	5.6%		0		0	
		Other	5.6%		0		0	
		TOTAL	***100.0%***		***8***	***3***	***0***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	7	3	0	0
		Transit	19.7%		3		0	
		Walk	23.8%		3		0	
		Other	8.2%		1		0	
		TOTAL	***100.0%***		***14***	***3***	***1***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	56	27	2	1
		Transit	23.6%		24		1	
		Walk	15.1%		15		1	
		Other	6.5%		7		0	
		TOTAL	***100.0%***		***102***	***27***	***4***	***1***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Near-Term (Phase 1) – Weekday
Hospital
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		237 person-trips	Total Person-trips [1] [2]:		16 person-trips
Work Trips [3]:	30%	71 person-trips	Work Trips [3]:	30%	5 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	2	2	0	0
		Transit	40.7%		2		0	
		Walk	16.7%		1		0	
		Other	3.3%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***0***	***0***
Superdistrict 2	35.2%	Auto	41.0%	1.14	10	9	1	1
		Transit	24.4%		6		0	
		Walk	30.6%		8		1	
		Other	4.0%		1		0	
		TOTAL	***100.0%***		***25***	***9***	***2***	***1***
Superdistrict 3	15.8%	Auto	49.9%	1.25	6	4	0	0
		Transit	48.0%		5		0	
		Walk	0.0%		0		0	
		Other	2.1%		0		0	
		TOTAL	***100.0%***		***11***	***4***	***1***	***0***
Superdistrict 4	15.1%	Auto	55.9%	1.22	6	5	0	0
		Transit	38.9%		4		0	
		Walk	3.0%		0		0	
		Other	2.2%		0		0	
		TOTAL	***100.0%***		***11***	***5***	***1***	***0***
East Bay	7.1%	Auto	67.4%	2.02	3	2	0	0
		Transit	31.0%		2		0	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***5***	***2***	***0***	***0***
North Bay	7.0%	Auto	81.5%	1.53	4	3	0	0
		Transit	16.1%		1		0	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***5***	***3***	***0***	***0***
South Bay	10.6%	Auto	69.9%	1.21	5	4	0	0
		Transit	27.5%		2		0	
		Walk	0.0%		0		0	
		Other	2.6%		0		0	
		TOTAL	***100.0%***		***8***	***4***	***1***	***0***
Out of Region	0.8%	Auto	95.7%	3.16	1	0	0	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	37	29	3	2
		Transit	31.7%		23		2	
		Walk	12.6%		9		1	
		Other	2.9%		2		0	
		TOTAL	***100.0%***		***71***	***29***	***5***	***2***

Notes:
[1] ITE Trip Generation, Code 610
[2] 2000 US Census Journey-to-work data
[3] Survey Data
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Near-Term (Phase 1) – Weekday
Hospital
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		237 person-trips	Total Person-trips [1] [2]:		16 person-trips
Work Trips [3]:	70%	166 person-trips	Work Trips [3]:	70%	11 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	9	5	1	0
		Transit	35.5%		8		1	
		Walk	16.4%		4		0	
		Other	6.4%		1		0	
		TOTAL	***100.0%***		***22***	***5***	***1***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	23	12	2	1
		Transit	23.7%		11		1	
		Walk	19.7%		9		1	
		Other	5.7%		3		0	
		TOTAL	***100.0%***		***45***	***12***	***3***	***1***
Superdistrict 3	14.0%	Auto	57.1%	2.05	13	6	1	0
		Transit	22.3%		5		0	
		Walk	9.9%		2		0	
		Other	10.7%		2		0	
		TOTAL	***100.0%***		***23***	***6***	***2***	***0***
Superdistrict 4	9.0%	Auto	63.4%	2.16	9	4	1	0
		Transit	32.4%		5		0	
		Walk	4.2%		1		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***15***	***4***	***1***	***0***
East Bay	11.0%	Auto	52.2%	2.20	10	4	1	0
		Transit	25.0%		5		0	
		Walk	14.1%		3		0	
		Other	8.7%		2		0	
		TOTAL	***100.0%***		***18***	***4***	***1***	***0***
North Bay	4.0%	Auto	73.6%	1.89	5	3	0	0
		Transit	8.8%		1		0	
		Walk	14.7%		1		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***7***	***3***	***0***	***0***
South Bay	8.0%	Auto	80.5%	2.30	11	5	1	0
		Transit	8.3%		1		0	
		Walk	5.6%		1		0	
		Other	5.6%		1		0	
		TOTAL	***100.0%***		***13***	***5***	***1***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	11	5	1	0
		Transit	19.7%		5		0	
		Walk	23.8%		6		0	
		Other	8.2%		2		0	
		TOTAL	***100.0%***		***23***	***5***	***2***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	91	44	6	3
		Transit	23.6%		39		3	
		Walk	15.1%		25		2	
		Other	6.5%		11		1	
		TOTAL	***100.0%***		***166***	***44***	***11***	***3***

Notes:
[1] ITE Trip Generation, Code 610
[2] 2000 US Census Journey-to-work data
[3] Survey Data
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Near-Term (Phase 1) – Weekday
R&D
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		109 person-trips	Total Person-trips [1] [2]:		14 person-trips
Work Trips [3]:	36%	39 person-trips	Work Trips [3]:	83%	12 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	1	1	0	0
		Transit	40.7%		1		0	
		Walk	16.7%		1		0	
		Other	3.3%		0		0	
		TOTAL	***100.0%***		***3***	***1***	***1***	***0***
Superdistrict 2	35.2%	Auto	41.0%	1.14	6	5	2	2
		Transit	24.4%		3		1	
		Walk	30.6%		4		1	
		Other	4.0%		1		0	
		TOTAL	***100.0%***		***14***	***5***	***4***	***2***
Superdistrict 3	15.8%	Auto	49.9%	1.25	3	2	1	1
		Transit	48.0%		3		1	
		Walk	0.0%		0		0	
		Other	2.1%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***2***	***1***
Superdistrict 4	15.1%	Auto	55.9%	1.22	3	3	1	1
		Transit	38.9%		2		1	
		Walk	3.0%		0		0	
		Other	2.2%		0		0	
		TOTAL	***100.0%***		***6***	***3***	***2***	***1***
East Bay	7.1%	Auto	67.4%	2.02	2	1	1	0
		Transit	31.0%		1		0	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***3***	***1***	***1***	***0***
North Bay	7.0%	Auto	81.5%	1.53	2	1	1	0
		Transit	16.1%		0		0	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***3***	***1***	***1***	***0***
South Bay	10.6%	Auto	69.9%	1.21	3	2	1	1
		Transit	27.5%		1		0	
		Walk	0.0%		0		0	
		Other	2.6%		0		0	
		TOTAL	***100.0%***		***4***	***2***	***1***	***1***
Out of Region	0.8%	Auto	95.7%	3.16	0	0	0	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	21	16	6	5
		Transit	31.7%		13		4	
		Walk	12.6%		5		2	
		Other	2.9%		1		0	
		TOTAL	***100.0%***		***39***	***16***	***12***	***5***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Near-Term (Phase 1) – Weekday
R&D
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		109 person-trips	Total Person-trips [1] [2]:		14 person-trips
Non-Work Trips [3]:	64%	70 person-trips	Non-Work Trips [3]:	17%	2 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	4	2	0	0
		Transit	35.5%		3		0	
		Walk	16.4%		1		0	
		Other	6.4%		1		0	
		TOTAL	***100.0%***		***9***	***2***	***0***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	10	5	0	0
		Transit	23.7%		4		0	
		Walk	19.7%		4		0	
		Other	5.7%		1		0	
		TOTAL	***100.0%***		***19***	***5***	***1***	***0***
Superdistrict 3	14.0%	Auto	57.1%	2.05	6	3	0	0
		Transit	22.3%		2		0	
		Walk	9.9%		1		0	
		Other	10.7%		1		0	
		TOTAL	***100.0%***		***10***	***3***	***0***	***0***
Superdistrict 4	9.0%	Auto	63.4%	2.16	4	2	0	0
		Transit	32.4%		2		0	
		Walk	4.2%		0		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***0***	***0***
East Bay	11.0%	Auto	52.2%	2.20	4	2	0	0
		Transit	25.0%		2		0	
		Walk	14.1%		1		0	
		Other	8.7%		1		0	
		TOTAL	***100.0%***		***8***	***2***	***0***	***0***
North Bay	4.0%	Auto	73.6%	1.89	2	1	0	0
		Transit	8.8%		0		0	
		Walk	14.7%		0		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***3***	***1***	***0***	***0***
South Bay	8.0%	Auto	80.5%	2.30	5	2	0	0
		Transit	8.3%		0		0	
		Walk	5.6%		0		0	
		Other	5.6%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***0***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	5	2	0	0
		Transit	19.7%		2		0	
		Walk	23.8%		2		0	
		Other	8.2%		1		0	
		TOTAL	***100.0%***		***10***	***2***	***0***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	38	19	1	1
		Transit	23.6%		17		1	
		Walk	15.1%		11		0	
		Other	6.5%		5		0	
		TOTAL	***100.0%***		***70***	***19***	***2***	***1***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Near-Term (Phase 1) – Weekday
Hotel
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		49 person-trips	Total Person-trips [1] [2]:		4 person-trips
Work Trips [3]:	12%	6 person-trips	Work Trips [3]:	60%	2 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	0	0	0	0
		Transit	40.7%		0		0	
		Walk	16.7%		0		0	
		Other	3.3%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
Superdistrict 2	35.2%	Auto	41.0%	1.14	1	1	0	0
		Transit	24.4%		1		0	
		Walk	30.6%		1		0	
		Other	4.0%		0		0	
		TOTAL	***100.0%***		***2***	***1***	***1***	***0***
Superdistrict 3	15.8%	Auto	49.9%	1.25	0	0	0	0
		Transit	48.0%		0		0	
		Walk	0.0%		0		0	
		Other	2.1%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
Superdistrict 4	15.1%	Auto	55.9%	1.22	0	0	0	0
		Transit	38.9%		0		0	
		Walk	3.0%		0		0	
		Other	2.2%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
East Bay	7.1%	Auto	67.4%	2.02	0	0	0	0
		Transit	31.0%		0		0	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
North Bay	7.0%	Auto	81.5%	1.53	0	0	0	0
		Transit	16.1%		0		0	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
South Bay	10.6%	Auto	69.9%	1.21	0	0	0	0
		Transit	27.5%		0		0	
		Walk	0.0%		0		0	
		Other	2.6%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
Out of Region	0.8%	Auto	95.7%	3.16	0	0	0	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	3	2	1	1
		Transit	31.7%		2		1	
		Walk	12.6%		1		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***2***	***1***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Near-Term (Phase 1) – Weekday
Hotel
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		49 person-trips	Total Person-trips [1] [2]:		4 person-trips
Non-Work Trips [3]:	88%	43 person-trips	Non-Work Trips [3]:	40%	2 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	2	1	0	0
		Transit	35.5%		2		0	
		Walk	16.4%		1		0	
		Other	6.4%		0		0	
		TOTAL	***100.0%***		***6***	***1***	***0***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	6	3	0	0
		Transit	23.7%		3		0	
		Walk	19.7%		2		0	
		Other	5.7%		1		0	
		TOTAL	***100.0%***		***12***	***3***	***0***	***0***
Superdistrict 3	14.0%	Auto	57.1%	2.05	3	2	0	0
		Transit	22.3%		1		0	
		Walk	9.9%		1		0	
		Other	10.7%		1		0	
		TOTAL	***100.0%***		***6***	***2***	***0***	***0***
Superdistrict 4	9.0%	Auto	63.4%	2.16	2	1	0	0
		Transit	32.4%		1		0	
		Walk	4.2%		0		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***4***	***1***	***0***	***0***
East Bay	11.0%	Auto	52.2%	2.20	2	1	0	0
		Transit	25.0%		1		0	
		Walk	14.1%		1		0	
		Other	8.7%		0		0	
		TOTAL	***100.0%***		***5***	***1***	***0***	***0***
North Bay	4.0%	Auto	73.6%	1.89	1	1	0	0
		Transit	8.8%		0		0	
		Walk	14.7%		0		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***2***	***1***	***0***	***0***
South Bay	8.0%	Auto	80.5%	2.30	3	1	0	0
		Transit	8.3%		0		0	
		Walk	5.6%		0		0	
		Other	5.6%		0		0	
		TOTAL	***100.0%***		***3***	***1***	***0***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	3	1	0	0
		Transit	19.7%		1		0	
		Walk	23.8%		1		0	
		Other	8.2%		0		0	
		TOTAL	***100.0%***		***6***	***1***	***0***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	23	11	1	0
		Transit	23.6%		10		0	
		Walk	15.1%		6		0	
		Other	6.5%		3		0	
		TOTAL	***100.0%***		***43***	***11***	***2***	***0***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

Alternative 2
Long-Term (Phase 2)

Fort Miley Campus

SFVAMC LRDP EIS Transportation Impact Study

Alternative 2 Long-Term (Phase 2), Fort Miley Campus – Weekday

Daily / PM Peak Hour Trips by Mode	Daily Hospital	Daily Office	Daily R&D	Daily Hotel	Daily Total	PM Peak Hour Hospital	PM Peak Hour Office	PM Peak Hour R&D	PM Peak Hour Hotel	PM Peak Hour Total
Auto	179	131	331	27	668	12	17	43	2	75
Transit	86	64	162	12	325	6	10	25	1	42
Walk	48	35	87	7	177	3	4	11	1	19
Other	18	13	32	3	66	1	1	3	0	5
Internal	0	0	0	0	0	0	0	0	0	0
Total	**331**	**243**	**612**	**49**	**1,236**	**23**	**33**	**81**	**4**	**141**
Vehicle Trips	103	77	195	14	389	7	13	31	1	52

PM Peak Hour Distribution	Total Peak Hour PTs	Vehicle Trips Hospital	Vehicle Trips R&D	Vehicle Trips Hotel	Vehicle Trips Office	Vehicle Trips Total	Transit Trips Hospital	Transit Trips R&D	Transit Trips Hotel	Transit Trips Office	Transit Trips Total
Superdistrict 1	13	1	2	0	1	4	1	3	0	1	5
Superdistrict 2	45	2	9	0	4	16	2	7	0	3	11
Superdistrict 3	21	1	5	0	2	8	1	6	0	2	9
Superdistrict 4	18	1	5	0	2	8	1	4	0	2	7
East Bay	11	1	2	0	1	3	1	2	0	1	3
North Bay	9	1	3	0	1	4	0	1	0	0	1
South Bay	14	1	4	0	2	7	0	2	0	1	3
Out of Region	6	1	1	0	0	1	0	0	0	0	1
Internal	0	0	0	0	0	0	0	0	0	0	0
Total	**137**	**7**	**31**	**1**	**13**	**52**	**6**	**25**	**1**	**10**	**42**

PM Peak Hour In/Out Split	Hospital Work	Hospital Non-work	Hotel Work	Hotel Non-work	Office Work	Office Non-work	R&D Work	R&D Non-work
Inbound	50%	50%	50%	50%	0%	50%	0%	50%
Outbound	50%	50%	50%	50%	100%	50%	100%	50%

PM Peak Hour Total Trips	Inbound Hospital	Inbound Office	Inbound R&D	Inbound Hotel	Inbound Total	Outbound Hospital	Outbound Office	Outbound R&D	Outbound Hotel	Outbound Total
Total vehicle trips	4	1	2	1	7	4	12	29	1	46
Total Auto Trips	6	2	4	1	13	6	16	39	1	62
Total Trips	11	3	7	2	23	11	30	74	2	118

PM Peak Hour Vehicle-Trips	Inbound Hospital	Inbound Office	Inbound R&D	Inbound Hotel	Inbound Total	Outbound Hospital	Outbound Office	Outbound R&D	Outbound Hotel	Outbound Total
Superdistrict 1	0.3	0.1	0.2	0.1	0.6	0.3	0.8	2.1	0.1	3.3
Superdistrict 2	1.0	0.2	0.5	0.2	1.9	1.0	3.7	9.0	0.2	13.8
Superdistrict 3	0.5	0.1	0.3	0.1	1.0	0.5	1.8	4.5	0.1	7.0
Superdistrict 4	0.4	0.1	0.2	0.1	0.8	0.4	2.0	4.8	0.1	7.3
East Bay	0.3	0.1	0.2	0.1	0.6	0.3	0.7	1.8	0.1	2.8
North Bay	0.3	0.0	0.1	0.1	0.5	0.3	1.1	2.6	0.1	4.0
South Bay	0.4	0.1	0.2	0.1	0.8	0.4	1.8	4.3	0.1	6.6
Out of Region	0.3	0.1	0.2	0.0	0.6	0.3	0.2	0.4	0.0	0.8
Internal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**3.5**	**0.7**	**1.8**	**0.7**	**6.8**	**3.5**	**12.0**	**29.4**	**0.7**	**45.6**

PM Peak Hour Transit Trips	Inbound Hospital	Inbound Office	Inbound R&D	Inbound Hotel	Inbound Total	Outbound Hospital	Outbound Office	Outbound R&D	Outbound Hotel	Outbound Total
Superdistrict 1	0.5	0.1	0.3	0.1	1.0	0.5	1.1	2.6	0.1	4.2
Superdistrict 2	0.8	0.2	0.4	0.2	1.6	0.8	2.5	6.2	0.2	9.7
Superdistrict 3	0.5	0.1	0.2	0.1	0.9	0.5	2.2	5.3	0.1	8.1
Superdistrict 4	0.4	0.1	0.2	0.1	0.8	0.4	1.7	4.1	0.1	6.4
East Bay	0.3	0.1	0.2	0.0	0.6	0.3	0.7	1.7	0.0	2.7
North Bay	0.1	0.0	0.0	0.0	0.1	0.1	0.3	0.8	0.0	1.2
South Bay	0.2	0.0	0.0	0.0	0.3	0.2	0.8	2.0	0.0	3.0
Out of Region	0.2	0.1	0.2	0.0	0.5	0.2	0.1	0.2	0.0	0.5
Internal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**3.0**	**0.7**	**1.6**	**0.6**	**5.8**	**3.0**	**9.3**	**22.9**	**0.6**	**35.8**

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Long-Term (Phase 2), Fort Miley Campus – Weekday
Office
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		243 person-trips	Total Person-trips [1] [2]:		33 person-trips
Work Trips [3]:	36%	88 person-trips	Work Trips [3]:	83%	27 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	3	2	1	1
		Transit	40.7%		3		1	
		Walk	16.7%		1		0	
		Other	3.3%		0		0	
		TOTAL	***100.0%***		***7***	***2***	***2***	***1***
Superdistrict 2	35.2%	Auto	41.0%	1.14	13	11	4	3
		Transit	24.4%		8		2	
		Walk	30.6%		9		3	
		Other	4.0%		1		0	
		TOTAL	***100.0%***		***31***	***11***	***10***	***3***
Superdistrict 3	15.8%	Auto	49.9%	1.25	7	6	2	2
		Transit	48.0%		7		2	
		Walk	0.0%		0		0	
		Other	2.1%		0		0	
		TOTAL	***100.0%***		***14***	***6***	***4***	***2***
Superdistrict 4	15.1%	Auto	55.9%	1.22	7	6	2	2
		Transit	38.9%		5		2	
		Walk	3.0%		0		0	
		Other	2.2%		0		0	
		TOTAL	***100.0%***		***13***	***6***	***4***	***2***
East Bay	7.1%	Auto	67.4%	2.02	4	2	1	1
		Transit	31.0%		2		1	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***2***	***1***
North Bay	7.0%	Auto	81.5%	1.53	5	3	2	1
		Transit	16.1%		1		0	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***6***	***3***	***2***	***1***
South Bay	10.6%	Auto	69.9%	1.21	6	5	2	2
		Transit	27.5%		3		1	
		Walk	0.0%		0		0	
		Other	2.6%		0		0	
		TOTAL	***100.0%***		***9***	***5***	***3***	***2***
Out of Region	0.8%	Auto	95.7%	3.16	1	0	0	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	46	36	14	11
		Transit	31.7%		28		9	
		Walk	12.6%		11		3	
		Other	2.9%		3		1	
		TOTAL	***100.0%***		***88***	***36***	***27***	***11***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Long-Term (Phase 2), Fort Miley Campus – Weekday
Office
Non-Work Trips

DAILY				PM PEAK HOUR			
Total Person-trips [1] [2]:		243	person-trips	Total Person-trips [1] [2]:		33	person-trips
Non-Work Trips [3]:	64%	156	person-trips	Non-Work Trips [3]:	17%	6	person-trips
Internal Trips:	0%	0	person-trips	Internal Trips:	0%	0	person-trips
External Trips:		156	person-trips	External Trips:		6	person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	8	4	0	0
		Transit	35.5%		7		0	
		Walk	16.4%		3		0	
		Other	6.4%		1		0	
		TOTAL	***100.0%***		***20***	***4***	***1***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	21	11	1	0
		Transit	23.7%		10		0	
		Walk	19.7%		8		0	
		Other	5.7%		2		0	
		TOTAL	***100.0%***		***42***	***11***	***2***	***0***
Superdistrict 3	14.0%	Auto	57.1%	2.05	12	6	0	0
		Transit	22.3%		5		0	
		Walk	9.9%		2		0	
		Other	10.7%		2		0	
		TOTAL	***100.0%***		***22***	***6***	***1***	***0***
Superdistrict 4	9.0%	Auto	63.4%	2.16	9	4	0	0
		Transit	32.4%		5		0	
		Walk	4.2%		1		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***14***	***4***	***1***	***0***
East Bay	11.0%	Auto	52.2%	2.20	9	4	0	0
		Transit	25.0%		4		0	
		Walk	14.1%		2		0	
		Other	8.7%		1		0	
		TOTAL	***100.0%***		***17***	***4***	***1***	***0***
North Bay	4.0%	Auto	73.6%	1.89	5	2	0	0
		Transit	8.8%		1		0	
		Walk	14.7%		1		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***0***	***0***
South Bay	8.0%	Auto	80.5%	2.30	10	4	0	0
		Transit	8.3%		1		0	
		Walk	5.6%		1		0	
		Other	5.6%		1		0	
		TOTAL	***100.0%***		***12***	***4***	***0***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	11	5	0	0
		Transit	19.7%		4		0	
		Walk	23.8%		5		0	
		Other	8.2%		2		0	
		TOTAL	***100.0%***		***22***	***5***	***1***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	85	41	3	1
		Transit	23.6%		37		1	
		Walk	15.1%		24		1	
		Other	6.5%		10		0	
		TOTAL	***100.0%***		***156***	***41***	***6***	***1***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Long-Term (Phase 2), Fort Miley Campus – Weekday
Hospital
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		331 person-trips	Total Person-trips [1] [2]:		23 person-trips
Work Trips [3]:	30%	99 person-trips	Work Trips [3]:	30%	7 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	3	3	0	0
		Transit	40.7%		3		0	
		Walk	16.7%		1		0	
		Other	3.3%		0		0	
		TOTAL	***100.0%***		***8***	***3***	***1***	***0***
Superdistrict 2	35.2%	Auto	41.0%	1.14	14	13	1	1
		Transit	24.4%		9		1	
		Walk	30.6%		11		1	
		Other	4.0%		1		0	
		TOTAL	***100.0%***		***35***	***13***	***2***	***1***
Superdistrict 3	15.8%	Auto	49.9%	1.25	8	6	1	0
		Transit	48.0%		8		1	
		Walk	0.0%		0		0	
		Other	2.1%		0		0	
		TOTAL	***100.0%***		***16***	***6***	***1***	***0***
Superdistrict 4	15.1%	Auto	55.9%	1.22	8	7	1	0
		Transit	38.9%		6		0	
		Walk	3.0%		0		0	
		Other	2.2%		0		0	
		TOTAL	***100.0%***		***15***	***7***	***1***	***0***
East Bay	7.1%	Auto	67.4%	2.02	5	2	0	0
		Transit	31.0%		2		0	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***7***	***2***	***0***	***0***
North Bay	7.0%	Auto	81.5%	1.53	6	4	0	0
		Transit	16.1%		1		0	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***7***	***4***	***0***	***0***
South Bay	10.6%	Auto	69.9%	1.21	7	6	1	0
		Transit	27.5%		3		0	
		Walk	0.0%		0		0	
		Other	2.6%		0		0	
		TOTAL	***100.0%***		***11***	***6***	***1***	***0***
Out of Region	0.8%	Auto	95.7%	3.16	1	0	0	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	52	41	4	3
		Transit	31.7%		32		2	
		Walk	12.6%		13		1	
		Other	2.9%		3		0	
		TOTAL	***100.0%***		***99***	***41***	***7***	***3***

Notes:
[1] ITE Trip Generation, Code 610
[2] 2000 US Census Journey-to-work data
[3] Survey Data
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Long-Term (Phase 2), Fort Miley Campus – Weekday
Hospital
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		331 person-trips	Total Person-trips [1] [2]:		23 person-trips
Work Trips [3]:	70%	232 person-trips	Work Trips [3]:	70%	16 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	13	7	1	0
		Transit	35.5%		11		1	
		Walk	16.4%		5		0	
		Other	6.4%		2		0	
		TOTAL	***100.0%***		***30***	***7***	***2***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	32	16	2	1
		Transit	23.7%		15		1	
		Walk	19.7%		12		1	
		Other	5.7%		4		0	
		TOTAL	***100.0%***		***63***	***16***	***4***	***1***
Superdistrict 3	14.0%	Auto	57.1%	2.05	19	9	1	1
		Transit	22.3%		7		1	
		Walk	9.9%		3		0	
		Other	10.7%		3		0	
		TOTAL	***100.0%***		***32***	***9***	***2***	***1***
Superdistrict 4	9.0%	Auto	63.4%	2.16	13	6	1	0
		Transit	32.4%		7		0	
		Walk	4.2%		1		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***21***	***6***	***1***	***0***
East Bay	11.0%	Auto	52.2%	2.20	13	6	1	0
		Transit	25.0%		6		0	
		Walk	14.1%		4		0	
		Other	8.7%		2		0	
		TOTAL	***100.0%***		***26***	***6***	***2***	***0***
North Bay	4.0%	Auto	73.6%	1.89	7	4	0	0
		Transit	8.8%		1		0	
		Walk	14.7%		1		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***9***	***4***	***1***	***0***
South Bay	8.0%	Auto	80.5%	2.30	15	6	1	0
		Transit	8.3%		2		0	
		Walk	5.6%		1		0	
		Other	5.6%		1		0	
		TOTAL	***100.0%***		***19***	***6***	***1***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	16	8	1	1
		Transit	19.7%		6		0	
		Walk	23.8%		8		1	
		Other	8.2%		3		0	
		TOTAL	***100.0%***		***32***	***8***	***2***	***1***
TOTAL	100.0%	Auto	54.8%	2.06	127	62	9	4
		Transit	23.6%		55		4	
		Walk	15.1%		35		2	
		Other	6.5%		15		1	
		TOTAL	***100.0%***		***232***	***62***	***16***	***4***

Notes:
[1] ITE Trip Generation, Code 610
[2] 2000 US Census Journey-to-work data
[3] Survey Data
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Long-Term (Phase 2), Fort Miley Campus – Weekday
R&D
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		612 person-trips	Total Person-trips [1] [2]:		81 person-trips
Work Trips [3]:	36%	220 person-trips	Work Trips [3]:	83%	67 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	7	6	2	2
		Transit	40.7%		8		2	
		Walk	16.7%		3		1	
		Other	3.3%		1		0	
		TOTAL	***100.0%***		***19***	***6***	***6***	***2***
Superdistrict 2	35.2%	Auto	41.0%	1.14	32	28	10	8
		Transit	24.4%		19		6	
		Walk	30.6%		24		7	
		Other	4.0%		3		1	
		TOTAL	***100.0%***		***78***	***28***	***24***	***8***
Superdistrict 3	15.8%	Auto	49.9%	1.25	17	14	5	4
		Transit	48.0%		17		5	
		Walk	0.0%		0		0	
		Other	2.1%		1		0	
		TOTAL	***100.0%***		***35***	***14***	***11***	***4***
Superdistrict 4	15.1%	Auto	55.9%	1.22	19	15	6	5
		Transit	38.9%		13		4	
		Walk	3.0%		1		0	
		Other	2.2%		1		0	
		TOTAL	***100.0%***		***33***	***15***	***10***	***5***
East Bay	7.1%	Auto	67.4%	2.02	11	5	3	2
		Transit	31.0%		5		1	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***16***	***5***	***5***	***2***
North Bay	7.0%	Auto	81.5%	1.53	13	8	4	2
		Transit	16.1%		2		1	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***15***	***8***	***5***	***2***
South Bay	10.6%	Auto	69.9%	1.21	16	13	5	4
		Transit	27.5%		6		2	
		Walk	0.0%		0		0	
		Other	2.6%		1		0	
		TOTAL	***100.0%***		***23***	***13***	***7***	***4***
Out of Region	0.8%	Auto	95.7%	3.16	2	1	1	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***2***	***1***	***1***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	116	91	35	28
		Transit	31.7%		70		21	
		Walk	12.6%		28		8	
		Other	2.9%		6		2	
		TOTAL	***100.0%***		***220***	***91***	***67***	***28***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Long-Term (Phase 2), Fort Miley Campus – Weekday
R&D
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		612 person-trips	Total Person-trips [1] [2]:		81 person-trips
Non-Work Trips [3]:	64%	392 person-trips	Non-Work Trips [3]:	17%	14 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	21	11	1	0
		Transit	35.5%		18		1	
		Walk	16.4%		8		0	
		Other	6.4%		3		0	
		TOTAL	***100.0%***		***51***	***11***	***2***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	54	27	2	1
		Transit	23.7%		25		1	
		Walk	19.7%		21		1	
		Other	5.7%		6		0	
		TOTAL	***100.0%***		***106***	***27***	***4***	***1***
Superdistrict 3	14.0%	Auto	57.1%	2.05	31	15	1	1
		Transit	22.3%		12		0	
		Walk	9.9%		5		0	
		Other	10.7%		6		0	
		TOTAL	***100.0%***		***55***	***15***	***2***	***1***
Superdistrict 4	9.0%	Auto	63.4%	2.16	22	10	1	0
		Transit	32.4%		11		0	
		Walk	4.2%		1		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***35***	***10***	***1***	***0***
East Bay	11.0%	Auto	52.2%	2.20	22	10	1	0
		Transit	25.0%		11		0	
		Walk	14.1%		6		0	
		Other	8.7%		4		0	
		TOTAL	***100.0%***		***43***	***10***	***2***	***0***
North Bay	4.0%	Auto	73.6%	1.89	12	6	0	0
		Transit	8.8%		1		0	
		Walk	14.7%		2		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***16***	***6***	***1***	***0***
South Bay	8.0%	Auto	80.5%	2.30	25	11	1	0
		Transit	8.3%		3		0	
		Walk	5.6%		2		0	
		Other	5.6%		2		0	
		TOTAL	***100.0%***		***31***	***11***	***1***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	26	13	1	0
		Transit	19.7%		11		0	
		Walk	23.8%		13		0	
		Other	8.2%		4		0	
		TOTAL	***100.0%***		***55***	***13***	***2***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	215	104	8	4
		Transit	23.6%		92		3	
		Walk	15.1%		59		2	
		Other	6.5%		26		1	
		TOTAL	***100.0%***		***392***	***104***	***14***	***4***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Long-Term (Phase 2), Fort Miley Campus – Weekday
Hotel
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		49 person-trips	Total Person-trips [1] [2]:		4 person-trips
Work Trips [3]:	12%	6 person-trips	Work Trips [3]:	60%	2 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	0	0	0	0
		Transit	40.7%		0		0	
		Walk	16.7%		0		0	
		Other	3.3%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
Superdistrict 2	35.2%	Auto	41.0%	1.14	1	1	0	0
		Transit	24.4%		1		0	
		Walk	30.6%		1		0	
		Other	4.0%		0		0	
		TOTAL	***100.0%***		***2***	***1***	***1***	***0***
Superdistrict 3	15.8%	Auto	49.9%	1.25	0	0	0	0
		Transit	48.0%		0		0	
		Walk	0.0%		0		0	
		Other	2.1%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
Superdistrict 4	15.1%	Auto	55.9%	1.22	0	0	0	0
		Transit	38.9%		0		0	
		Walk	3.0%		0		0	
		Other	2.2%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
East Bay	7.1%	Auto	67.4%	2.02	0	0	0	0
		Transit	31.0%		0		0	
		Walk	0.0%		0		0	
		Other	1.6%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
North Bay	7.0%	Auto	81.5%	1.53	0	0	0	0
		Transit	16.1%		0		0	
		Walk	0.0%		0		0	
		Other	2.4%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
South Bay	10.6%	Auto	69.9%	1.21	0	0	0	0
		Transit	27.5%		0		0	
		Walk	0.0%		0		0	
		Other	2.6%		0		0	
		TOTAL	***100.0%***		***1***	***0***	***0***	***0***
Out of Region	0.8%	Auto	95.7%	3.16	0	0	0	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***0***	***0***	***0***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	3	2	1	1
		Transit	31.7%		2		1	
		Walk	12.6%		1		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***6***	***2***	***2***	***1***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Long-Term (Phase 2), Fort Miley Campus – Weekday
Hotel
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		49 person-trips	Total Person-trips [1] [2]:		4 person-trips
Non-Work Trips [3]:	88%	43 person-trips	Non-Work Trips [3]:	40%	2 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	2	1	0	0
		Transit	35.5%		2		0	
		Walk	16.4%		1		0	
		Other	6.4%		0		0	
		TOTAL	***100.0%***		***6***	***1***	***0***	***0***
Superdistrict 2	27.0%	Auto	50.9%	1.96	6	3	0	0
		Transit	23.7%		3		0	
		Walk	19.7%		2		0	
		Other	5.7%		1		0	
		TOTAL	***100.0%***		***12***	***3***	***0***	***0***
Superdistrict 3	14.0%	Auto	57.1%	2.05	3	2	0	0
		Transit	22.3%		1		0	
		Walk	9.9%		1		0	
		Other	10.7%		1		0	
		TOTAL	***100.0%***		***6***	***2***	***0***	***0***
Superdistrict 4	9.0%	Auto	63.4%	2.16	2	1	0	0
		Transit	32.4%		1		0	
		Walk	4.2%		0		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***4***	***1***	***0***	***0***
East Bay	11.0%	Auto	52.2%	2.20	2	1	0	0
		Transit	25.0%		1		0	
		Walk	14.1%		1		0	
		Other	8.7%		0		0	
		TOTAL	***100.0%***		***5***	***1***	***0***	***0***
North Bay	4.0%	Auto	73.6%	1.89	1	1	0	0
		Transit	8.8%		0		0	
		Walk	14.7%		0		0	
		Other	2.9%		0		0	
		TOTAL	***100.0%***		***2***	***1***	***0***	***0***
South Bay	8.0%	Auto	80.5%	2.30	3	1	0	0
		Transit	8.3%		0		0	
		Walk	5.6%		0		0	
		Other	5.6%		0		0	
		TOTAL	***100.0%***		***3***	***1***	***0***	***0***
Out of Region	14.0%	Auto	48.3%	2.07	3	1	0	0
		Transit	19.7%		1		0	
		Walk	23.8%		1		0	
		Other	8.2%		0		0	
		TOTAL	***100.0%***		***6***	***1***	***0***	***0***
TOTAL	100.0%	Auto	54.8%	2.06	23	11	1	0
		Transit	23.6%		10		0	
		Walk	15.1%		6		0	
		Other	6.5%		3		0	
		TOTAL	***100.0%***		***43***	***11***	***2***	***0***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

Alternative 2
Long-Term (Phase 2)

Mission Bay Campus

SFVAMC LRDP EIS Transportation Impact Study

Alternative 2 Long-Term (Phase 2), Mission Bay Campus – Weekday

Daily / PM Peak Hour Trips by Mode	Daily					PM Peak Hour				
	Hospital	Office	R&D	Hotel	Total	Hospital	Office	R&D	Hotel	Total
Auto	3,169	0	946	0	4,115	303	0	123	0	426
Transit	1,523	0	464	0	1,987	146	0	70	0	216
Walk	842	0	249	0	1,091	81	0	30	0	111
Other	319	0	92	0	411	31	0	8	0	39
Internal	0	0	0	0	0	0	0	0	0	0
Total	**5,853**	**0**	**1,752**	**0**	**7,605**	**561**	**0**	**231**	**0**	**792**
Vehicle Trips	1,812	0	558	0	2,369	174	0	89	0	263

PM Peak Hour Distribution	Total Peak Hour PTs	Vehicle Trips					Transit Trips				
		Hospital	R&D	Hotel	Office	Total	Hospital	R&D	Hotel	Office	Total
Superdistrict 1	86	16	6	0	0	22	24	8	0	0	32
Superdistrict 2	243	49	27	0	0	76	40	19	0	0	59
Superdistrict 3	117	26	14	0	0	40	25	16	0	0	41
Superdistrict 4	93	22	14	0	0	36	21	12	0	0	34
East Bay	73	14	6	0	0	20	14	5	0	0	20
North Bay	42	12	8	0	0	20	3	2	0	0	6
South Bay	73	21	13	0	0	34	8	6	0	0	13
Out of Region	63	13	2	0	0	15	11	1	0	0	12
Internal	0	0	0	0	0	0	0	0	0	0	0
Total	**792**	**174**	**89**	**0**	**0**	**263**	**146**	**70**	**0**	**0**	**216**

PM Peak Hour In/Out Split	Hospital		Hotel		Office		R&D	
	Work	Non-work	Work	Non-work	Work	Non-work	Work	Non-work
Inbound	50%	50%	50%	50%	0%	50%	0%	50%
Outbound	50%	50%	50%	50%	100%	50%	100%	50%

PM Peak Hour Total Trips	Inbound					Outbound				
	Hospital	Office	R&D	Hotel	Total	Hospital	Office	R&D	Hotel	Total
Total vehicle trips	87	0	5	0	92	87	0	84	0	171
Total Auto Trips	152	0	11	0	162	152	0	112	0	264
Total Trips	280	0	20	0	300	280	0	211	0	492

PM Peak Hour Vehicle-Trips	Inbound					Outbound				
	Hospital	Office	R&D	Hotel	Total	Hospital	Office	R&D	Hotel	Total
Superdistrict 1	7.8	0.0	0.6	0.0	8.4	7.8	0.0	5.9	0.0	13.7
Superdistrict 2	24.4	0.0	1.4	0.0	25.8	24.4	0.0	25.7	0.0	50.1
Superdistrict 3	13.0	0.0	0.8	0.0	13.7	13.0	0.0	12.9	0.0	25.8
Superdistrict 4	11.0	0.0	0.5	0.0	11.5	11.0	0.0	13.8	0.0	24.8
East Bay	7.1	0.0	0.5	0.0	7.6	7.1	0.0	5.1	0.0	12.2
North Bay	6.2	0.0	0.3	0.0	6.5	6.2	0.0	7.5	0.0	13.6
South Bay	10.6	0.0	0.6	0.0	11.2	10.6	0.0	12.3	0.0	22.9
Out of Region	6.6	0.0	0.6	0.0	7.3	6.6	0.0	1.1	0.0	7.7
Internal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**86.8**	**0.0**	**5.2**	**0.0**	**92.0**	**86.8**	**0.0**	**84.1**	**0.0**	**170.9**

PM Peak Hour Transit Trips	Inbound					Outbound				
	Hospital	Office	R&D	Hotel	Total	Hospital	Office	R&D	Hotel	Total
Superdistrict 1	11.9	0.0	0.9	0.0	12.8	11.9	0.0	7.5	0.0	19.4
Superdistrict 2	19.8	0.0	1.3	0.0	21.0	19.8	0.0	17.7	0.0	37.5
Superdistrict 3	12.5	0.0	0.6	0.0	13.1	12.5	0.0	15.2	0.0	27.7
Superdistrict 4	10.7	0.0	0.6	0.0	11.2	10.7	0.0	11.8	0.0	22.5
East Bay	7.2	0.0	0.5	0.0	7.8	7.2	0.0	4.8	0.0	12.0
North Bay	1.6	0.0	0.1	0.0	1.7	1.6	0.0	2.2	0.0	3.9
South Bay	3.8	0.0	0.1	0.0	3.9	3.8	0.0	5.7	0.0	9.5
Out of Region	5.4	0.0	0.5	0.0	6.0	5.4	0.0	0.6	0.0	6.0
Internal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**72.9**	**0.0**	**4.6**	**0.0**	**77.6**	**72.9**	**0.0**	**65.5**	**0.0**	**138.4**

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Long-Term (Phase 2), Mission Bay Campus – Weekday
Hospital
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		5,853 person-trips	Total Person-trips [1] [2]:		561 person-trips
Work Trips [3]:	30%	1,756 person-trips	Work Trips [3]:	30%	168 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	58	49	6	5
		Transit	40.7%		60		6	
		Walk	16.7%		25		2	
		Other	3.3%		5		0	
		TOTAL	***100.0%***		***147***	***49***	***14***	***5***
Superdistrict 2	35.2%	Auto	41.0%	1.14	253	222	24	21
		Transit	24.4%		151		14	
		Walk	30.6%		189		18	
		Other	4.0%		25		2	
		TOTAL	***100.0%***		***618***	***222***	***59***	***21***
Superdistrict 3	15.8%	Auto	49.9%	1.25	138	111	13	11
		Transit	48.0%		133		13	
		Walk	0.0%		0		0	
		Other	2.1%		6		1	
		TOTAL	***100.0%***		***277***	***111***	***27***	***11***
Superdistrict 4	15.1%	Auto	55.9%	1.22	148	121	14	12
		Transit	38.9%		103		10	
		Walk	3.0%		8		1	
		Other	2.2%		6		1	
		TOTAL	***100.0%***		***265***	***121***	***25***	***12***
East Bay	7.1%	Auto	67.4%	2.02	84	42	8	4
		Transit	31.0%		39		4	
		Walk	0.0%		0		0	
		Other	1.6%		2		0	
		TOTAL	***100.0%***		***125***	***42***	***12***	***4***
North Bay	7.0%	Auto	81.5%	1.53	100	65	10	6
		Transit	16.1%		20		2	
		Walk	0.0%		0		0	
		Other	2.4%		3		0	
		TOTAL	***100.0%***		***123***	***65***	***12***	***6***
South Bay	10.6%	Auto	69.9%	1.21	130	108	12	10
		Transit	27.5%		51		5	
		Walk	0.0%		0		0	
		Other	2.6%		5		0	
		TOTAL	***100.0%***		***186***	***108***	***18***	***10***
Out of Region	0.8%	Auto	95.7%	3.16	13	4	1	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***14***	***4***	***1***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	926	722	89	69
		Transit	31.7%		557		53	
		Walk	12.6%		222		21	
		Other	2.9%		51		5	
		TOTAL	***100.0%***		***1,756***	***722***	***168***	***69***

Notes:
[1] ITE Trip Generation, Code 610
[2] 2000 US Census Journey-to-work data
[3] Survey Data
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Long-Term (Phase 2), Mission Bay Campus – Weekday
Hospital
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		5,853 person-trips	Total Person-trips [1] [2]:		561 person-trips
Work Trips [3]:	70%	4,097 person-trips	Work Trips [3]:	70%	392 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	222	115	21	11
		Transit	35.5%		189		18	
		Walk	16.4%		87		8	
		Other	6.4%		34		3	
		TOTAL	***100.0%***		***533***	***115***	***51***	***11***
Superdistrict 2	27.0%	Auto	50.9%	1.96	563	287	54	28
		Transit	23.7%		262		25	
		Walk	19.7%		218		21	
		Other	5.7%		63		6	
		TOTAL	***100.0%***		***1,106***	***287***	***106***	***28***
Superdistrict 3	14.0%	Auto	57.1%	2.05	328	160	31	15
		Transit	22.3%		128		12	
		Walk	9.9%		57		5	
		Other	10.7%		61		6	
		TOTAL	***100.0%***		***574***	***160***	***55***	***15***
Superdistrict 4	9.0%	Auto	63.4%	2.16	234	108	22	10
		Transit	32.4%		119		11	
		Walk	4.2%		15		1	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***369***	***108***	***35***	***10***
East Bay	11.0%	Auto	52.2%	2.20	235	107	23	10
		Transit	25.0%		113		11	
		Walk	14.1%		64		6	
		Other	8.7%		39		4	
		TOTAL	***100.0%***		***451***	***107***	***43***	***10***
North Bay	4.0%	Auto	73.6%	1.89	121	64	12	6
		Transit	8.8%		14		1	
		Walk	14.7%		24		2	
		Other	2.9%		5		0	
		TOTAL	***100.0%***		***164***	***64***	***16***	***6***
South Bay	8.0%	Auto	80.5%	2.30	264	115	25	11
		Transit	8.3%		27		3	
		Walk	5.6%		18		2	
		Other	5.6%		18		2	
		TOTAL	***100.0%***		***328***	***115***	***31***	***11***
Out of Region	14.0%	Auto	48.3%	2.07	277	134	27	13
		Transit	19.7%		113		11	
		Walk	23.8%		137		13	
		Other	8.2%		47		5	
		TOTAL	***100.0%***		***574***	***134***	***55***	***13***
TOTAL	100.0%	Auto	54.8%	2.06	2,243	1,090	215	104
		Transit	23.6%		966		93	
		Walk	15.1%		620		59	
		Other	6.5%		268		26	
		TOTAL	***100.0%***		***4,097***	***1,090***	***392***	***104***

Notes:
[1] ITE Trip Generation, Code 610
[2] 2000 US Census Journey-to-work data
[3] Survey Data
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Long-Term (Phase 2), Mission Bay Campus – Weekday
R&D
Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		1,752 person-trips	Total Person-trips [1] [2]:		231 person-trips
Work Trips [3]:	36%	631 person-trips	Work Trips [3]:	83%	192 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	8.4%	Auto	39.3%	1.19	21	17	6	5
		Transit	40.7%		22		7	
		Walk	16.7%		9		3	
		Other	3.3%		2		1	
		TOTAL	***100.0%***		***53***	***17***	***16***	***5***
Superdistrict 2	35.2%	Auto	41.0%	1.14	91	80	28	24
		Transit	24.4%		54		16	
		Walk	30.6%		68		21	
		Other	4.0%		9		3	
		TOTAL	***100.0%***		***222***	***80***	***68***	***24***
Superdistrict 3	15.8%	Auto	49.9%	1.25	50	40	15	12
		Transit	48.0%		48		15	
		Walk	0.0%		0		0	
		Other	2.1%		2		1	
		TOTAL	***100.0%***		***100***	***40***	***30***	***12***
Superdistrict 4	15.1%	Auto	55.9%	1.22	53	44	16	13
		Transit	38.9%		37		11	
		Walk	3.0%		3		1	
		Other	2.2%		2		1	
		TOTAL	***100.0%***		***95***	***44***	***29***	***13***
East Bay	7.1%	Auto	67.4%	2.02	30	15	9	5
		Transit	31.0%		14		4	
		Walk	0.0%		0		0	
		Other	1.6%		1		0	
		TOTAL	***100.0%***		***45***	***15***	***14***	***5***
North Bay	7.0%	Auto	81.5%	1.53	36	24	11	7
		Transit	16.1%		7		2	
		Walk	0.0%		0		0	
		Other	2.4%		1		0	
		TOTAL	***100.0%***		***44***	***24***	***13***	***7***
South Bay	10.6%	Auto	69.9%	1.21	47	39	14	12
		Transit	27.5%		18		6	
		Walk	0.0%		0		0	
		Other	2.6%		2		1	
		TOTAL	***100.0%***		***67***	***39***	***20***	***12***
Out of Region	0.8%	Auto	95.7%	3.16	5	2	1	0
		Transit	1.8%		0		0	
		Walk	0.0%		0		0	
		Other	2.5%		0		0	
		TOTAL	***100.0%***		***5***	***2***	***2***	***0***
TOTAL	100.0%	Auto	52.7%	1.28	332	259	101	79
		Transit	31.7%		200		61	
		Walk	12.6%		80		24	
		Other	2.9%		18		6	
		TOTAL	***100.0%***		***631***	***259***	***192***	***79***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

SFVAMC LRDP EIS Transportation Impact Study
Alternative 2 Long-Term (Phase 2), Mission Bay Campus – Weekday
R&D
Non-Work Trips

DAILY			PM PEAK HOUR		
Total Person-trips [1] [2]:		1,752 person-trips	Total Person-trips [1] [2]:		231 person-trips
Non-Work Trips [3]:	64%	1,121 person-trips	Non-Work Trips [3]:	17%	39 person-trips

Origins	Distribution [4]	Mode	Percent [4]	AVO [4]	Daily		PM Peak Hour	
					Person Trips	Auto Trips	Person Trips	Auto Trips
Superdistrict 1	13.0%	Auto	41.7%	1.93	61	31	2	1
		Transit	35.5%		52		2	
		Walk	16.4%		24		1	
		Other	6.4%		9		0	
		TOTAL	***100.0%***		***146***	***31***	***5***	***1***
Superdistrict 2	27.0%	Auto	50.9%	1.96	154	79	5	3
		Transit	23.7%		72		3	
		Walk	19.7%		60		2	
		Other	5.7%		17		1	
		TOTAL	***100.0%***		***303***	***79***	***11***	***3***
Superdistrict 3	14.0%	Auto	57.1%	2.05	90	44	3	2
		Transit	22.3%		35		1	
		Walk	9.9%		16		1	
		Other	10.7%		17		1	
		TOTAL	***100.0%***		***157***	***44***	***6***	***2***
Superdistrict 4	9.0%	Auto	63.4%	2.16	64	30	2	1
		Transit	32.4%		33		1	
		Walk	4.2%		4		0	
		Other	0.0%		0		0	
		TOTAL	***100.0%***		***101***	***30***	***4***	***1***
East Bay	11.0%	Auto	52.2%	2.20	64	29	2	1
		Transit	25.0%		31		1	
		Walk	14.1%		17		1	
		Other	8.7%		11		0	
		TOTAL	***100.0%***		***123***	***29***	***4***	***1***
North Bay	4.0%	Auto	73.6%	1.89	33	17	1	1
		Transit	8.8%		4		0	
		Walk	14.7%		7		0	
		Other	2.9%		1		0	
		TOTAL	***100.0%***		***45***	***17***	***2***	***1***
South Bay	8.0%	Auto	80.5%	2.30	72	31	3	1
		Transit	8.3%		7		0	
		Walk	5.6%		5		0	
		Other	5.6%		5		0	
		TOTAL	***100.0%***		***90***	***31***	***3***	***1***
Out of Region	14.0%	Auto	48.3%	2.07	76	37	3	1
		Transit	19.7%		31		1	
		Walk	23.8%		37		1	
		Other	8.2%		13		0	
		TOTAL	***100.0%***		***157***	***37***	***6***	***1***
TOTAL	100.0%	Auto	54.8%	2.06	614	298	22	10
		Transit	23.6%		264		9	
		Walk	15.1%		170		6	
		Other	6.5%		73		3	
		TOTAL	***100.0%***		***1,121***	***298***	***39***	***10***

Notes:
[1] ITE Trip Generation, Code 710
[2] 2000 US Census Journey-to-work data
[3] SF Guidelines, Appendix C
[4] SF Guidelines, Appendix E - Work Trips to SD-2 - All

Appendix D

Parking and Loading Demand and Code Requirements

ITE PARKING DEMAND

Scenario	Hospital Use		Office Use		R&D Use		Motel Use		Medical-Dental Office Use		Total Demand
	Size (SF)	Demand	Size (SF)	Demand	Size (SF)	Demand	Size (Rooms)	Demand	Size (SF)	Demand	
Near-Term Alternative 1 & 2	13,300	59	13,450	32	12,500	30	8	7	0	0	128
Long-Term Alternative 1	18,600	82	20,450	49	69,900	168	8	7	120,000	424	730
Long-Term Alternative 2	18,600	82	20,450	49	269,900	648	8	7	150,000	530	1,316
Fort Miley Campus	18,600	82	20,450	49	69,900	168	8	7	0	0	306
Mission Bay Campus	0	0	0	0	200,000	480	0	0	150,000	530	1,010

PLANNING CODE PARKING REQUIREMENT

Scenario	Hospital Use		Office Use		R&D Use		Motel Use		Total Required
	Size (SF)	Required	Size (SF)	Required	Size (SF)	Required	Size (Rooms)	Required	
Near-Term Alternative 1 & 2	13,300	44	13,450	13	12,500	13	8	8	78
Long-Term Alternative 1	138,600	462	20,450	20	69,900	70	8	8	560
Long-Term Alternative 2	168,600	562	20,450	20	269,900	270	8	8	860
Fort Miley Campus	18,600	62	20,450	20	69,900	70	8	8	160
Mission Bay Campus	150,000	500	0	0	200,000	200	0	0	700

PLANNING CODE LOADING REQUIREMENT

Scenario	Size (SF)	Number of Loading Spaces Required
Near-Term Alternative 1 & 2	58,300	0
Long-Term Alternative 1	305,600	2
Long-Term Alternative 2 (SFVAMC Site)	185,600	1
Long-Term Alternative 2 (SOMA/Mission Bay Site)	350,000	2

Appendix E

Transit Ridership and Capacity Calculations

Line	Direction	2008 TEP Ridership	MLP	Capacity			Utilization	SF Model Ridership		Annual Growth Rate	Future Ridership			Capacity			Utilization		
				Buses per hour	Capacity per bus	Total		2010	2035		2015	2023	2035	Buses per hour	Capacity per bus	Total	2015	2023	2035
38 Geary	Inbound	487	Geary Blvd&Webster St SW-NS/BZ	9	94	846	57.6%	3,323	3,968		542	606	701	9	94	846	64.1%	71.6%	82.8%
	Outbound	675	Geary Blvd&Taylor St NW-FS/BZ	12	94	1,128	59.8%	4,199	5,496		761	859	1,006	12	94	1,128	67.5%	76.2%	89.2%
38L Geary Limited	Inbound	499	Geary Blvd&Fillmore St S-MB/BZ	9	94	846	59.0%	3,659	7,787		556	621	718	12	94	1,128	49.3%	55.0%	63.6%
	Outbound	683	Geary Blvd&Van Ness Ave N-MB/BB	9	94	846	80.7%	4,479	10,924		770	869	1,018	12	94	1,128	68.3%	77.1%	90.3%
38AX Geary A Express	Inbound																		
	Outbound	177	Pine St&Montgomery St NE-NS	4	63	252	70.2%	311	59		200	225	264	4	63	252	79.2%	89.4%	104.7%

Inbound	6982	11755	0.016
Outbound	8989	16479	0.018

Appendix F

Construction Traffic

Alternative 1

Phase	Subphase	Proposed Action	Construction Duration (Months)	Approximate Start Date	Approximate Completion Date	Gross Square Footage	Net Square Footage	Demolition?	Construction Phasing and Duration (Months) *Demolition*	*Excavation and Below Grade Concrete*	*Above-Grade Structure*	*Paving (Concurrent with Above-Grade Structure Except 1.7)*	*Painting (Concurrent with Above-Grade Structure*
1	1.1	Building 41 Research	12	January-13	December-13	14,200	12,500	Y	1	3	8	1	1
1	1.2	Emergency Operations Center & Parking Garage Expansion	17	January-13	May-14	155,000	155,000	N	0	5	12	2	2
1	1.3	Building 22 Hoptel Addition	13	January-13	January-14	8,700	8,700	N	0	3	10	1	1
1	1.4	Patient Welcome Center	24	September-13	August-15	14,800	14,800	N	0	6	18	2	2
1	1.5	Building 24 Mental Health Expansion (includes demolition of Buildings 20 & 32)	13	June-14	June-15	15,600	13,300	Y	1	3	9	1	1
2	2.1	Hybrid Operating Room Expansion	12	November-15	October-16	5,300	5,300	N	0	3	9	1	1
2	2.2	IT Support Space Expansion	18	May-16	October-17	7,000	7,000	N	0	5	13	2	2
2	2.3	Building 23 (Mental Health Research Expansion	13	July-16	July-17	15,000	15,000	N	0	3	10	1	1
2	2.4	Building 40 Research Replacement Facility (includes demolition of Buildings 14, T21, & T23)	24	May-21	April-23	100,000	42,400	Y	2	6	16	4	4
2	2.5	Ambulatory Care Center	20	June-21	January-23	120,000	120,000	N	0	4	16	4	4

Subtotals (by phase)

Phase 1	208,300	204,300
Phase 2	247,300	189,700
Total	455,600	394,000

Notes:
Durations shown represent proportional distributions of a typical 12-month construction period

Daily Truck Assumptions by Construction Phase

	Maximum Daily Trips (One-Way)		
	Tractor-Trailer,	*Dump Truck, and very Trucks and V*	*Total*
Demolition	8	0	8
Excavation	4	2	6
Building Construction - with paving/painting	6	10	16
Above-Grade Structure	*2*	*6*	*8*
Paving	*2*	*2*	*4*
Painting	*2*	*2*	*4*

Note: Does not account for any reduction in employee vehicle trips due to ride-sharing or transit incentive programs instituted by SFVAMC.

POV Assumptions by Construction

	Maximum Daily Trips (One-Way)
Demolition	10
Excavation	10
Building Construction - with paving/painting	62
Above-Grade Structure	*30*
Paving	*16*
Painting	*16*

Daily Trucks

Subphase	Proposed Action	Construction Duration (Months)	Approximate Start Date	Approximate Completion Date	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2016 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1.1	Building 41 Research	12	January-13	December-13	8	6	6	6	8	8	8	8	8	8	8	16																																		
1.2	Emergency Operations Center & Parking Garage Expansion	17	January-13	May-14	6	6	6	6	6	8	8	8	8	8	8	8	8	8	8	16	16																													
1.3	Building 22 Hoptel Addition	13	January-13	January-14	6	6	6	8	8	8	8	8	8	8	8	8	16																																	
1.4	Patient Welcome Center	24	September-13	August-15									6	6	6	6	6	6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	16	16													
1.5	Building 24 Mental Health Expansion (includes demolition of Buildings 20 & 32)	13	June-14	June-15																		8	6	6	6	8	8	8	8	8	8	8	8	16																
2.1	Hybrid Operating Room Expansion	12	November-15	October-16																																		6	6	6	8	8	8	8	8	8	8	8	16
2.2	IT Support Space Expansion	18	May-16	October-17																													6	6	6	6	6	8											
2.3	Building 23 (Mental Health Research Expansion	13	July-16	July-17																															6	6	6	8											
2.4	Building 40 Research Replacement Facility (includes demolition of Buildings 14, T21, & T23)	24	May-21	April-23																																													
2.5	Ambulatory Care Center	20	June-21	January-23																																													
				Monthly Maximum Daily Trips (One-Way)	20	18	18	20	22	24	24	24	30	30	30	38	30	14	16	24	24	16	14	14	14	16	16	16	16	16	16	16	16	24	16	16	0	0	6	6	6	8	8	8	14	14	20	20	20	32

Maximum Daily Trips (One-Way) for Phases 1 and 2	38
Maximum Daily Trips (One-Way) for Phases 3 and 4	32
Maximum Daily Trips (One-Way) for Entire LRDP	38

- Demolition
- Excavation
- Building Construction
- Concurrent Building Construction, Painting, and Paving
- Paving Only
- Concurrent Paving and Painting

Subphase	Proposed Action	Construction Duration (Months)	Approximate Start Date	Approximate Completion Date	2017 Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2018 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2019 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2020 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1.1	Building 41 Research	12	January-13	December-13																																																
1.2	Emergency Operations Center & Parking Garage Expansion	17	January-13	May-14																																																
1.3	Building 22 Hoptel Addition	13	January-13	January-14																																																
1.4	Patient Welcome Center	24	September-13	August-15																																																
1.5	Building 24 Mental Health Expansion (includes demolition of Buildings 20 & 32)	13	June-14	June-15																																																
2.1	Hybrid Operating Room Expansion	12	November-15	October-16																																																
2.2	IT Support Space Expansion	18	May-16	October-17	8	8	8	8	8	8	8	8	8	8	16	16																																				
2.3	Building 23 (Mental Health Research Expansion	13	July-16	July-17	8	8	8	8	8	8	8	8	16																																							
2.4	Building 40 Research Replacement Facility (includes demolition of Buildings 14, T21, & T23)	24	May-21	April-23																																																
2.5	Ambulatory Care Center	20	June-21	January-23																																																
				Monthly Maximum Daily Trips (One-Way)	16	16	16	16	16	16	16	16	24	8	16	16	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	0	0	0	0	0	0	0	0	0	0	0	0

Maximum Daily Trips (One-Way) for Phases 1 and 2	38
Maximum Daily Trips (One-Way) for Phases 3 and 4	32
Maximum Daily Trips (One-Way) for Entire LRDP	38

Subphase	Proposed Action	Construction Duration (Months)	Approximate Start Date	Approximate Completion Date	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
					2021															2022												2023			
1.1	Building 41 Research	12	January-13	December-13																															
1.2	Emergency Operations Center & Parking Garage Expansion	17	January-13	May-14																															
1.3	Building 22 Hoptel Addition	13	January-13	January-14																															
1.4	Patient Welcome Center	24	September-13	August-15																															
1.5	Building 24 Mental Health Expansion (includes demolition of Buildings 20 & 32)	13	June-14	June-15																															
2.1	Hybrid Operating Room Expansion	12	November-15	October-16																															
2.2	IT Support Space Expansion	18	May-16	October-17																															
2.3	Building 23 (Mental Health Research Expansion	13	July-16	July-17																															
2.4	Building 40 Research Replacement Facility (includes demolition of Buildings 14, T21, & T23)	24	May-21	April-23								8	8	6	6	6	6	6	6	8	8	8	8	8	8	8	8	8	8	8	8	16	16	16	16
2.5	Ambulatory Care Center	20	June-21	January-23									6	6	6	6	8	8	8	8	8	8	8	8	8	8	8	8	16	16	16	16			
			Monthly Maximum Daily Trips (One-Way)		0	0	0	0	0	0	0	8	14	12	12	12	14	14	14	16	16	16	16	16	16	16	16	16	24	24	24	32	16	16	16

Maximum Daily Trips (One-Way) for Phases 1 and 2	38
Maximum Daily Trips (One-Way) for Phases 3 and 4	32
Maximum Daily Trips (One-Way) for Entire LRDP	38

Daily Personal Vehicles

Subphase	Proposed Action	Construction Duration (Months)	Approximate Start Date	Approximate Completion Date	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2016 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1.1	Building 41 Research	12	January-13	December-13	10	10	10	10	30	30	30	30	30	30	30	62																																		
1.2	Emergency Operations Center & Parking Garage Expansion	17	January-13	May-14	10	10	10	10	10	30	30	30	30	30	30	30	30	30	30	62	62																													
1.3	Building 22 Hoptel Addition	13	January-13	January-14	10	6	10	30	30	30	30	30	30	30	30	30	62																																	
1.4	Patient Welcome Center	24	September-13	August-15									10	10	10	10	10	10	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	62	62														
1.5	Building 24 Mental Health Expansion (includes demolition of Buildings 20 & 32)	13	June-14	June-15																		10	10	10	10	30	30	30	30	30	30	30	30	30	62															
2.1	Hybrid Operating Room Expansion	12	November-15	October-16																																			10	10	10	30	30	30	30	30	30	30	30	62
2.2	IT Support Space Expansion	18	May-16	October-17																																									10	10	10	10	10	30
2.3	Building 23 (Mental Health Research Expansion	13	July-16	July-17																																											10	10	10	30
2.4	Building 40 Research Replacement Facility (includes demolition of Buildings 14, T21, & T23)	24	May-21	April-23																																														
2.5	Ambulatory Care Center	20	June-21	January-23																																														
				Monthly Maximum Daily Trips (One-Way)	30	26	30	50	70	90	90	90	100	100	100	132	102	40	60	92	92	40	40	40	40	60	60	60	60	60	60	60	60	92	62	62	0	0	10	10	10	30	30	30	40	40	50	50	50	122

Maximum Daily Trips (One-Way) for Phases 1 and 2	132
Maximum Daily Trips (One-Way) for Phases 3 and 4	124
Maximum Daily Trips (One-Way) for Entire LRDP	132

- Demolition
- Excavation
- Building Construction
- Concurrent Building Construction, Painting, and Paving
- Paving Only
- Concurrent Paving and Painting

Subphase	Proposed Action	Construction Duration (Months)	Approximate Start Date	Approximate Completion Date
1.1	Building 41 Research	12	January-13	December-13
1.2	Emergency Operations Center & Parking Garage Expansion	17	January-13	May-14
1.3	Building 22 Hoptel Addition	13	January-13	January-14
1.4	Patient Welcome Center	24	September-13	August-15
1.5	Building 24 Mental Health Expansion (includes demolition of Buildings 20 & 32)	13	June-14	June-15
2.1	Hybrid Operating Room Expansion	12	November-15	October-16
2.2	IT Support Space Expansion	18	May-16	October-17
2.3	Building 23 (Mental Health Research Expansion	13	July-16	July-17
2.4	Building 40 Research Replacement Facility (includes demolition of Buildings 14, T21, & T23)	24	May-21	April-23
2.5	Ambulatory Care Center	20	June-21	January-23

	2017												2018												2019												2020											
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Building 41 Research																																															
Emergency Operations Center & Parking Garage Expansion																																															
Building 22 Hoptel Addition																																															
Patient Welcome Center																																															
Building 24 Mental Health Expansion (includes demolition of Buildings 20 & 32)																																															
Hybrid Operating Room Expansion																																															
IT Support Space Expansion	30	30	30	30	30	30	30	30	30	30	62	62																																			
Building 23 (Mental Health Research Expansion																																															
	30	30	30	30	30	30	30	30	62																																						
Building 40 Research Replacement Facility (includes demolition of Buildings 14, T21, & T23)																																															
Ambulatory Care Center																																															
Monthly Maximum Daily Trips (One-Way)	60	60	60	60	60	60	60	60	92	30	62	62	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	0	0	0	0	0	0	0	0	0	0

Maximum Daily Trips (One-Way) for Phases 1 and 2	132
Maximum Daily Trips (One-Way) for Phases 3 and 4	124
Maximum Daily Trips (One-Way) for Entire LRDP	132

Subphase	Proposed Action	Construction Duration (Months)	Approximate Start Date	Approximate Completion Date	2021 Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2022 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2023 Jan	Feb	Mar	Apr
1.1	Building 41 Research	12	January-13	December-13																															
1.2	Emergency Operations Center & Parking Garage Expansion	17	January-13	May-14																															
1.3	Building 22 Hoptel Addition	13	January-13	January-14																															
1.4	Patient Welcome Center	24	September-13	August-15																															
1.5	Building 24 Mental Health Expansion (includes demolition of Buildings 20 & 32)	13	June-14	June-15																															
2.1	Hybrid Operating Room Expansion	12	November-15	October-16																															
2.2	IT Support Space Expansion	18	May-16	October-17																															
2.3	Building 23 (Mental Health Research Expansion	13	July-16	July-17																															
2.4	Building 40 Research Replacement Facility (includes demolition of Buildings 14, T21, & T23)	24	May-21	April-23																															
2.5	Ambulatory Care Center	20	June-21	January-23																															
			Monthly Maximum Daily Trips (One-Way)		0	0	0	0	0	0	0	10	20	20	20	20	40	40	40	60	60	60	60	60	60	60	60	60	92	92	92	124	62	62	62

Maximum Daily Trips (One-Way) for Phases 1 and 2	132
Maximum Daily Trips (One-Way) for Phases 3 and 4	124
Maximum Daily Trips (One-Way) for Entire LRDP	132

Alternative 2

Phase	Subphase	Proposed Action	Construction Duration (Months)	Approximate Start Date	Approximate Completion Date	Gross Square Footage	Net Square Footage	Demolition?	Construction Phasing and Duration (Months)				
									Demolition	*Excavation and Below Grade Concrete*	*Above-Grade Structure*	*Paving (Concurrent with Above-Grade Structure Except 1.7)*	*Painting (Concurrent with Above-Grade Structure*
2	2.5	Ambulatory Care Center	18	July-24	December-25	150,000	150,000	Y	2	2	8	1	1
2	2.6	Clinical Parking Garage (400 spaces)	12	January-25	December-25	120,000	120,000	Y	2	2	8	1	0
2	2.7	Research Building	24	January-26	December-27	200,000	200,000	Y	2	4	18	4	4
2	2.8	Research Parking Garage (475 spaces)	12	January-27	December-27	150,000	150,000	Y	2	2	8	1	0

Subphase	Proposed Action	Construction Duration (Months)	Approximate Start Date	Approximate Completion Date	2024 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2025 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2026 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
2.5	Ambulatory Care Center	18	July-24	December-25							10	10	10	10	30	30	30	30	30	30	30	62															
2.6	Clinical Parking Garage (400 spaces)	12	January-25	December-25													10	10	10	10	30	30	30	30	30	30	46	46									
2.7	Research Building	24	January-26	December-27																									10	10	10	10	10	10	10	30	30
2.8	Research Parking Garage (475 spaces)	12	January-27	December-27																																	
			Monthly Maximum Daily Trips (One-Way)		0	0	0	0	0	0	10	10	10	10	30	30	30	30	30	30	30	62	0	0	0	0	0	0	0	0	0	0	0	0	10	30	30
2.5	Ambulatory Care Center	18	July-24	December-25							8	8	6	6	8	8	8	8	8	8	8	16															
2.6	Clinical Parking Garage (400 spaces)	12	January-25	December-25													8	6	6	6	8	8	8	8	8	8	12	12									
2.7	Research Building	24	January-26	December-27																									8	8	6	6	6	6	6	8	8
2.8	Research Parking Garage (475 spaces)	12	January-27	December-27																																	
			Monthly Maximum Daily Trips (One-Way)		0	0	0	0	0	0	8	8	6	6	8	8	8	8	8	8	8	16	0	0	0	0	0	0	0	0	0	0	0	0	6	8	8

Maximum Daily POV Trips (One-Way) for New SFVAMC Mission Bay Campus	108
Maximum Daily Truck Trips (One-Way) for New SFVAMC Mission Bay Campus	28
Maximum Daily Trips (One-Way)	136

- Demolition
- Excavation
- Building Construction
- Concurrent Building Construction and Paving
- Paving Only
- Concurrent Paving and Painting

2027

Subphase	Proposed Action	Construction Duration (Months)	Approximate Start Date	Approximate Completion Date	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
2.5	Ambulatory Care Center	18	July-24	December-25																
2.6	Clinical Parking Garage (400 spaces)	12	January-25	December-25																POV
2.7	Research Building	24	January-26	December-27	30	30	30	30	30	30	30	30	30	62	62	62	62	62	62	
2.8	Research Parking Garage (475 spaces)	12	January-27	December-27				10	10	10	10	30	30	30	30	30	30	46	46	
			Monthly Maximum Daily Trips (One-Way)		30	30	30	40	40	40	40	60	60	92	92	92	92	108	108	
2.5	Ambulatory Care Center	18	July-24	December-25																
2.6	Clinical Parking Garage (400 spaces)	12	January-25	December-25																Trucks
2.7	Research Building	24	January-26	December-27	8	8	8	8	8	8	8	8	8	16	16	16	16	16	16	
2.8	Research Parking Garage (475 spaces)	12	January-27	December-27				8	6	6	6	8	8	8	8	8	8	12	12	
			Monthly Maximum Daily Trips (One-Way)		8	8	8	16	14	14	14	16	16	24	24	24	24	28	28	

Maximum Daily POV Trips (One-Way) for New SFVAMC Mission Bay Campus	108
Maximum Daily Truck Trips (One-Way) for New SFVAMC Mission Bay Campus	28
Maximum Daily Trips (One-Way)	136